Exploring an Action Research Process of Multimodal Learning System Design for Online Learners in English Language Education in a Chinese University

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Thesis submitted to the University of Nottingham for the degree of Doctor of Philosophy

November 2009

Table of Contents

Abstract

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I work at an online institute (the Institute) of a Chinese university and I am responsible for course design and development of degree-bearing courses in English language education via online delivery to learners nationwide. My job is contextualized in a situation in China where online course design and development **booms in practice**, yet it **lacks theoretical guidelines, quality research with responsive approaches and staff with professional identity and practice.**

I started my research in 2004 with a **mono-commitment** -- a real-situation task of adapting the courseware of an "orientation" module of a post-diploma BA course in English language education. I worked alone as both a researcher and a practitioner, only to find that the task involved more than just courseware design – it dealt with **subject matter** in that online course design and development was a process as well as a product that aimed at the construction of a learning system (the "What" issue); it also dealt with **a methodological issue** of selecting a research approach that could accommodate my research need and situation (the "How" issue).

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learner-researchers through a process of "plan -- act -- analyze and reflect" during the design, development, implementation and evaluation phases of the "orientation" module. **Two issues** emerged from this research cycle. One was that there existed four major tensions between instructional design and the learners' reality: time design, media selection, support design in relation to interaction and group learning, and assessment design. The other was that action research could be applied as an effective approach to professional development.

I conducted my third research cycle in 2006 with **tri-commitments – professional development** (the "Who" issue) of 12 new staff at the Institute in addition to a further exploration of **instructional design** (the "What" issue) and **action research** (the "How" issue). This research cycle revealed that the interventional strategies worked to some extent, but some issues persisted and new issues emerged. Among them, the tensions between instructional design and the learners' reality, and the multi-faceted context of the research were repeatedly recognized.

The three research cycles have informed my further research to establish a paradigmatic and practical framework that can integrate the "What", the "How" and the "Who" issues. This framework is termed multimodal learning system design that adopts a design, learning, multimodal and ecological view to guide a cyclical process that involves a community of practice in inquiry and reflection as well as all the major stakeholders (e.g. designers, tutors, administrators and learners) and a product that creates a learning system. This framework is valued for its responsiveness to sustainable improvements and changes in the online education field full of innovation and challenges in theory, research and professionalism.

Acknowledgements

I must say "Acknowledgements" is the toughest part to write in my entire thesis. Originally, I tried a conventional format (for example, "I would like to extend my heartfelt gratitude to the following persons who have made the completion of this thesis possible..."). Then, as my thesis finally chose an unconventional format to report my research "story", I decided to adopt a similar personal style to present my acknowledgements.

For so many times, I thought of quitting my study, especially after the loss of my father and husband. I survived because I have a wonderful team of people who have supported me in different ways. I would like to thank them in person with the following remarks.

Dr. Gordon Joyes, my main supervisor,

You have been inspiring me with your burning passion for online education, your innovative spirit in everything you do, and your penetrating sharpness about learning, teaching and research. With your supervision, I could not find myself any excuses not to pursue perfection.

Dr. Do Coyle, my backup supervisor,

You always appear at the right time and the right place with the right words. Thank you for giving me the courage and confidence to carry on despite all the difficulties.

Professor Yueguo Gu, my mentor (Pro-vice chancellor of the University, Executive Dean of the Institute)

It is you who told me ten years ago that if I did not start to engage in online education, I would find myself jobless ten years later. I took your words, and all that I have been experiencing within these ten years left me no regret at all.

Professor Carol Hall and your team (School of Education, University of Nottingham)

You possess superb tactfulness of managing your team as both a committed academic group and a loving family. I feel honoured to become part of it during my study and hope to continue my "teamship".

Professor David Wood, Dr. Charles Crook and your team (Institute of Learning Science, University of Nottingham)

I feel extremely lucky to become the first group of your research students. I deeply appreciate this honour and I am determined to return your trust and support with my achievements.

Dr. Helen Spencer-Oatey (director of eChina-UK elearning Programme) and HEFCE (sponsor of the Programme)

Thank you for having the vision of promoting research projects in e-learning between the two countries. These projects have offered me great opportunities to learn from those who also engage in online education research.

Dr. Tong Wang, Dr. Jinlan Tang and my other colleagues at the Institute

Thank you for the peer-pressure you unintentionally exerted on me with your incredible achievements. It is such pressure that encouraged me to go on against all odds.

My research fellows (my research team of 2005 and 2006)

Thank you for being together with me researching ourselves. You made me feel that I am a better person than I really am.

Dear Dad,

Be proud of me, as you always did.

Dear Xuefeng, my husband,

Though I no longer have your physical presence, I know you are with me all the time, celebrating my gains and sharing my pains.

Dear Eddie, my son,

You were only four when I started my PhD study. You once said that you'd rather be my computer than my son. I am sorry that my study has stolen much time which I should have spent on you. But when eight-year-old you visited the University of Nottingham and told me that one day you would like to come here for your own PhD study, I came to realize that what has grown up in these years is not just my study, but also my son. I would like you to know that you are the very person who makes me still have dreams and chase them bravely.

University of Nottingham

Last but not the least, I would like to thank the University of Nottingham for your openness and flexibility. You quietly stand by my side in my ups and downs and wait patiently with your welcoming arms for the very moment to come. I can't wait to embrace that moment with you.

List of Tables

List of Figures

Prologue: How Will the "Story" Be Told

To me, this thesis is more my professional autobiography than a presentation to obtain a PhD degree. Thus, I tend to use the term "story" to describe it, and present it in a form of a story. The story started from early 2004 when I committed myself to a real work-based project of adapting an existing online course at my Institute – an online institute (abbreviated as "the Institute" from this point) of a Chinese university in Beijing (abbreviated as "the University" from this point) and at the same time I began my PhD study. So I made this project the subject of my research, only to find it grow ambitiously in a cyclical process of action research, having transformed me from an intuitive practitioner of online course design to a self-directed professional enquiring into multimodal learning system design.

In reality, this process is indeed story-like with procedural developments (three complete cycles of action research across 2004 to 2006) that have built up to the establishment of a model of multimodal learning system design. The choice of a story style presentation for this thesis has been a careful thought. Described as "one of the most neglected aspects" of action research (McKernan, 1996:236), the writing of the report, let alone a PhD thesis, proves to be an issue in the literature (McKernan, 1996; Winter, 1996; Burns, 1999; Zuber-Skerritt and Fletcher, 2007). McKernan states that doing research and writing a research report are "separate professional activities", requiring researchers to become "at once good story-tellers" (McKernan, 1996:236). It is such a daunting task that it could be a good reason for one not to

choose doing action research as suggested by Dick (1993) with the following remarks.

1) *You probably can't use a conventional format to write it up effectively. Again, that means you have to learn some new skills.*

2) *Action research is much harder to report, at least for thesis purposes. If you stay close to the research mainstream you don't have to take the same pains to justify what you do. For action research, you have to justify your overall approach. You have to do this well enough that even if examiners don't agree with your approach, they have to acknowledge that you have provided an adequate rationale.*

3) *All else being equal, an action research thesis is likely to be longer than a conventional thesis. As already mentioned, you have to provide a more compelling justification for what you do. In effect, you have to write two theses. One reports your method, results and interpretation. The other explains why these were appropriate for the research situation. In addition, if you use qualitative data (and you probably will), that also tends to take more space to report.*

I only came to recognize the truth in his remarks when I started to synthesize my thesis. This explains why this prologue is dedicated to describe and justify the structure of my thesis in the following aspects: the audience and the style, the process and the structure.

1. The audience and the style

The audience determines the style (Winter, 1996:26; Burns, 1999:182). McKernan (1996:227) suggests three groups of audience: colleagues collaborating in action research; colleagues sharing the same interest from other institutions or other fields; and most important the action researchers. Who is the audience of my thesis? I assume this an essential question to ask and to answer as it determines my purpose and style of presentation. I identify four major groups of readers as follows.

1) The intimate reader: myself

   This thesis is my autobiography that not only records my five-year research work, but also witnesses my professional growth. Therefore, I follow a personal style to demonstrate my presence, responsibility and ownership of this research, and meanwhile avoid an authoritative tone that is against the principles of action research (Winter, 1996:26).

2) The authoritative readers: my supervisors and examiners

   This thesis is the justification of my entitlement to a PhD degree from the University of Nottingham. Thus, it needs to demonstrate a graceful balance between the acknowledgement and respect of academic norms and the desire for and demonstration of innovation.

3) The core readers: my research team

   This thesis represents the joint work of my research team, including instructional designers, tutors, administrators, and learners within the 2004 to 2006 cohorts. It employs a reader-friendly, jargon-free style to assure its accessibility especially

to those non-academics.

4) The peripheral readers: people with similar concerns or interests

This thesis will be made accessible to people with similar concerns or interests in the same or different professions. Though I strongly claim the context-boundness of my research, this does not mean it cannot have any illuminating value for their research. Therefore, it seeks to be inclusive and descriptive in addressing key issues.

With the above reader groups in mind, I decided to adopt an "I" approach recognized in the literature (Winter, 1996:48; Cohen, et al. 2003:240 cited Elliott, 1978:356; McNiff, et al. 2003:20), commonsense language (Cohen, et al. 2003:240 cited Elliott, 1978:356), and a balance of formal and informal styles in my thesis.

2. The format

The conventional academic norms of the literature review, methodology, findings and conclusions are inappropriate to present an action research report since its authoritative and observational orientation is not in line with the basic principles of action research (Winter, 1996:25). I discovered four possible formats to present an action research and these are as follows.

1) An adapted conventional format (McKernan, 1996:238~239; Burns, 1999:184)

Though slightly different in terminology or content sequence, this format still follows introduction (context), the literature review, methodology, research design, data analysis and conclusions sequentially.

2) A historic format (Elliot, 1991:88)

This format stays within the framework of the conventional format but adds the descriptions of the evolutionary process of the issue in each part.

3) An autobiographical format (Winter, 1996:26)

This format appears in accounts of one's everyday life, interwoven with passages addressing academic and methodological issues of research.

4) A narrative format (Winter, 1996:26)

This format presents action research in the sequence of practice and reflection, with a clear statement of personal involvement and in concrete detail.

In the early stage of my thesis synthesization, I tried to keep to the academic norms, only to find them painful to follow since they could not portray the evolutionary process of my three-cycle research. Take the literature review for example. It accompanied the whole of my research process, with times when it guided my research if actions were yet to be taken, times when it confirmed or disconfirmed my understandings and practices when they had already taken shape, and times when it was initially viewed as irrelevant but later a revisit had to be made when my research revealed its relevance. The accompanying literature review approach was chosen as an effective way that helps researchers develop a thorough understanding of the issues as they unfold (Dick, 1993; Winter, 1998:67), and a major research strategy of action research (Davis, 2004:15).

Therefore, I decided to adopt a narrative approach to present my research. I structured my thesis in a narrative format, as first in parts then chapters, with each

part representing a cycle, and each chapter illustrating a phase within the cycle in plan-act-analyze-reflection narrations.

3. The process

My decisions of the style and format of presenting my action research were made as I completed my three-cycle research and struggled to synthesize my cycle-based notes into a conventional thesis format. In a way, this was like conducting another mini-research project on the writing of an action research thesis, an aspect I ignored in my early stages of the literature review on action research. Davis (2004) presents a model illustrating three concurring tasks of her action research project (her research interest, her action research and her thesis research) as illustrated in Figure 1.

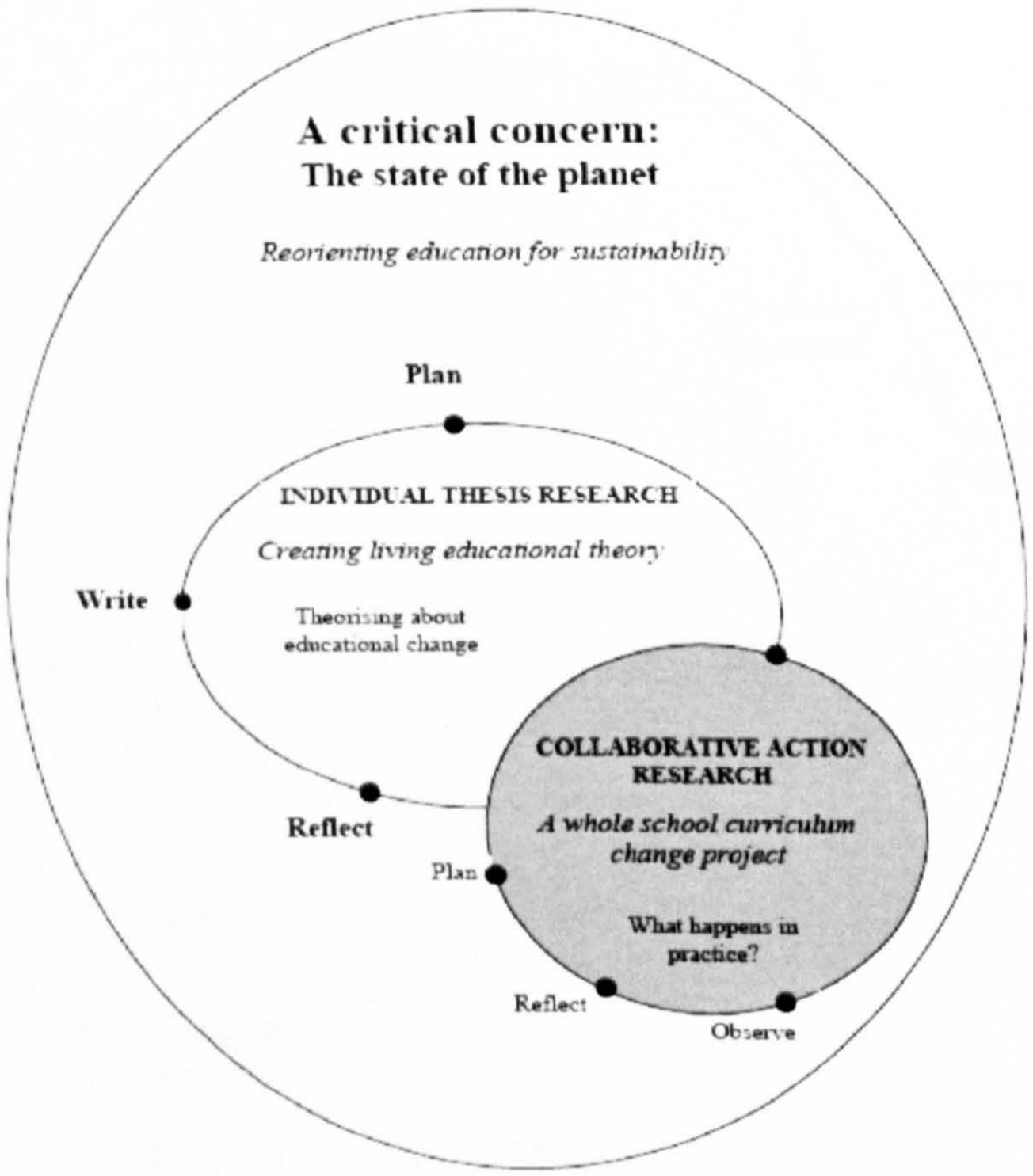

Figure 1 Davis' (2004:10) model of action research thesis writing

Davis' model focuses on her thesis research, describing her action research process

as one phase of her thesis research process, with the former a collaborative work, and the latter an individual task.

Zuber-Skerrit and Fletcher (2007:431) introduce a conceptual model for an action research thesis as in Figure 2

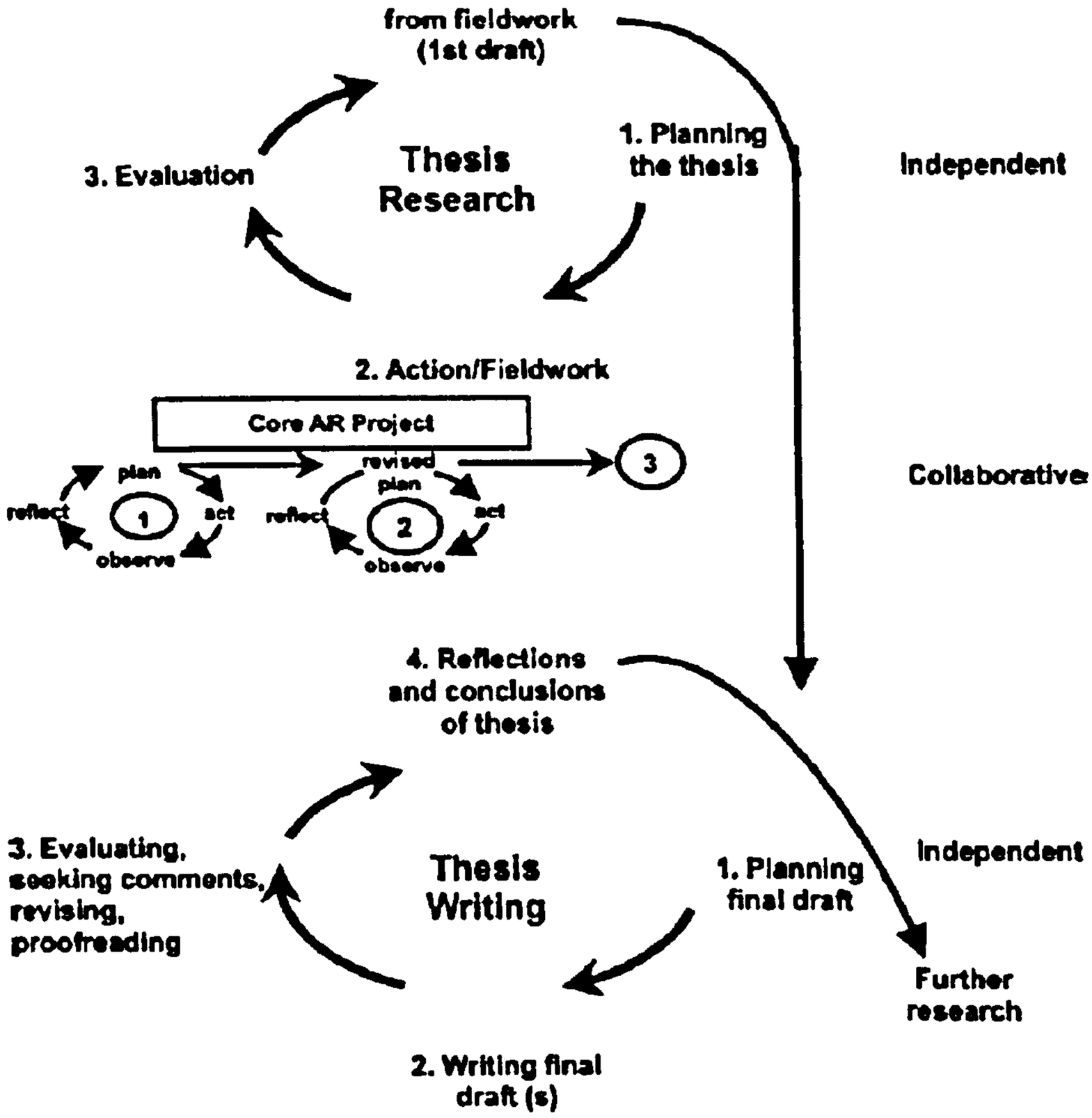

Figure 2 Zuber-Skerrit and Fletcher's (2007:431) conceptual model of an action research thesis

This model reinforces action research as a cyclic process, and this is reflected in the thesis writing. In addition, it makes more explicit the collaborative nature of action research, and the solitary nature of thesis writing.

These two models focus on thesis writing and this overshadows the core action research project. It is not my intention to focus on the nature of action research thesis

writing at the expense of action research, but to complement it. These models alerted me to the necessity of visualizing the concurrence of my research process and my writing process so as to gain my readers' tolerance of the possible descriptive nature of my early chapters and to inform them as to why my thesis is presented in the way it is. Figure 3 shows such processes.

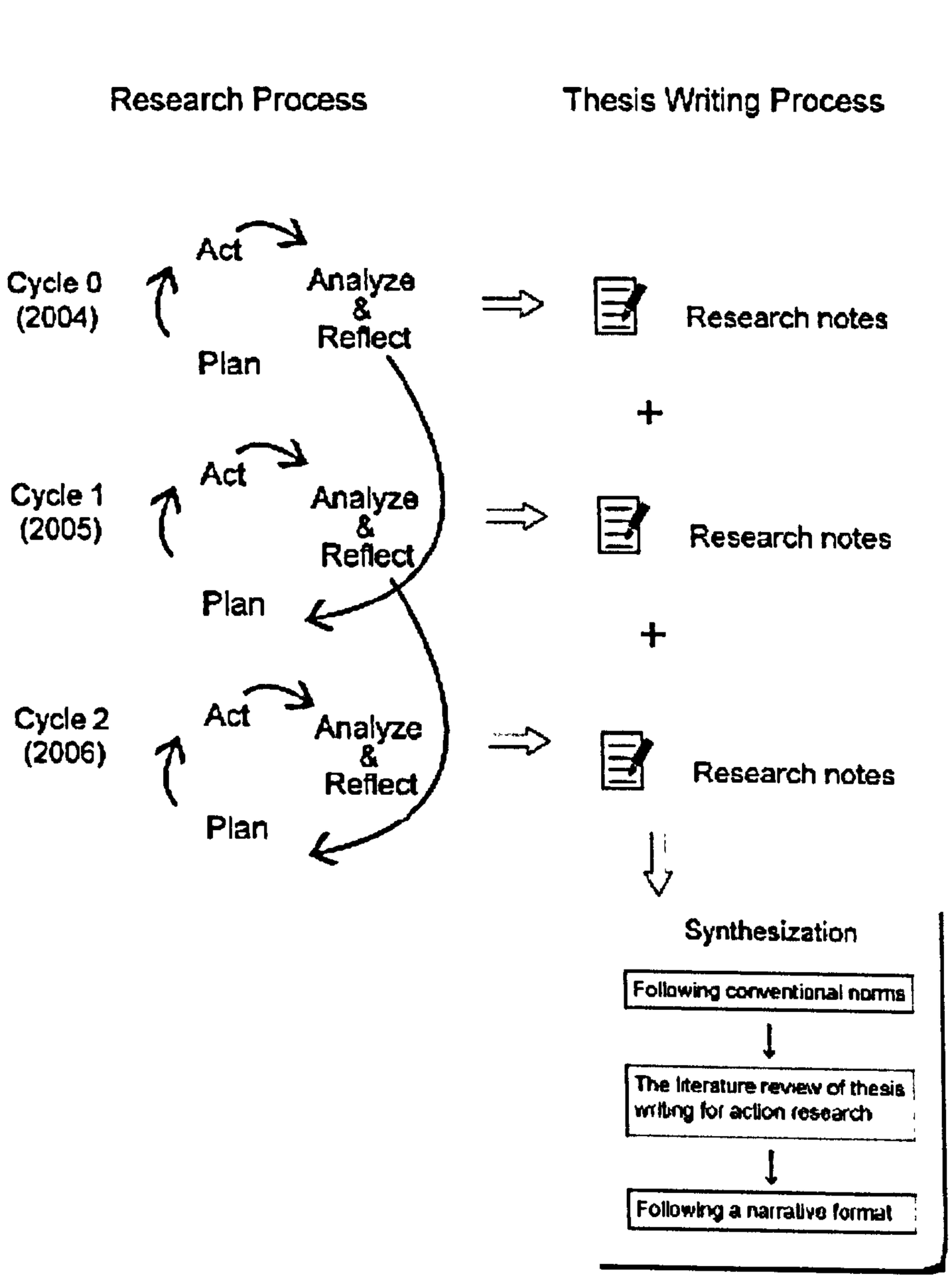

Figure 3 My action research and thesis writing processes

4. The structure

I hope that by now I have well prepared my readers for a narration-formatted structure of my thesis. Figure 4 presents a thesis map for ease of reference.

Prologue: How Will the "Story" Be Told?

This part presents and rationalizes the thesis structure.

⇩

Part I: Introduction

This part provides the context the research is set against and a summary of the research process.

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Chapter 1 Contextualization – From Classroom to Multimodality

Chapter 2 Research – From Methods to Action Research

⇩

Part II: A Preliminary Attempt

This part reports research cycle 0 undertaken in 2004. The term cycle 0 will be explained in Chapter 2.

⇖ ⇩ ⇘

Chapter 3 Plan – Dealing with a Real-situation Concern

Chapter 4 Act – Collecting Naturally-occurring Data

Chapter 5 Analyze and Reflect – Emerging a Dual-concern

⇩

Part III: An Initial Exploration

This part reports research cycle 1 undertaken in 2005.

⇖ ⇩ ⇘

Chapter 6 Plan – Designing a Dual-commitment Research

Chapter 7 Act – Managing Four-group Data

Chapter 8 Analyze and Reflect – Emerging Confirmations and Tensions

⇩

Part IV: A Further Examination

This part reports research cycle 2 undertaken in 2006.

⇙ ⇩ ⇘

Chapter 9 Plan – Designing a Tri-commitment Research

Chapter 10 Act – Implementing the Plan

Chapter 11 Analyze and Reflect – Learning from "Successes"&"Failures"

⇩

Part V: Future Prospects

This part summarizes the previous research cycles and proposes a model of multimodal learning system design.

⇩

Chapter 12 Establishing a Model -- Multimodal Learning System Design

⇩

Epilogue: How Will the "Story" Continue?

This part provides a summary of my research and explores future prospects.

Figure 4 My thesis map

Part I

Introduction

(Chapters 1-2)

Chapter 1: Contextualization: From Classroom to Multimodality

Chapter abstract

*This chapter presents the **context** of my research at **personal, institutional, national and global levels.** It identifies **three needs** within this context, namely, a need for **theoretical and pedagogical guidelines for online course design and development,** a need for **quality research,** and a need for **professionals.***

1.1 From Classroom to Multimodality

I see a necessity to crystallize the meaning of the following frequently used terms in this thesis at the start to ensure what follows is more clearly understood. This also serves as an initial orientation to the field of study from a Chinese perspective before I begin to describe the contexts in more detail.

1) Classroom-based/campus-based education (in China)

This refers to tertiary-level degree-bearing education for full-time adult learners in a classroom on a campus.

2) Distance education (in China)

This refers to tertiary-level degree-bearing education to part-time adult learners via correspondence, or television/radio, and/or regular evening or

weekend face-to-face classes.

3) Modern distance education project (in China)

This is an official term used by China Ministry of Education (abbreviated as MoE from this point) from 2000 when it launched the "experimental project of modern distance education" to describe tertiary-level degree-bearing education mainly in which 2/3 of the total study hours is mediated by modern educational technology (e.g. satellite, LAN, Internet, cable TV, CD-ROMs, etc.) to part-time adult learners (MoE document, 2000). The wider literature uses terms such as e-learning, digital learning, online learning, web-based learning, virtual learning, open flexible learning to describe similar educational contexts.

4) Online education (in China)

This is an unofficial term used by all of the 67 universities taking part in the above-mentioned experimental project, as most of these use the Internet as the major medium for course delivery. For brevity, I will mainly use this term in my thesis instead of the official term.

5) Multimodal education

As one of the 67 universities, my University, started with the term "online education" when it established the Institute in 2000 to undertake the project. Since 2007, the Institute has shifted to the term "multimodal education" or "multimodal learning" (Gu, 2008:37) to describe its teaching and learning system that allows integrated learning modes via different media (e.g. print,

face-to-face, computer, Internet, mobile phone, etc.).

The above definitions can be viewed as a description of a mere media-shift in higher education in China, in particular for part-time adult learners. However, they are specifically relevant to my situation in that all stakeholders of my research come from a conventional classroom-based background, yet we engage ourselves in this multimodal innovation. It is our transformation from classroom to multimodal teaching and learning that provides the overarching challenge represented in this research. In the following sections, I will present the context of my research at personal, institutional, national and global levels. As the context has been changing through my five-year research, and so has my understanding of the context, what is presented in this chapter is initial and scratchy. I will provide more relevant and detailed review of the context against each of the research cycle in the four "plan" chapters.

1.2 A Personal Profile

I had been a campus-based instructor of English for 12 years at the School of English Language Communication at my University before I decided to join the Institute at its establishment in 2000. To be honest, it was more a decision out of a desire for a change than of a vision of the prospects of online education. I found classroom teaching no longer fascinating, in a situation where I repeatedly delivered similar courses year after year to groups of similar learners. I started my work at the new Institute as a chair

tutor[1] of first-year modules for a post-diploma BA course[2] in English language education. At that time I held the view that online education, when compared to campus-based education, was merely about the change in delivery media.

The eight years from 2000 to 2008 saw me growing from a classroom instructor, to a web-based chair tutor, Director of the Course Design and Development Centre and now Deputy Dean in charge of course design and development. I began my PhD studies after being freshly promoted to my deanship. I was met with the daunting task of upgrading the online courseware for the post-diploma BA course. This was daunting in two ways. First was the huge amount of work as it involved 15 modules of approximately 1200 study hours in total. Second and ultimately more challenging was the absence of a framework to undertake this task.

To tackle the issue, I chose the first module of the course "orientation" to start with as a case study with the aim to establish a framework for the alteration work for the rest of the modules, only to find this case led to a cyclical process of action research, where the initial aim evolved ambitiously to my transformation from a craftsman-like practitioner of online course design and development to a researcher and professional of multimodal learning system design. This thesis is in fact a full narration of

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[1] The role of a chair tutor of a module was defined then to be responsible for delivering face-to-face tutorials, developing online courseware, moderating online course forum, and providing tutor training upon demand.

[2] At the Institute, the post-diploma BA course is termed "programme" and the modules within this course are termed "courses".

this process.

1.3 An Institutional Profile

The Institute was established in 2000 immediately after my University was authorized by the MoE to join the modern distance education project[3]. It runs three degree-bearing courses in English language education, the diploma, BA and post-diploma BA, with an average yearly enrollment of 1000 learners, 60% of whom register for the three-year post-diploma BA course.

The Institute has established partnerships with 48 schools of English language education of local universities nationwide known as the learning centres. These centres collaborate with the Institute in enrollment, face-to-face tutorial provision, learning process support and monitoring, sit-in course examination administration, and other administrative duties.

The Institute has also established partnership with an IT company (Beijing Pacific Century Info-Tech Co., Ltd.) who provides technological and financial support.

Until 2004, the Institute's infrastructure was as shown in Figure 1.1.

[3] Practically, any universities in China can run degree-bearing online education. However, only those degrees granted by the MoE authorized universities can be officially recognized as administratively valid and will attract learners.

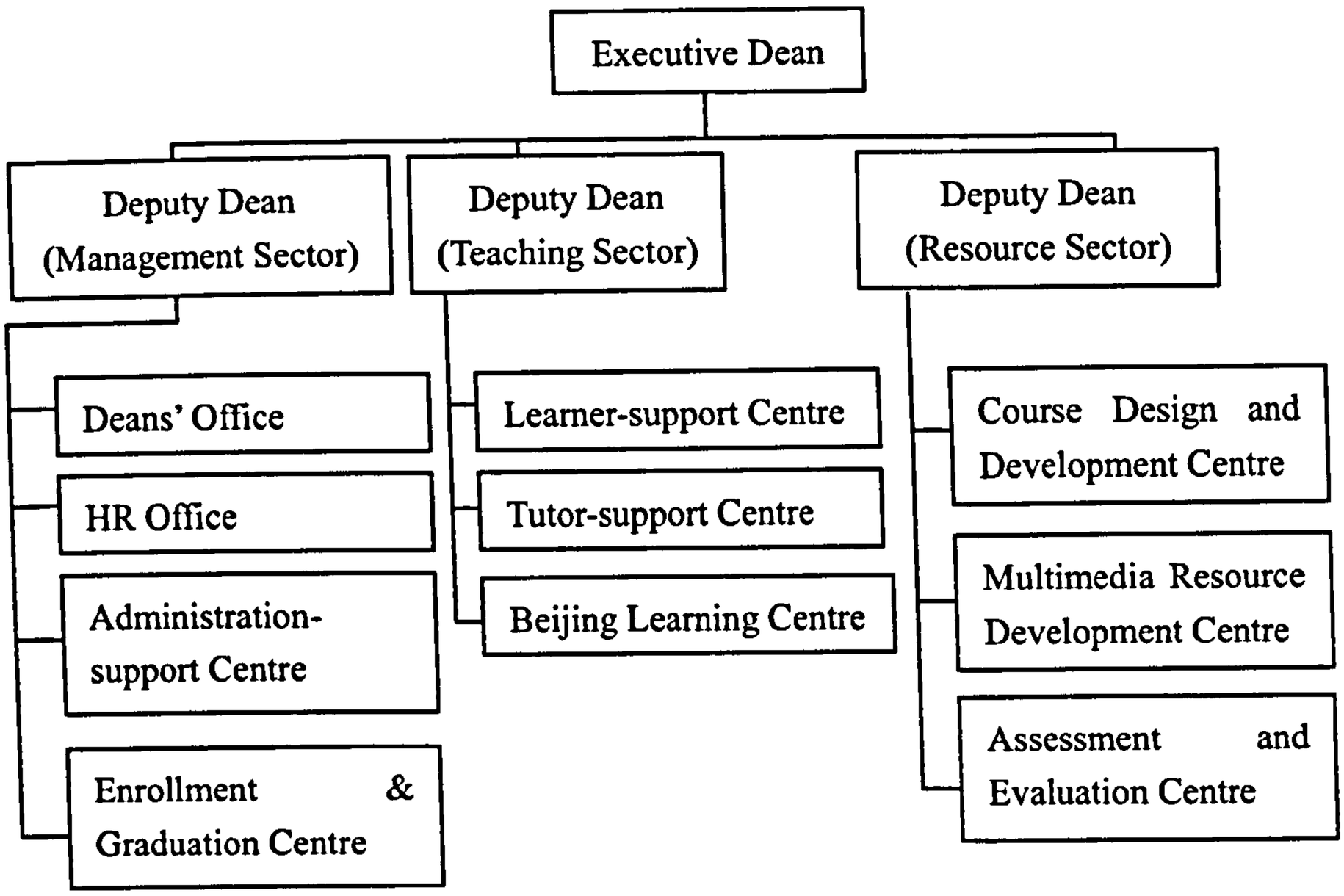

Figure 1.1 The infrastructure of the Institute in 2004

Within this structure, the Course Design and Development, Multimedia Resource Development and Assessment and Evaluation Centres made up the Institute's Resource Sector that was mainly responsible for course design and development-related jobs.

The post-diploma BA course started off with online courseware as a hasty adaptation of a series of print textbooks targeted at learners of distance education at the China Central Radio and Television University. Such hastiness was due to a tight schedule, a lack of experience of the staff (including me) and an absence of a framework for development.

Criticism of this type of simple transference of face-to-face resources to online ones was already emerging in the literature (Reiser, 2001a:64;

DuCharme-Hansen and Dupin-Bryant, 2004:4), and some obvious mistakes were reported. As a result, the Executive Dean decided to redesign the courseware series and this became the responsibility of the Resource Sector. It was obvious that this new cycle of development should not follow the previous model, a typical print-textbook-transfer model (Gu, 2008:41) (3.1 in Chapter 3 will describe this model in detail). However, the Resource Sector was not aware of any alternative model for the development of the online courseware since no research had been undertaken at the Institute into this. This was the time when I decided to begin my PhD studies and as this was a real-situation concern, both personally and institutionally, it became the focus of my research.

Staff professionalism is always an accompanying concern with job requirements. The Resource Sector was then made up of staff from three disciplines.

1) Academic staff: They all have MAs in English Language Teaching with at least five-year campus-based teaching experience, but none had received training in online education.

2) Audio and video technicians: They are all technologically competent in audio recording and video shooting and editing; yet they have low English proficiency. None has received training in either online education or English language teaching.

3) Administrative staff: They have a diploma or BA degree in English

language, but none has received training in either online education or English language teaching.

No member of staff was cross-disciplined. The above facts determined the two needs of the Institute: one was the need for collaboration and the other was the need for professional development.

1.4 A National Profile

Distance education is reported to have gone through three generations in China (Ding, 2005:211).

1) The first generation (since the 1950s): Correspondence-mediated distance education in which learning is mainly print-based, supported by regular evening or weekend face-to-face classes.

2) The second generation (since the 1970s): Radio and television-mediated distance education in which learning is print-based, supported by regular tutorial programmes transmitted via radio or television, evening or weekend face-to-face classes. Later, tutorial videotapes and VCDs were also made available.

3) The third generation (since 2000): Modern technology-mediated distance education, in which learning is mainly web-based, supported by print materials, and CD-ROMs.

It must be noted that these three generations still co-exist as major forms of distance education in China. However, the third generation currently enjoys the fastest growth. Table 1.1 shows their intakes from 2004 to 2006.

Table 1.1 Intakes for the three forms of distance education (MoE documents: 2004, 2005, and 2006)

Year	2004	2005	2006	2007 and 2008
1st generation	984755	876409	856651	Not yet released.
2nd generation	118233	81299	62433	
3rd generation	839325	891046	1132516	

Table 1.1 shows that though the first two generations still enjoy a large intake, modern distance education is experiencing a continuous growth, while the other two are facing a decrease.

There could be many reasons for this, but an increased demand for higher education, reform of higher education that promotes diversified education modes, the upgrading of the information infrastructure and development and the application of new technology has played a major role (Ding, 2005:208-210). In addition, a favourable governmental enrollment policy is also contributing to the growth -- modern distance education enjoys autonomy in setting enrollment qualification and intake quota, while the other two have national unified entrance exams and MoE-controlled intake quota.

This fast growth puts online course development in high demand. Until 2005, 15,000 online modules of 153 subjects covering 10 disciplines had been developed (Modern Distance Education Innovation and Practice, Collections of Universities and Colleges, 2005:i). The priority given to online course development is seen not only in the practice of the 67 nominated universities, but also in MoE's scheme. The only national-status

prize awarded to modern distance education is "China National Programme for Elaborate Courses" (CNPEC) (for online education) started from 2007 (MoE document, 2007b). The online course development task is not a privilege of online education. One of the critical items for the prize of "CNPEC" (for campus-based education) is that the course must be web-based (MoE document, 2003). In addition, the extent of employing modern technology in course delivery is one of the criteria in MoE's Assessment Scheme of Reforms of BA Programmes, a ranking system applied to all universities (MoE document, 2004a).

This attention is also seen in the English language education field. English courses are compulsory parts of the curriculum in all universities. From 2004, the MoE issued a series of policies for the "Teaching Reform of Tertiary-level English Courses Project" by promoting an integration of classroom and computer modes (changed to classroom and the Internet since 2006) of teaching English (MoE documents, 2004b, 2006a). This project led to the 2007 version of Teaching Guidelines to Tertiary-level English Courses with an explicit requirement that no less than 30% of credits of English courses must be earned through studying via modern technology (MoE document, 2007a).

In summary, online course design and development has become an essential activity for all universities. However, the boom in practice is not reflected in research. Until the end of 2007, publications with online course

development/design as key words in the 51 core journals of tertiary-level education and social science in China were limited to 68. A close study of these publications revealed a dominance of the following research orientations.

1) Literature-review-based instead of practice- or case-based;
2) An aspectual view instead of a holistic view, especially a preference for technology application issues;
3) An absence of the exploration of theoretical and pedagogical issues.

Book publications are even scarcer and again, demonstrate the above-mentioned orientations, with the only exceptions of several works by Gu (2004a, 2005a), and Gu et al. (2005).

Issues emerged as a result of this gap between practice and research, with the following particularly targeted at course design and development.

1) Skepticism towards the quality of online education (Huang et al. 2003; Gu, 2004a:276-279).
2) Lack of quality course resources appropriate for online education (Ding, 2005:68).
3) An assembly line model, viewed as dominant in online course development, led to problematic consequences including high negotiation cost; tensions among pedagogy, technology and practicality; prolonged production period; a deflation or distortion of the intended aims; a mismatch of what is intended and what is needed (Cao, 2004:

27).

4) A simplistic transference of campus-based materials to online course production resulted in learning difficulties and low retention rate, segmentation of the study package, and failure to meet the learners' need (Cao, 2004:27).

5) Learners were not enthusiastic about utilizing online courseware. The huge time, human resource and technology investment in courseware development seemed unproductive and ineffective (Cao, 2004:27).

These issues called for a need for research to examine the current practice for explanations and solutions, and to construct theoretical and pedagogical justification for the practice.

This field does not lack human resources. Yet it lacks human resources with the right professional identity (Ding, 2005:68). The MoE's list of disciplines (MoE document, 2006b) has not recognized online education as a discipline, which means no curricula, no positions, no research funds will be made specifically available for the learning, teaching, practice and research of this subject. People engaged in this field come from a variety of peripheral disciplines such as educational technology, computer science, as well as main subject areas. At the Institute where English language education is the subject, staff mainly have an English language teaching (ELT) background. This may be a good explanation for the reason why research papers tend to address specific aspects of online education,

lacking a holistic view at theoretical and pedagogical levels – the researchers find no professional identity in online education, thus, focusing on those particular issues relevant to their own disciplines. There is a need for them to adapt their established disciplinary beliefs to address the new context, to acquire knowledge of other disciplines, to think and act across disciplines, and finally to establish the professional identity of online education as a distinct discipline.

In addition, campus-based education staff, at this transition period from solely face-to-face-classroom delivery to more flexible modes involving the integration of classroom and modern technologies for teaching and learning, are also challenged by paradigm shifts and competences necessary for effective practice. After a review of efforts China made in educational informationization, Yu et al. (2005:100) point out that there has been a tendency to overly focus on the technology and that there is an urgent need for teacher training. A similar argument can be found in Gu's remark (2005b:74) that the development of online education in China is not an issue of "Dian Nao" (computer mind), but of "Ren Nao" (human mind).

1.5 A Global Profile

The global higher education sector, either in on-campus or off-campus mode, is experiencing a similar transfer from print-based to web-based (Nation, 2000; Laurillard, 2002; Cornford and Pollock, 2003; Zhang, 2005a). Successful cases exist at conventional universities such as

Middlesex, Liverpool, Portsmouth University in the UK, Hibernia College in Ireland, Phoenix, Pennsylvania University in USA to name a few, and at many open universities in countries such as the UK, India, Finland, Sweden, and South Africa (Zhang, 2005b:23). Disastrous examples of ventures in this area exist as well, for example in North America with AllLearn, NYU Online, Fathom, Virtual Temple, University of Maryland University College Online (Macleod, 2006). The UK e-University Project (Zhang, 2005b:23; Ding, 2005:230) is another instance where the venture was quickly abandoned.

Zhang (2005a:28) indentifies the various reasons for failure that are relevant to course design and development and these are summarized below.

1) A simplistic transfer of quality course content from print to the web may not necessarily promote learning;
2) Practice is not guided nor evaluated by research;
3) Underestimation of the cost;
4) A simplistic transfer of courses from one region to another, ignorant of regional diversities in educational philosophy, learners' background and needs;
5) Absence of professional people for online education.

The lack of research in this area is recognized as a global issue in a report from the 2006 International Forum on Distance Education 2006 in Guang

Zhou, China, citing views of distinguished scholars in this field (Yao, 2006:16). Moreover, published research papers in this field have been recognized as being of poor quality. It has been reported in Both China and the US only 5% of the published papers could be justified as research papers (Yao, 2006:17). The contrast between the practice and an understanding is also identified in online language learning field (White, 2003:2).

The lack of professionalism in online course development and delivery is also recognized. Instructors involved in this task are "novice web designers and have received no training in interaction and web-based instructional design" (Frizell and Hübscher, 2002).

1.6 A Context with a Gap between Practice and Research

The sections so far have outlined the context of my research. It is modern distance education in English language education in higher education in China. In spite of the fast growing practice in this context, relevant research lacks both quantity and quality. My thesis covers three main issues that have arisen from this initial analysis.

1) There is a need for theoretical and pedagogical guidelines for online course design and development. This is categorized in my thesis as a course design and development issue, that has changed to instructional system design, and that is finally evolving in multimodal learning system design. These will be explored from Chapter 6 on.

2) There is a need for quality research. This is categorized in my thesis as a methodological issue, and will be explored from Chapter 6 on.

3) There is a need for human resources with an established professional identity in online education. This is categorized in my thesis as a professional development issue, and will be explored from Chapter 8 on.

Chapter summary

This chapter has examined the ***context*** *of my research at* ***personal, institutional, national and global*** *levels, and identified* ***three needs*** *for improvements. In Chapter 2, I will discuss how my research is informed by and in turn, informs these issues.*

Chapter 2: Research: From Methods to Action Research

Chapter abstract

This chapter presents an overview of the three action research cycles I planned, implemented, analyzed and reflected across 2004 to 2006. This is approached by specifying the initiatives, the focus, the context, the participants, the process and the methods adopted in each cycle. It aims to ***draw a research map*** *to keep my readers on my evolution track from a novice course designer and a researcher to a multimodal learning system designer and action researcher towards professionalism.*

2.1 Research Overview

In Chapter 1, I proposed three issues of concern in online education at personal, institutional, national and global levels. They are to do with the "What" (instructional design), "How" (research methodology) and "Who" (professional development) issues. In fact, these issues were not explicitly identified at the beginning of my research. They emerged and crystallized as my research progressed. In this chapter, I outline my research process that enabled this to occur.

My research was initiated by the "what" issue, which provoked the "how" issue in my preliminary attempt (research cycle 0), and this aroused the

"who" issue in my initial exploration (research cycle 1), and I continued with these three issues in my further examination (research cycle 2). These stages in my research form three action research cycles. Each cycle follows a plan-act-analyze-reflect process. Though in retrospect, the approach I used in my first research cycle conformed to an action research model, because I did not consciously choose this as a research methodology at that time, it is termed research cycle 0 in my thesis, with the remaining successive cycles as research cycle 1 and research cycle 2.

As the aims, focuses, methods, and participants evolved with each cycle of action research, so did the literature review and findings, I will provide an outline of each cycle in this chapter for ease of reference, saving the details for later chapters. This outline is based on Zuber-Skerrit and Fletcher's framework for presenting action research (2007:42), addressing six of its key dimensions including "why" (initiative), "what" (focus), "where" (context), "who" (participant), "when" (process) and "how" (method). The answer to the question "where" is omitted in all cycles since they all took place at the Institute, a context described in Chapter 1. Table 2.1 provides an overview of my research cycles.

Table 2.1 Overview of my research cycles

	Initiative	Focus	Participants	Process	Methods
Cycle 0	A mono-commitment research Focus on: 1) What (course design)	Online course design and development	I as a researcher who worked alone.	Jan. -- Sep. 2004	A cluster of research methods
Cycle 1	A dual-commitment research Focus on: 1) What (instructional design) 2) How (methodology)	Instructional design and action research	4 staff-researchers and 15 volunteer learner-researchers	Oct. 2004 -- Dec. 2005	Action research
Cycle 2	A tri-commitment research Focus on: 1) What (instructional design) 2) How (methodology) 3) Who (professional development)	Instructional design, action research and professional development	12 new staff and 359 learners	Dec. 2005 – Dec. 2006	Action research
Future plan	An integration of instructional design, action research and professional development as a paradigm, a process and a product	Multimodal learning system design	Staff, local tutors, local administrators, and learners	Future	Multimodal learning system design

2.2 A Summary of My Research Cycles

2.2.1 Research cycle 0: a preliminary attempt (This is covered in more detail in Chapters 3-5.)

1. Why (the initiative)

This cycle was initiated by an immediate and practical need of a framework for online course design and development to undertake a personal and institutional task of upgrading courseware of a post-diploma BA course. This cycle was primarily to do with the "What" issue: what improvements could be made to the course design and development task?

2. What (the focus)

I selected the first module "Orientation" of the course as a case to explore the design and development process.

3. Who (the participant)

I was the sole researcher. The researchees included 686 newly enrolled post-diploma BA learners of spring 2004.

4. When (the process)

This cycle lasted 9 months as shown in Table 2.2.

Table 2.2 The time-line process of research cycle 0

2004								
Jan.	**Feb.**	**Mar.**	**April**	**May**	**June**	**July**	**Aug.**	**Sep.**
Plan ⇨		Act ⇨		Analyze and Reflect ⇨				

5. How (the method)

I chose a cluster of research methods, collecting and analyzing four groups of naturally-occurring data, including the learners' profile, online forum posts,

call centre messages, and assignment submission rate in order to surface learners' concerns and difficulties about both the orientation module and their learning process, so as to address them in the new design.

6. Major findings that led to research cycle 1

This research cycle revealed a dual-concern reality. One deals with the subject matter in that online course design and development was a process beyond a mono-perspective, mono-phase, mono-cycle and individual work; it was also a product beyond the mere content (courseware). It was in fact a process with multi-perspectives of different stakeholders (e.g. learners, researchers, tutors, etc.) through phases of design and development, delivery, evaluation and reflection in a cyclical manner via collaborative work. Such a process aimed at not only a production of courseware, but a construction of a learning system (the "What" issue). The other relates to methodological issues. I followed a cluster of research methods' approach, only to find that this approach was inadequate to support me to attain my research aims. I needed a research methodology responsive to my research need and situation (the "How" issue).

2.2.2 Research cycle 1: an initial exploration (This is covered in more detail in Chapters 6-8.)

1. Why (the initiative)

This is a dual-commitment research cycle that sought to improve my understanding and practice of instructional design (an evolved term of "course design and development") of the orientation module (the "What" issue), and of

action research as a research methodology (the "How" issue).

2. What (the focus)

This research cycle followed two focuses. One was the examination of instructional design theories as well as the instructional design practice. The other was the exploration of the responsiveness of action research to my context at both the conceptual and operational levels.

3. Who (the participant)

The research was conducted by two core research groups, namely, a group of 4 tutor-researchers who were involved in the design, development, or delivery of the orientation module; a group of 15 volunteer learner-researchers sampled from 407 newly-enrolled learners of spring 2005 who studied the orientation module.

4. When (the process)

This cycle lasted 9 months as shown in Table 2.3. During this cycle and the next, I had dealt with a major family tragedy and went into two periods of suspension. This had an impact on my research as I had to rely on other members of my research team, with my absence, to continue the research according to the plan.

Table 2.3 The time-line process of research cycle 1

2004	**2005**					
Oct-Nov	**Jan-Feb**	**Mar.**	**April**	**May**	**June-Nov**	**Dec.**
Plan ⇨		Act ⇨	Analyze and Reflect		⇨ 1st period of Suspension	Analyze and Reflect ⇨

5. How (the method)

I adopted an action research approach to collect and analyze the data from different groups (tutor-researcher group, learner-researcher group, peripheral learner group, and peripheral tutor group), at different times (pre-, during- and post-module), using different methods (naturally-occurring data, questionnaires, interviews, seminars and journals).

6. Major findings that led to research cycle 2

This research cycle revealed that the dual-commitment approach led to tri-achievements with professional development (the "Who" issue) as a fulfillment in addition to an improved understanding and practice of instructional design (the "What" issue) and action research (the "How" issue). Two issues emerged from the research that demanded further examination. One was the exploration of appropriate instructional strategies to tackle four major tensions between instructional design and the learners' reality. These tensions were time design for the learners, appropriate media selection, support design in relation to interaction and group learning, and assessment design. The other was the application of action research as an intentional professional development approach.

2.2.3 Research cycle 2: a further examination (This is covered in more detail in Chapters 9-11.)

1. Why (the initiative)

This is a tri-commitment research cycle that aimed to explore my

understanding and practice of professional development (the "Who" issue), and my further understanding and practice of instructional design (the "What" issue) and action research (the "How" issue).

2. What (the focus)

This research cycle examined the effect of the interventional strategies to the instructional design of the orientation module that addressed the four tensions identified by research cycle 1. It also explored action research as an intervention for staff professional development.

3. Who (the participant)

The research involved 12 new staff working in different disciplinary areas and with different administrative responsibilities at the Institute. It also involved learners in two ways. One was that all 359 newly enrolled learners who studied the orientation module were required in their module assignment to participate in group activities to contribute their module evaluation. The other was to invite 212 learners of Beijing learning centre to keep journals during their study period of the orientation module.

4. When (the process)

This cycle lasted 12 months as shown in Table 2.4.

Table 2.4 The time-line process of research cycle 2

2005	**2006**				
Dec.	**Jan.**	**Feb.**	**Mar.**	**April-Aug.**	**Sep.- Dec.**
Plan ⇨			Act ⇨	2nd period of suspension	Analyze and Reflect ⇨

5. How (the method)

I attempted an integration of instructional design and action research processes that addressed inquiry and reflection in group approach. Data was collected from different groups (new staff group, peripheral learner group, Beijing learning centre group and peripheral tutor group), at different times (pre-, during- and post-module), and using different methods (naturally-occurring data, questionnaires, interviews, and journals).

6. Major findings that led to future research

This research cycle revealed that my interventional strategies worked to some extent, but some issues persisted and new issues emerged. Among them, the tensions between instructional design and the learners' reality, and the multi-faceted context of the research were repeatedly recognized and demanded conceptual and practical rationalization.

2.2.4 Future prospects (This is covered in more detail in Chapter 12.)

With instructional design (the "What" issue), action research (the "How" issue) and professional development (the "Who" issue) as the three major themes integrated in my research, a model of "multimodal learning system design" is introduced to umbrella the conceptual and practical improvements in my previous three research cycles and to guide further improvements in my future research.

Chapter summary

This chapter has provided a summary of my research cycles with special attention to the ***evolving focus of the initiative, the focus, the participant, the process, the method and the major findings****. The brevity has allowed little opportunity to present in any detail the argument for the changes and improvements from one cycle to another, leaving this task to the remaining chapters. It is hoped that this chapter will have prepared my readers so that they will be more able to make sense of the thesis structure and the nature of the researcher's journey. From the next chapter onwards, I will report my research cycles one by one, following a narrative approach.*

Part II

A Preliminary Attempt

(Chapters 3-5)

Chapter 3: Plan – Dealing With a Real-situation Concern

Chapter abstract

This chapter describes the start of my first research cycle in spring 2004 initiated by a ***real-situation task*** *to adapt the orientation module of the post-diploma BA course in English language education of the Institute. It explains* ***the need*** *for such an adaptation and* ***the concerns****. Then it presents* ***a research plan*** *that was implemented to collect naturally-occurring data during the course delivery with an aim to* ***discover issues*** *so as to* ***inform the focus of further research****.*

3.1 A Real-situation Concern

As mentioned in Chapter 1, my research cycle 0 was initiated by a real-situation concern – I needed a framework to guide the Resource Sector of the Institute to upgrade 15 modules of the post-diploma BA course.

This course was developed in the 1990s for a different context. It targeted learners registered for a post-diploma non-honours BA course in English language education at the China Central Radio & Television University (abbreviated as CCRTVU from this point on) -- a joint course between the University and CCRTVU. Learners studied their courses via print textbooks, regular live tutorials transmitted on China Educational TV channel (with tutorial tapes available at their local centres), and regular face-to-face tutorials.

When the Institute was established in 2000, it decided to adopt and further develop this as an online post-diploma honours BA course.

A team of academics who had newly joined the Institute from other departments of the University, including me, with our substantial experience of campus-based teaching and little training and practice of online education, were involved in this development work. We had no more than six months to complete the five modules to be delivered in 2001 for the first learner intake.

Our main task was to transfer print textbooks to online courseware scripts. Script adaptation mainly focused on alteration of the instructions obviously inappropriate in the courseware; for example, "listen to the tape" needed to be changed to "listen to the recording"; "write the outline on a separate piece of paper." needed to be changed to "write the outline in the space below." This was a typical print-textbook-transfer model (Gu, 2008:41), with instant feedback and voice-based instruction as the major enhancement of the online versions over the print ones.

At the end of 2003, the Institute launched its 3rd version of its e-learning platform (abbreviated as e-platform from this point on), adding the following functionality.

1) Resource banks: Apart from the courseware, text, audio and video versions of tutorials were added as learning resources.

2) Assessment management: Computer-marked unit-based assessment, online assignment download and submission, and online examination registration

were introduced.

3) Community systems: Course forums and call centre service (telephone and email) were made available to learners. A synchronous text+voice system known as Voice of BeiwaiOnline (abbreviated as VOB from this point on) was also embedded.

This additional functionality on the one hand improved learner support services, but on the other hand, increased learners' vulnerability to unsuccessful learning if they did not use the e-platform as required, especially the use of the assessment devices. 2003 also saw an expansion of the Institute's learners to 5000. 47 learning centres across China were established. These resulted in an increased demand on learner support services.

The rapid courseware development by inexperienced staff started to reveal its drawbacks in failing to address the growth in service needs, changes in technology and increased number of learners. The first module of the course – "orientation" -- became particularly inappropriate because, unlike the rest of the modules on language skills that were not heavily context-specific, this module was written with the aim of guiding learners to essential skills required in the new language learning system. It displayed two obvious inadequacies.

1) The module targeted a typical CCRTVU learning system, presenting information that may be partially or completely inappropriate in the learning system of the Institute.

2) The module addressed generic learning strategies in the distance language

learning context, absent of guidance on the learners' transition to online learning.

I knew this would lead to problems, but I did not know what the nature and extent of these would be. I also saw a pressing demand for adapting this module, as well as the rest, but I did not know how. This was the time when my PhD study started; thus, these real-situation concerns became the focus of my research.

3.2 A Research Plan

The circumstances already described meant that I rushed into my research planning without an extensive literature review – this left me with the need to develop a methodological stance as well as a fuller understanding of the key concepts and theories in this area. However it was important that I took this early opportunity to explore the nature of the learner experience and the ways naturally-occurring data might be used to inform this. This would inform my later research and provide some indication of what might need redesigning.

My research intention at this stage was to develop an understanding of the learners and their experience; for example, what elements of the module worked for them, what did not, what were their needs, etc. I chose to focus on all the possible naturally-occurring data in the categories shown in Table 3.1.

Table 3.1 Naturally-occurring data of my research cycle 0

Time	Data	Source	Possible significance
Pre-module	Learners' profile (age, gender, education, marital status, etc.)	e-platform database	Are learners alike or diverse? What should this indicate?
	Print book purchase rate	e-platform database	Do learners learn from the courseware or the print books?
During-module	Number of the forum posts	The forum	Do learners use this service?
	Content of the forum posts		If yes, what are the concerns they raise?
	Number of the call centre messages	Call centre database	Do learners use this service?
	Content of the call centre messages		If yes, what are the concerns they raise?
	Tutorial attendance rate	Local administrators	Do learners use this service?
Post-module	Assignment submission rate	e-platform database	Can learners use online submission system?
	Assignment scores		Can learners successfully complete this module?

This choice to focus on all the possible naturally-occurring data was made for the following reasons.

1) The fuzziness of the situation.

Until this moment, the need for an adaptation of the orientation module was hypothesized by academic instinct instead of hard research data. So was the assumption that the current practices of course design and development needed to be different from the existing practice. I found myself data-weak to formulate a definite research framework targeting a focus. The primary task then was to identify if there existed any problem at all. I believed that interventional tools such as additional questionnaires etc. would not be

advisable at this stage. I needed the data to reflect the situation as it was and did not want any "research" effect or learner overload effect to influence the ways the learners interacted with the module.

2) A research novice.

I had not had the opportunity as yet to spend enough time deliberating my research approaches and methods, considering them at this stage a mere vehicle to help me undertake my task of course design and development.

3) Time tightness.

As my research started simultaneously with the delivery of the orientation module, little time was allowed for the design and implementation of any research tools.

4) The recognition of a need for follow-up work

I expected this research to be a prelude to further study, to lead me to a less fuzzy situation for follow-up work, though the "cycle" concept had not emerged at this stage. So I adopted an exploratory approach to my research, focusing first of all on what the naturally-occurring data revealed.

Chapter summary

This chapter has explained ***the need and concerns*** *relating to upgrading an online course as a real-situation task that formed the context for my research cycle 0. It has outlined* ***the rationale for and described a research plan*** *that focused on* ***collecting naturally-occurring data*** *to* ***inform my future research***

***direction**. The next chapter will focus on the description of the data collection process during the delivery of the orientation module in spring 2004.*

Chapter 4: Act – Collecting Naturally-occurring Data

Chapter abstract

This chapter reports the research action to ***collect the data*** *in the* ***pre-, during- and post-periods*** *of the delivery of the orientation module. It describes the data collection* ***methods*** *and the* ***nature*** *of the data.*

4.1 Collecting Pre-module Data

In spring 2004, the Institute had enrolled 686 learners on the post-diploma BA course at 15 learning centres across China. Since all learners were required to fill in an online form of personal information upon registration, data concerning their essential demographic information of age, gender, educational background, marital status and occupations were conveniently collected via the e-platform database.

The online book purchase system showed that 356 copies of print textbooks for the orientation module had been sold[4].

4.2 Collecting During-module Data

The orientation module was delivered as such in spring 2004: it was a 1-credit compulsory module that required learners to spend their first week (10 hours) self-studying either the print textbook or its online courseware. They needed to

[4] Unlike elsewhere in higher education where print textbooks are most often optional course readers, in my situation, the print textbook for the orientation module contains a complete text version of the module which is an essential resource for learners who study this module. Of course, they can also choose to use the courseware instead which is an e-version of the print textbook at this stage.

complete an assignment of 25 multiple-choice questions concerning the module content, a sample weekly study plan and a three-year study plan, then to submit it online by the end of the third week. The assignments were marked by local tutors and scores were uploaded to the e-platform by the end of the fourth week. A total score of 60 and above earned a pass.

During the week, learners could seek help from either their local tutors via phone or email, the chair tutor of the module (named Professor Guide) via the orientation module forum and call centre staff via phone or email. At the end of the week, a four-hour face-to-face tutorial was provided at their learning centre as an optional learner support service.

At this stage, I found that I needed to change my single-week data collection plan to a four-week one as inquiries from the learners concerning the study of the orientation module continued until the release of the assignment scores. During these four weeks, the following data were attended to.

1) Forum posts:

There were 820 posts among which 232 posts were from Prof. Guide, and 588 posts were from the learners.

2) Call centre messages:

There were 38 calls and 47 email messages.

3) Tutorial attendance:

Collection of this data turned out to be a problem. Though the Institute required learning centres to keep paper-based tutorial attendance records, only

one centre actually did this in this instance. I assumed that this might be due to the fact that such a record did not count as credit for either the centre or the learners, and that the Institute headquarters did not monitor this record. The only data came from the Beijing learning centre, with 315 learners among whom 289 attended the tutorial.

4.3 Collecting Post-module Data

By the assignment submission deadline, 597 learners out of 686 submitted their assignments. Their scores ranged from 90 to 100 (Appendix 4.18), which meant that all who submitted the assignments passed the module.

Chapter summary

This chapter has reported the ***data collection process*** *in the pre-, during- and post-module periods. The next chapter will report the data analysis and subsequent reflection to identify issues for a new research cycle.*

Chapter 5: Analyze and Reflect – Emerging a Dual-concern

Chapter abstract

This chapter reports the data analysis and reflection process of the research cycle 0 at ***two levels.*** *One is the analysis of and reflection on the data that revealed* ***three key issues*** *concerning the design of the orientation module, namely, the responsiveness of the module to learners' needs, learners' media selection, and the effectiveness of the assessment. The other is a reflection on* ***the whole research process*** *that led to* ***a dual-concern reality.*** *The first concern is that course design and development proved to be both* ***a process and a product issue beyond mere content consideration.*** *The second concern is that research methodology is an equally important issue* ***beyond a mere method consideration.*** *In the light of the above findings,* ***a modified research need*** *is proposed. The chapter starts with a brief description of the data analysis and reflection methods.*

5.1 A Cyclical Process of Data Analysis and Reflection

What is presented in this chapter has been rewritten several times, simply because as my research progressed, my understanding and practice of the

principles, procedures, techniques, and interpretation criteria of data analysis evolved. In order to keep to the uniform principle of data interpretation (McKernan, 1996:223), and to make a comparative analysis possible, I revisited the data analysis process of a previous cycle when I engaged in that of a follow-up cycle. The rationale and the descriptions of the principles, procedures, techniques, and interpretation criteria of data analysis will be discussed in Chapter 8 where actions were more fully guided by action research methodology, and which on revisiting the data informed the following analysis.

Meanwhile, I have tried to keep the reflections as original as they were for two reasons. One is that though the data analysis techniques used have been refined through cycles, the major issues the data revealed remain consistent with the original findings. The other is that though these reflections may lack depth and breadth if viewed from my current perspective, they formed a logical link to the needs of the next research cycle. The reflections of this research cycle took place at two levels: reflections upon the collected data and upon the whole research process. The following sections will present the two levels of reflection respectively.

5.2 Reflecting on the Data

The data analysis and reflection process of this research cycle was originally guided by my existing research norms of working on the findings and drawing

conclusions. However, the process led me to questions instead of solutions. Though at the time I was not aware of the "reflection" phase in action research, these questions served a similar purpose to reveal issues for a new research cycle. Though the data was limited, it still managed to surface the following three key questions as to the design of the orientation module.

1) Did the module address learners' need?

Data was collected from the module forum, call centre telephone and email messages to discover the inquiries learners raised as shown in Table 5.1.

Table 5.1 Inquiries from 2004 learners (via e-platform database)

Categories	Forum posts[5] (N=296)		Telephones (N=39) (38 calls, 39 entries[6])		Emails (N=55) (47 messages, 55 entries)	
	No	%	No	%	No.	%
Learner autonomy layer	8	2.70%	0	0%	5	9.09%
Language learning layer	61	21.61%	0	0%	1	1.82%
Affect layer	1	0.34%	0	0%	0	0%
Technology layer	57	19.26%	20	51.28%	19	34.55%
System layer	169	57.09%	17	43.59%	30	54.55%
Others	0	0%	2	5.13%	0	0%

Table 5.1 shows that learners' inquiries covered a wide spectrum of issues. Their inquiries in the system and technology categories occupied the largest proportion in all three communication channels (76.35% in the forum posts, 94.87% in the calls and 89.1% in the emails). This to some extent confirmed

[5] Among 588 posts from the learners, 296 posts were making inquiries.
[6] If a call message contains two inquiries, it is counted as one call, but two entries. Similarly, if an email message contains two inquiries, it is counted as one message, but two entries.

the institutional assumption of the inappropriateness of the orientation module in addressing context-specific issues relating to the learning system of the Institute.

2) Did learners choose to learn online?

The module provided online courseware and an online forum with the expectation that the learners would mainly study the module online. But three types of data indicated that this may not be the case. One was the print-textbook purchase rate. Out of 686 learners, 356 copies of print textbooks were sold at the beginning of the semester, showing a 51.90% purchase rate. There existed a possibility that more purchases occurred during the semester. Still, this initial rate explains that over half of the learner population planned to use the print textbook in their study of the orientation module, yet whether they would use it solely, or in combination with its online version was not known. Nevertheless, this demanded a further exploration due to the fact that if the module was to be adapted, it was not the courseware alone that needed to be considered, the print textbook needed to be redesigned accordingly to support those learners who selected print as the major media to study the module. There were some pedagogic assumptions being made here about the mode of study and these also needed to be addressed; for example, was it possible or desirable for an orientation to an online course not to involve some compulsory online elements? The second indicator that learners were not choosing to work solely online was the tutorial attendance rate. Beijing learning centre had a

91.75% tutorial attendance rate. Though this face-to-face contact was provided as an optional service to learners where attendance carried no credit in their module assessment, such a high attendance rate suggested learners' need of face-to-face components. The third indicator was the forum post rate. Among the three channels of learner support services, learners tended to use the forum (588 items) much more than phone calls (38 items) and emails (47 items). Even so, 588 posts indicated an average less than one post per person in this 686 learner group, regardless of the fact that some of these posts were sent by the same learners[7]. These indicators showed a possible low use of online resources and communication channels, which did not support the Institute's intention to encourage learners to choose online media to study their modules. But I did not have an accurate picture of the value of online resources and communication channels for the learners from this data.

3) How effective was the assessment to evaluate learners' achievements?

The assignment submission rate was 86.88% (N=686/n=596). What did this suggest? Was this a high, medium or low submission rate? What happened to those learners who failed to submit their assignments? The data could not explain this. The analysis of the scores was also difficult to interpret due to the frequency of high marks. As the open-book take-home assignment contained

[7] The forum at that time was a third-party product built in the Institute e-platform. This resulted in the forum and e-platform having two different databases. When learners accessed the forum via the e-platform, most of them would keep their default-registered names. But some learners chose to disguise themselves with made-up names, thus made it difficult to have an exact identification of forum post senders.

solely multiple-choice questions that matched the answers provided in the text of the coursebook/courseware, it allowed learners to pass with little challenge. Should the assessment of this induction-type module offer an easy pass so as to build learners' confidence, or should it be designed to prepare learners for the challenges online learning might bring to them? This provoked a rethinking of what the assessment was for and thus, how it should be designed, delivered and marked.

The analysis of the naturally occurring data in relation to the above questions only served to raise further questions about the course design and delivery. The next section covers my reflection on the adequacy of the research process and future directions.

5.3 Reflecting on the Research Process

This section will examine the research process upon which the data was collected. It will surface three issues as to the dual-concern research reality: course design and development beyond a content concern, and a research need beyond a method concern.

5.3.1 A dual-concern research reality

According to my plan, at the completion of this initial research, I should have developed a vision of how I might undertake the task of the adaptation of the orientation module. However, I found that my data offered limited clues to my concerns about the course design; in addition, posed new concerns about

methodology.

The most obvious was that during the research process, I was kept busy by not only the decision-making as to the redesign of the orientation module, but also the methodological issues to guide the decision-making. The following reflection will address this dual-concern reality accordingly.

5.3.2 A course design and development need beyond the content

My research was initiated by the attempt to adapt the orientation module, with a focus on the possible need of adding an introduction to the learning system and online learning strategies to the module content. The data did support such a need, with a high percentage of learners' inquiries about the context-specific technology and system issues (argued in 5.2). However, the data also revealed some non-content-related issues also important in the course design and development. This will be argued below in two aspects: product and process. The following ideas were based on the data from the initial research attempt only. They had limitations as the way they were; yet they made the next research cycle a more informed and deliberate process than the current cycle.

1) Product wise, the following non-content-related issues emerged.

a) The delivery media for resources

The 51% print textbook purchase rate suggests that in an online learning system, print resources still had their place. Course design and development had to decide whether to include print resources or not, and if so, how these should interact with online resources, and

how this was to be made clear to the learners.

b) The learner support service

The fact that the forum included less than one post per learner and that the call centre was used less frequently was difficult to interpret. Did learners not need these services? Did learners have no knowledge of their existence and/or usage? Did learners have difficulty in accessing them? Support service had been considered to be a delivery-stage issue and it was for this reason that the Learner Support Centre was administered by the Teaching Sector. The Resource Sector, in its course design and development, seldom considered support service-related issues. The consequence of this was a complete absence of the education of the learners as to the recognition, accessibility and availability of learner support services as part of the module.

Contrary to the low utilization of technology-mediated support services, learners' high attendance rate at the face-to-face tutorials may imply their preference for their familiar classroom-based learning to online learning. Therefore, similar to the print-book situation, decisions had to be made as whether face-to-face tutorials should be provided and encouraged; and if so, what role they played in this online learning system.

c) The assessment

Several questions were raised concerning the assessment. For example, what submission rate was expected and why? What should the assessment measure: comprehension of the texts or an ability to cope with online learning? Should there be a high pass rate to help learners build confidence?

2) Process wise, my initial vision was a flowchart of staged actions to guide the course design and development. However, the research posed concerns about not only what these actions should be, but also how these actions should be taken. I found I had to consider the following.

   a) Mono- or multi-perspective research

      This research started with a mono-perspective of a Director of the Resource Sector. However, the analysis of the learners' inquiries opened a learner perspective. In the follow-up course design and development task, how the designers' perspective met that of the learners' was yet to be explored.

   b) Mono- or multi-phase process

      The data for this research cycle was all collected from the course delivery stage. Though limited, it usefully prompted the follow-up work. Delivery thus played a role in course design and development, which meant that the development process research needed to extend beyond a mere design and development phase.

   c) Mono- or multi-cycle process

The research made the course design and development no longer a one-go process. It proved to be valuable only when its findings fed thoughts and brought actions to another cycle of work.

d) Individual or group work

In the light of the above argument, course design and development decision-making could not be the work of a single person. Though this research saw the participation of stakeholders (e.g. call centre staff, the chair tutor, local tutors and administrators) in an assisting role, the follow-up work concerning course design and development could not take place without a joint effort of a clearly identified set of the stakeholders with key responsibilities.

5.3.3 A research need beyond the methods

The methodological issues, viewed as a mere vehicle to the course design and development initiative when the research started, gradually emerged as equally important, if not more so, as the research progressed. Despite my vague recognition of the research methodology then, I already found the following challenges in the research reality. I also detected that some issues coincided with the reflection about the course design and development aspect.

1) Were naturally-occurring data sufficient?

As suggested in the early section of this chapter, naturally-occurring data alone were difficult to interpret. Interventional tools needed to be employed to discover explanations of the reality.

2) Were methods for data collection sufficient?

Decisions needed to be made not only about methods for data collection, but also about methods for data planning, analysis and reflection. Their absence from the planning of this initial research made the process problematic.

3) Were methods sufficient?

A lack of an identified methodology left me struggling with uncertainty about principles, procedures, validity and reliability. My methods were only technical instruments, whereas I needed a methodology as a paradigmatically contextualized concept to guide my research (Cohen, et al. 2003:137). There was a need for me to identify an appropriate methodology prior to the decision about the methods used within my research.

4) Was individual effort and mono-perspective sufficient?

The research was conducted solely by me. The solitude gave rise to uncertainty in many aspects, such as the coding system for the qualitative data, and the interpretation made from the data. The research process was

guided by a single viewpoint of a Director of the Resource Sector as a researcher, yet actions involved affected learners, the chair tutor, call centre staff, local tutors and administrators. This reality made me ponder the necessity of the involvement of their views in the research process.

5) Was a single cycle sufficient?

The research started with an idea that further activities would be needed and would be guided by the findings of this research cycle. However, this research cycle produced few if any conclusive decisions as to the adaptation task of the orientation module. It actually surfaced issues that needed addressing at a fundamental level about the course design and development and raised methodological considerations. It seemed that "further activities" would involve a full cycle of research in a more informed manner.

5.4 A Modification of My Research Need

A key outcome of research cycle 0 was the dual-concern research reality that extended my initial research plan to a further exploration of both the course design and development and methodological issues. I planned to make these two concerns the need of the next research cycle as explained in Table 5.2.

Table 5.2 My research need for research cycle 1

Category	Course design and development	Research
The need	Improvement in the product aspect (beyond content) and the process aspect of the design and development of the orientation module	Improvement at the method level (methods for data planning, collection, analysis and reflection) and methodology level (identification of a methodology)
Grouping	Beyond an individual effort to include other stakeholders' participation	
Perspectives	Beyond a mono-perspective of a Director of the Resource Sector to include other stakeholders' views	
Phases	Inclusion of the delivery stage as part of the design and development process	Inclusion of data planning, collection, analysis and reflection as a whole process
Cycles	Beyond a mono-cycle to allow improvement to be made in the follow-up cycle	

Chapter summary

This chapter has discussed the major findings of the initial research cycle 0, revealing the issues of the course design and development as ***both a process and a product*** *beyond the content consideration, and of* ***the research need*** *beyond a cluster of research methods. The next chapter will cover my initial* ***in-depth exploration of the literature*** *to guide my further research and meet the above needs.*

Part III

An Initial Exploration

(Chapters 6-8)

Chapter 6: Plan – Designing a Dual-commitment Research

Chapter abstract

This chapter develops and describes ***a dual-commitment research plan*** *for a new research cycle in the light of research cycle 0 findings, and a literature review of the subject matter* ***(instructional design)*** *and the methodological issue* ***(action research)****.*

I focus my literature review of instructional design on ***two contexts****. One is the* ***general educational context*** *where I will mainly examine its* ***theoretical bases*** *to* ***establish principles*** *for the instructional design of the orientation module, and its* ***practical aspects*** *to* ***formulate a framework for the creation of a learning environment as a process and a product****. The other is the* ***online education context*** *where I will explore the reasons why instructional design is* ***appealing*** *and the impact the* ***technology*** *exerts on the theory and practice of instructional design.*

I will examine action research from ***three perspectives****. One is a* ***contextual study*** *to reveal that there is little understanding of the theory and practice of action research in online education in China. Second is a* ***paradigmatic study*** *to examine the established paradigms of action research and my own research paradigm. Third is a* ***dimensional study*** *in order to establish a practical framework for my research.*

6.1 Examining the Subject Matter

In this section, I will focus on discovering and exploring an appropriate concept that can reflect my need for course design and development as both a process and a product. I will approach this by examining instructional system design theories, then its application in a general educational context and an online education context.

6.1.1 Instructional systems design in place

Until now, I have been using "course design and development" as a term to describe my concern. However, as suggested in Chapter 5, such a task involved more jobs than just the design and development of the course content, or courseware as in my context. As a product, it was identified that considerations were to be made about the design, such as delivery media, learner support, and assessment in addition to content; as a process, it extended to the delivery stage of support, monitoring and evaluation to ensure the fulfilment of the intended goals of the design and to collect information for future improvement. Since the term "course design and development" had a strong indication of a content focus as it had been widely used in my campus-based context, I found it necessary to make a distinction by adopting a different term that embodied both the product and process considerations. Instructional system design (shortened to "instructional design" in my thesis) seemed to respond to such a need. I will explore this subject in depth to discover how well it addresses my situation.

Instructional design had its establishment as a discipline during World War II in the United States (shortened to U.S. in my thesis) when training materials were

developed for military service (Reiser, 2001b:58). Instructional design gained large scale attention in the 1970s throughout the 1980s in military, business and industry in U.S., though there was limited impact on the design of learning for schools and higher education (Reiser, 2001b:62). Until now, instructional design has been used more as a standard for producing high quality training materials in both the military and corporate realms than in higher education (IDEA). However, instructional design received more attention in school and tertiary education when open and distance learning, and later modern-technology-mediated learning started to boom (Murphy, 2003:280). I am going to examine instructional design in two contexts: the general educational context and the online education context.

6.1.2 Instructional design in the general educational context

This section will provide a contextual definition of instructional design, and review its theoretical bases, as well as provide the argument presented in the literature that it concerns both a process and a product.

6.1.2.1. Defining instructional design in my context

I started with a review of definitions of instructional design to determine its appropriateness for my context. The definitions are cited below chronologically (emboldened words are my emphasis on the consensus of these definitions).

1) 1970s: Assumptions of instructional design were as such: instructional planning must be for the individual; instructional design has phases that are both immediate and long-range; **systematically designed** instruction can greatly affect individual human development; designing instruction must be based upon

knowledge of how human beings learn, and must take fully into account **learning conditions** that need to be established in order for the **desired effects** to occur (Gagne and Briggs, 1974:4-6).

2) 1980s: "Instructional design is this linking **science** – a body of **knowledge** that prescribes instructional **action** to **optimize desired instructional outcomes**, such as achievement and effect." (Reigeluth, 1983:5).

3) 1990s: "Instructional Systems Design (ISD) is a **systematic** model for thinking and planning that is proposed to help teachers determine both their **teaching methods and what is to be taught**. In general, Instructional Design (ID) refers to the wide range of skills and activities involved in the **planning, selection, preparation, presentation, evaluation, and modification of instruction.**" (Moallem, 1998:37)

4) 2000s: "The field of instructional design and technology encompasses the **analysis of learning and performance problems**, and **the design, development, implementation, evaluation and management** of **instructional and non-instructional processes and resources** intended to **improve learning and performance** in a variety of settings, particularly educational institutions and the workplace." (Reiser, 2001a:53)

All these definitions, whether early or more recent, display consensus on the following issues. Instructional design:

1) bases itself on both/either learning and instruction (teaching) theories;

2) aims to ensure quality learning;

3) adopts a systematic approach.

However, the definitions still demonstrate conflicting or ambiguous views on the following two issues.

1) Is instructional design a creation of materials/content or more than it?

2) Is it a study of the product, or the process involved, or both?

As to the first question, early models of instructional design tend to focus on the design of the content; for example, the design of the tasks, objectives and assessment (Reiser, 2001b:61). From the 1990s, there has been a shift from content only to the consideration of the learners' learning environment within the design framework (Wilson, 1996).

Reigeluth (1999a:13) and Snelbecker (1999b:653) provide their answers to the second question. They clearly state that instructional theory is not an instructional design process, with the former about the instructions design (product) and the latter about the process for the design and development of instructions, though they recognize that they are closely related. However, Mayer (1999:156) proposes a focus on the process as well as the product as one of instructional design principles (6.1.2.3 and 6.1.2.4 will further discuss this).

I could not allow either neglect or ambiguity of the product and process issues in my situation, not only because my research cycle 0 surfaced them as issues, but also because in my new cycle, I needed to know what decisions were to be made in the design (product), and how these decisions were made (process). I took a pragmatic approach and considered the concept of instructional design as addressing both the

product and process and this was essential to fully inform my practice.

At this stage in my research, it was important to note that, in spite of any ambiguity in the literature about the meaning of instructional design, I would need to examine this against my conceptual perspective and I decided that I would still use this term until a more appropriate alternative was identified.

6.1.2.2. Learning and instructional theories

All the above-cited definitions of instructional design relate themselves to theoretical bases of this field. Instructional theory is defined as a theory about "how to help people learn better" (Reigeluth, 1999c: ix). Learning theories, thus, form a primary base for instructional theories (Gagne and Briggs, 1974:5; Reigeluth, 1999a:13). This has two implications. One is that the knowledge and belief about learning determines the philosophy and strategies of instructional design (a philosophical perspective); the other is that as the understanding of learning evolves, so does that of instructional design (an evolutionary perspective).

Van Merrienboer and Kirschner (2001) provide a good summary of instructional design approaches from a philosophical perspective of learning theories by reviewing the works of Merrill, Scandura, Kuyper, et al., Spector, etc. in a 2001 special issue of Instructional Science. They categorize instructional theory in a three-world view as explained in Table 6.1.

Table 6.1 A three-world view of instructional design approaches (Van Merrienboer and Kirschner, 2001)

Three worlds	Theory base	Highlights	Instructional strategies
World of knowledge	Taxonomies of learning outcomes	A stress on the analysis of tasks and content in learning goals	The delivery method as to how to optimally deliver presentations, how to set up practice and how to assess for particular learning outcomes
World of learning	Cognitive psychology	A stress on the analysis of particular learning processes instead of the content	The learning process supports methods to develop support systems, and feedback strategies
World of work	Constructivist views	A stress on real-life, professional task performance	The use of simulations and meaningful experiences to reflect a real authentic situation; interactions with others in multiple perspectives, reflexivity

I was not in a position of locating my instructional design case in any of the above worlds until I started the process. However, I felt the possibility of a combination of the three worlds in my context by using the methods (World of Work) in the view of the process (World of Learning) to achieve the outcomes (World of Knowledge).[1]

Mayer (1999:143-144) discusses how the evolution of views of learning as a result of research drives instructional strategies. Table 6.2 has the summary.

[1] Section 12.5 in Chapter 12 will revisit this view and demonstrate the possibility.

Table 6.2 Development of instructional strategies with the evolution of research of learning (my summary of Mayer, 1999:143-144)

Time	View of learning	Research settings	Description	Instructional strategies
Before mid 20th century	Learning as response strengthen-ing	The study of animal learning in artificial laboratories	Learning occurs when a learner strengthens or weakens an association between a stimulus and a response.	To create environments where the learner repeatedly is cued to give a simple response, which is immediately followed by feedback.
1950s-1970s	Learning as knowledge acquisition	The study of human learning in artificial laboratories	Learning occurs when a learner places new information in long-term memory.	To create environments in which the learner is exposed to large amounts of information.
1980s-1990s	Learning as knowledge construct-ion	The study of human learning in increasingly realistic settings	Learning occurs when a learner actively constructs a knowledge representation in working memory.	To create environments in which the learner interacts meaningfully with academic material, including fostering the learner's processes of selecting, organizing, and integrating information.

Murphy (2003:54-60) adopts both philosophical and evolutionary perspectives to explain the influence of learning theories on instructional theories.

1) An influence of behaviourism on the formation of instruction objectives based on expected learners' performable behaviours in 1950s;

2) An influence of cognitivism on the systems approach to instructional design in 1970s;

3) An influence of constructivism since 1980s.

Both behaviourist and cognitivist viewpoints of instructional design were critically

examined in the light of the successful practices of the Open University of UK (UKOU) (Murphy, 2003:284-285) in an open and distance education setting. Constructivism as "individualized education that builds on learners' conceptions of knowledge, and stresses the motivation necessary for genuine learning" (Murphy, 2003:284) has received much attention from instructional theorists and practitioners.

The influence of learning theories on instructional strategies, from either a philosophical or evolutionary perspective, demonstrates that instructional design represents "an attempt to develop theories which are more directly concerned with application" (Snelbecker, 1974:16), "a linking science between learning theory and educational practice" (Jegede, 2003:122). The above remarks express two opinions. One is that learning theories are closely related to instructional theories (also termed instructional design theory by some authors); the other is that instructional theories are not learning theories.

Reigeluth (1999a:13) clearly states the distinction between learning theories and instructional theories. He points out that learning theories are descriptive type of theories which focus on how learning occurs, whereas instructional theories are design type of theories which focus on means outside of the learners that facilitate learning, thus, they are directly related to educational practices. He defines instructional theory as design-oriented, offering instructional methods dependent on instructional situations, componential and probabilistic (ibid. 1999a:12).

Instructional theory was primarily constructed as a by-product of research conducted for other purposes and was overshadowed by learning theories until the 1980s, when

it started to emerge as an established discipline (Snelbecker, 1999b:665). Since then, it has vigorously grown to an overwhelming number of established disciplines and the boom of technology utilization in instruction has given it even promising growing opportunities (Snelbecker, 1999b:672).

In summary, instructional theories base their philosophy and strategies on learning theories and evolve as the learning theories develop. But instructional theories are not learning theories in that instructional theories believe that to know how people learn (the concern of learning theories) is not sufficient for educational providers. They need to become aware and at the same time acquire the techniques of creating a learning system with instructional techniques that help people learn (the concern of instructional theories).

6.1.2.3. Instructional design as a process

Before the 1970s, when learning theories focused on external factors such as contiguity, repetition and reinforcement (Gagne and Briggs, 1974:6-8), instructional design was not surprisingly a mere decision about teaching strategies to teach a particular piece of knowledge. When internal factors, such as information, intellectual skills, cognitive strategies, motor skills and attitude, were identified as learning capabilities within the learner (Gagne and Briggs, 1974:9-11), instructional design then started to be viewed as a process-oriented task (Gagne and Briggs, 1974:15-16).

A well established process model of instructional design is the ADDIE Model standing for Analyze, Design, Develop, Implement and Evaluate, with most

approaches being variations of this model (Reiser, 2001b:58; Gustafson & Branch, 2002:18). Hardre (2005:166) provides a summary of the activities in each phase of this model based on the works of Smith & Ragan (1993, 1999), Reigeluth (1999), Dick, Carey, & Carey (2001), Gustafson & Branch (2002), Dick et al. (2003) and Morrison et al. (2004) as presented in Table 6.3.

Table 6.3 Activities in a typical instructional design process (my summary of Hardre, 2005:166, with emboldened words as my emphasis.)

	Phases	**Activities**
1)	Analysis	Identify the **need** and set a **goal** for the instruction.
2)	Design	Establish specific **objectives** and specify **learning activities** and **media** to achieve them.
3)	Development	Prepare student and instructor **materials** as specified in the design.
4)	Implementation	Involve **delivering** the instruction as designed.
5)	Evaluation	Include both **formative and summative evaluation and revision.**

The ADDIE model takes a procedural view of conducting instructional design. Luppicini (2003:78) suggests a RAID model (Reflective Action Instructional Design). He lists the following as central to the RAID model.

1) the steps to be followed (what to do);

2) how those steps are followed (how to do it);

3) when they are to be followed (when to do it);

4) with whom to follow the steps with (who to do it with).

In this list, apart from "what" (the process as described in ADDIE model), "how", "when" and "who" are also considered in reflective action to address multiple areas of the process.

The relationship between the phases of actions is also my concern. Some view them

as clearly defined steps each leading to an output as an input to the next stage (Plass and Salibury, 2002:35); others suggest that these phases are not necessarily conducted in a linear pattern (Reiser, 2002b).

The literature tends not to address the process issue within my context. In the book Modern Distance Education Innovation and Practice, Collections of Universities and Colleges (2005), a signposting work of a reflection on five years of modern distance education practice in China, only two papers made some attempt (the term "course design" is used). Yu (2005:6) proposed a "course team model" adopted at China Centre Radio and Television University, which resembles that of the Open University of UK (UKOU). The other paper by Lu (2005:24) describes a process-oriented view that includes the design of the course content, formative assessment, and the use of forum, etc.

6.1.2.4 Instructional design as a product

In contrast to the hegemonic ADDIE model for the instructional design process, models for the instructional design of a product are overwhelmingly abundant. To keep in line with my concept of instructional design, I only focused on the literature that conceptualized instructional design as a design of a learning environment/system instead of mere content/materials.

Instructional strategies are believed to vary when addressing different types of learning in cognitive, psychomotor and affect domains (Reigeluth and Moore, 1999:52). So do the models. Furthermore, models addressing the same domain of learning can vary as a result of different theoretical beliefs, perspectives and

emphasises. I therefore base my categorization of these models on Reigeluth and Moore's (1999:56) framework of comparing instructional strategies as shown in Table 6.4.

Table 6.4 Framework of comparing instructional strategies (my summary of Reigeluth and Moore, 1999:56)

Model	Components	Remarks
1) Types of learning		
A three-phase instruction model (Merrill, 1999:400; Gagne, 1965 and 1985, cited in Merrill, 1999, 401)	● the presentation of the knowledge; ● the provision of practice with feedback; ● the provision of learner guidance for the expected learning outcome.	It addresses the cognitive domain (knowledge objects) of learning.
Guidelines of instructions (Perkins, 1992:45, cited in Reigeluth, 1999a:5-6)	● Clear information; ● Thoughtful practice; ● Informative feedback; ● Strong intrinsic or extrinsic motivation.	It aims to foster cognitive learning.
A psychomotor domain model (Romiszowski, 1999: 469-475)	● to impart knowledge; ● to provide practice; ● to provide feedback on practice; ● to promote transfer.	It addresses the phychomotor domain of learning.
An affective development model (Martin and Reigeluth, 1999: 493/498)	● a conceptual model for affective development; ● an application model for affective development.	It addresses the affect domain of learning as a process and/or end product.
2) Control of learning		
Open Learning Environments model (Hannafin et al., 1999:123)	● enabling contexts (induced or imposed perspectives that influence how needs are framed, approaches are planned and resources are interpreted); ● resources (sources ranging from electronic, to print, to humans, that provide needed information); ● tools (means for engaging and	It emphasizes divergent thinking and multiple perspectives.

	manipulating both resources and ideas); ● scaffolding (processes that support individual learning efforts)	
3) Focus of learning		
TfU model (Perkins and Unger, 1999:108)	● generative topics; ● understanding goals; ● understanding performances; ● ongoing assessments.	Topic-oriented and domain-specific (a focus on performance capability)
Constructivist Learning Environment model (Jonassen, 1999: 218)	● Problem/project context, representation and manipulation space; ● Related cases ● Information resources ● Cognitive tools; ● Conversation/collaboration tools; ● Social/contextual support	It has a focus on problem-, project-, case-based learning.
4) Grouping of learning		
A collaborative design model (Moallum, 2003:87)	● cognitive support (content); ● social support (peer and group); ● emotional support in a problem-based learning environment (activity)	It adopts a social constructivism view with an interactivity focus.
5) Interactions for learning		
Learning community approach (Bielaczyc and Collins, 1999:273-277)	● Goals of the community; ● Learning activities; ● Teacher roles and power relationship; ● Centrality/peripherality and identity; ● Resources; ● Discourse; ● Knowledge; ● Products.	It adopts a social constructivism view with a community learning focus.
6) Support for learning		
SOI model (Mayer, 1999:149)	strategies for ● selecting relevant information; ● organizing incoming information; ● integrating incoming information.	It focuses on fostering learners three cognitive processes in knowledge construction.
7) Sequencing of instruction[2]		

[2] This category is my adaptation, as it is not included in Reigeluth and Moore's framework.

Instructional sequencing (Reigeluth, 1999b: 428-432)	Considerations include: ● the size of each group of content ("learning episode" in Reigeluth term, "activity" in my term); ● the components (both the content and the support content) of each activity; ● the order of the components within each activity; ● the order of activities. Types of sequencing strategies: ● topical sequencing; ● spiral sequencing. Types of methods: ● conceptual elaboration sequence; ● theoretical elaboration sequence; ● simplifying conditions sequence (for procedural task, the focus is on the steps; for heuristic task, the focus is on the principles, guidelines, and/or causal models.).	Sequencing is about how to group and order "what to teach" (activities, knowledge, etc.). It becomes an important issue only when there is a strong relationship among the topics of the course and the size of the course demands more than a couple of hours of learning.

These models conflicted with my initial expectation of having ONE nice and neat checklist of considerations for the design of the orientation module. However, what I could observe so far was that despite the variations, most models included the following three considerations.

1) The ends (in terms such as learning goals, outcome, objectives);

2) The means (a discussion of how the ends can be met, for example, with whom, via what support, through what process, etc.);

3) The assessment (methods to monitor and check if the ends are met).

Section 6.1.2 has explored the influence of learning theories on instructional theories and practices. It has also examined the literature related to instructional design as a process or as a product. This revealed that for the process, the key features within the ADDIE model predominated; for the product, it appeared in a variety of models from

different perspectives all of which addressed the learning objectives, the activities and the assessment. Section 6.1.3 will examine the influence of instruction design in online education in particular.

6.1.3 Instructional design in the online education context

It has been mentioned in 6.1.1 that instructional design became a more important issue in education when open and distance learning, and, later, modern-technology-mediated learning started to boom (Murphy, 2003:280). This section will seek the justification of this observation and explore the reasons.

6.1.3.1 A context of attention

Though online education has attended to instructional design, such attention is only emerging and focuses mainly on case studies with "very little theory and generalisable research" (Ellis and Phelps, 2000). Frydenberg (2002) suggests that this is because few fully developed programmes are at a stage where summative evaluation is possible.

In what way is instructional design unique in this context? How does such uniqueness impact decisions (the product) and decision-makings (the process) of instructional design? These will be questions of concern throughout my cycles of research.

The use of technology within instruction can be traced back to the 1950s when people used the term instructional technology to describe not only the implication of hardware and software devices for teaching purposes, but also the principles to guide the use of these devices (Snelbecker, 1974:116; 1999b:669). Seels (1989 cited in

Reiser, 2001b:64) describes the influence of learning theories on instructional design from a technology point of view. He proposes that behaviourism led to behaviour modification designs, cognitivism led to artificial intelligence designs and constructivism has yet to make a major impact. Snelbecker (1999b:669) visions technology as a challenge to the development of instructional theories in the new century. He describes the relationship between technology and the development of instructional theories in that instructional theories will guide the decisions of utilizing technology in instructions, and in this application process, technology can inform the improvement of instructional theories.

Siemens (2002) describes e-learning as "the marriage of technology and education" and considers that "the instructional designer's greatest role is that of 'bridging' concepts between the two worlds." Reiser (2001a:53) proposes to re-term the field as "instructional design and technology". He defines this field as follows (the emboldened text is my emphasis).

> *"The field of instructional design and technology encompasses the* ***analysis of learning and performance problems, and the design, development, implementation, evaluation and management*** *of* ***instructional and non-instructional processes and resources*** *intended to* ***improve learning and performance*** *in a variety of settings, particularly educational institutions and the workplace. Professionals in the field of instructional design and technology often use* ***systematic instructional design procedures*** *and* ***employ a variety of instructional media*** *to accomplish their goals. Moreover, in recent years, they*

have paid increasing attention to ***non-instructional solutions*** *to some performance problems.* ***Research and theory*** *related to each of the aforementioned areas is also an important part of the field."* (Reiser, 2001a:53)

Reiser's work is significant in its explicit identification of the following issues in instructional design when technology plays a vital role.

1) Selection of media as an integral decision.

2) Learning as a process (learning) and a product (performance).

3) Instructional design as a process and a product (resources in his term).

4) Non-instructional process.

5) Research and theory as important as practice.

Among all the possible technologies, the 1980s saw an increasing interest in employing computer-based technology in instructional design and in the 1990s, such interest started to have significant impact to this field (Reiser, 2001a:62). More recently, the Internet has become the most talked-about educational technology. In higher education, the attraction of use of the Internet within instructional design lies in the following three potentials believed to "promote learning and performance via some 'non-traditional' means in comparison to the proceeding media such as radio, television and computer" (Reiser, 2001a:61).

1) It is viewed as a low-cost method of providing instruction to students who may otherwise be denied of access due to factors such as work or family-commitment, geographic distance, physical disabilities, etc., though the cost issue remains disputable.

2) It increases interactive capabilities, especially between the tutor and the learners, and among the learners in addition to between the learners and the instructional content.

3) It enables instructional designers to design learning experiences that involve more complex interactions between learners and instructional content. For example, the amount and type of information, the type of feedback, the links, etc. allows a constructive perspective of learning possible.

Reiser's first remark is rather a political justification of instructional design in the online context – to open access to a mass population at a low cost. Reiser's second and third statements express a constructivist perspective on learning that can be classified as a theoretical justification for instructional design in an online context. Technology has the potential to support the key principles underlying constructivist learning in open and distance education, such as interaction among learners in addition to that between learners and tutors, adapting the learning experience to the differences in leaner backgrounds and contexts (Murphy, 2003:291).

Technology is also believed to promote the notion of "user-designers" (Banathy, 1991, cited in Reigeluth, 1999a:25) as a good application of learning-focused instructional theory in the information age. This refers to the involvement of users (primarily the learners and facilitators of learning) in instructional design by using computer-mediated learning tools in the design process.

6.1.3.2 Technology matters

Apart from political and theoretical justifications, the use of the Internet for learning

also demands significant attention to instructional design at operational levels in both process and product dimensions. Concerning the process, the following influences have been identified.

1) A process with increasing responsibilities

Technology is less adaptive in comparison with a human instructor and this determines that once the course is delivered, it is less likely to be changed to the situation (Siemens, 2002). This means that the analysis, design and development stages require for the following features (Siemens, 2002).

a) The aims and goals of the course have to be precisely and appropriately defined;

b) Learners' potential needs, and concerns have to be anticipated as accurately as possible;

c) The content has to be "well organized";

d) The structure for the learning process has to be presented;

e) The selection of technology must be well-thought-out;

f) Standardization of the content presentation has to be established.

2) A process with extent and scale

The demand on the extent and scale of online course planning, development, and delivery processes "exceed the expectations and experience" of many campus-turned-online language teachers (White, 2003:69/73). In comparison with those in a campus-based context, these processes involve more steps, take longer time, demand more financial input, and include more people of different disciplines.

3) An emphasis on a multi-disciplinary team approach

A course team approach (Murphy, 2003:286) needs to be adopted with an emphasis on a multi-disciplinary team which ideally composes experienced online teachers, management representation, student support specialists, information technology developers, instructional designers, experienced trainers and teachers, and resource management facilitators (Taylor, 2003:79).

4) A readiness for evaluation

A further crucial process is added as in-depth evaluation (White, 2003:69). The online context makes instructional design far more transparent than campus-based learning because it leaves a "trail" that can be used as resources for subsequent courses by not only the instructor of the course, but also other people who have responsibility for quality assurance, e.g. mangers, external examiners, etc.

Concerning the product, the following arguments have been raised.

1) Technology has the potential to bring about effective presentation of the content (multimedia, video streaming) (Siemens, 2002; Reiser, 2001a:61; Murphy, 2003:292;);

2) Technology increases interactivity capabilities (Siemens, 2002; Reiser, 2001a: 61; Murphy, 2003:292)

3) Asynchronous interaction, in comparison with face-to-face interaction, allows words to replace speeches, leaving a digital record of proceedings. This also provides great opportunity for learner and tutor reflection both in action and on action (Jaques and Salmon, 2000:3).

Section 6.1 has established instructional design to be the subject matter of my research. Though much influenced by learning theories, instructional theories are different in that they bridge theories with educational practice. It is both a process and a product and guides to the creation of a learning environment/system. As a process, it generally follows the ADDIE model of analysis, design, development, implementation and evaluation; as a product, it addresses the ends, the means and the assessment of learning. Technology advancement has brought instructional design to a new level of attention particularly in open, distance and online education with its impact on both the theories and practices.

I would like to end this section with a literature suggestion as an important linkage to the next section. Reigeluth and Frick (1999:633-652) propose that this information age is in need of a paradigm shift of education. "Formative research" is a preferred research methodology to improve design theory for designing instructional practices and processes. They define formative research as "a kind of developmental research or action research that is intended to improve design theory for designing instructional practices or processes" (ibid. 1999:633). After all these discussions about instructional design, the next question is what research methodology can best support me to improve MY understanding and practice in this field. This will be the focus of the next section.

6.2 Examining the Methodological Issue

Research cycle 0 used a cluster of research methods to collect naturally-occurring data, only to find that my research needed more than just methods to fulfil its goals.

This section will justify action research as an appropriate methodology, and explore its responsiveness to my situation from paradigmatic, contextual and dimensional perspectives.

6.2.1 Action research in place

A traditional categorisation of educational research methodology is that of quantitative and qualitative styles (Nunan, 1992a; Gomm and Woods, 1993:ix; Burns, 1999). According to Nunan (1992a:3), quantitative research is "obtrusive and controlled, objective, generalisable, outcome oriented and assume the existence of 'facts' which are somehow external to and independent of the observer or researcher." In contrast, qualitative research assumes that "all knowledge is relative, that there is a subjective element to all knowledge and research, and that holistic, ungeneralisable studies are justifiable". Nunan (ibid.:3) argues that this binary distinction represents a simplistic and naive view of research, as quantitative and qualitative approaches are indistinguishable in many respects.

A further review of some recent work then on educational research methodology in general is summarized in Table 6.5.

Table 6.5 Different categorization of research methodologies in general educational context

Sources	Categories	Perceptions
Philips and Pugh's three basic types of research (2002:50)	• exploratory research • testing-out research • problem-solving research	The best methodology should possess a high degree of protection for a survival of a PhD study.
Freebody's three prevalence methodologies for education context (2003:75)	• ethnography • case study • action research	Qualitative research can address educational needs in an effective way.
Cohen et al's eight styles of educational research (2003:137-241)	• naturalistic and ethnographic research • historical research • surveys, longitudinal, cross-sectional and trend studies • case studies • correlational research • ex post facto research • experiments, quasi-experiments and single-case research • action research	The categorization is based on paradigmatic contexts in which research is located.
Picciano's seven types of research methodologies (2004:3-4)	• ethnographic • historical • description • correlational • causal comparative • experimental • action and evaluation research	Methodologies should directly relate to the nature of the research problems being investigated.

These authors' methodological perceptions were added to the table as I tried to find explanations for such a variety; and further, questioning how I could decide my perception in order to locate a "best" methodology for my research. I became aware of a fallacy in my search for a research methodology: That there was a "best" choice. Methodologies had their pros and cons, dependent on researchers, contexts, aims, etc. I needed to focus on the examination of the "appropriateness" of certain

methodologies for my research context instead (Dick, 1993:5; McNiff, 2002:5).

Therefore, I reviewed my research needs initiated by research cycle 0 findings by asking the following questions.

1) Why am I conducting this research?

   To improve my understanding and practice of both course design and development and research methodology.

2) What is the research focus?

   Problems and issues of my concerns in relation to course design and development and research methodology.

3) Who takes part in the research?

   Preferably different stakeholders, including learners, tutors, administrators and me to work collaboratively.

4) Where is the research?

   At the Institute, a real work situation.

5) When is the research?

   I made an initial attempt, and now I would like to start another cycle to further explore the issue.

6) How do I do the research?

   This is what I want to find out.

Based on this checklist, together with the suggestions from my supervisors, I focused on action research as a candidate research methodology. Even with limited knowledge of action research by then, I identified at least one matching feature

between action research and my research reality that no other research methodologies possessed: the cyclical research process.

My intention of the literature review on action research was not to join the writers to develop yet another version of the Handbook for Action Research, but to decide how responsive action research was to my research situation. In the following, I examine this from the three perspectives.

1) A contextual perspective that reveals that there is little understanding of the theory and practice of action research in my context – online education in English language education in China.
2) A paradigmatic perspective to decide its relevance to the theoretical issues of my research.
3) A dimensional perspective to establish a practical framework for my research.

6.2.2 A contextual study of action research

In this section, I will review action research in the contexts of higher education, English language education, distance and online education. It reveals that there is a lack of both theory and practice of action research in the above contexts in China.

1. The emergence of action research

There is no consensus on the origins of action research, though Kurt Lewin, an American psychologist, is regarded by many to be the first to explicitly propose action research as a research methodology (Zuber-Skerrit, 1992:45; Kemmis and McTaggart, 1992:6; Masters, 1995; McKernan, 1996:8; O'Brien, 1998:6; McNiff, 2002:8). There is evidence that before Lewin, action research practice was driven by

social workers seeking changes to social problems (McKernan, 1996:8). Thus, action research claims to have a consistent theme in its "commitment to social justice and a fairer life experience for all" (McNiff et al. 2003:2).

2. Action research in higher education

Action research as a research methodology has been applied to a variety of settings such as industrial, health, educational, and community behavioural (McKernan, 1996:3) and information systems (West, et al. 1995).

Action research was introduced to the field of education in the late 1960s and early 1970s by the "teacher-researcher" movement in the secondary education sector (Riding, et al. 1995; Masters, 1995). Or maybe even earlier, in late 1940s and early 1950s in Corey's teacher-managed research projects at Columbia University, North America (Kemmis and McTaggart, 1992:6), immediately after Lewin's attempt. It started to have great impact in Europe, North America, and Australia and further internationally, in the field of education in the 1980s (Kemmis and McTarggart, 1992:6-7). It has been applied to curriculum development, professional development, school improvement programmes and systems planning and policy development (Kemmis and McTaggart, 1992:5). Educational action research is claimed to be "the busiest area of action research publication" (Dick, 2006:441, a later reference).

3. Action research in English language education

The introduction of action research to English language education took place when conventional English language teaching (ELT) methodologies failed to meet a fast-growing demand for effective language education in the 1970s, resulting in the

involvement of teachers in the reforms to promote its effectiveness (White, 2003:12). Action research became a "buzzword" in ELT in the 1990s (Crookes, 1993:130; Rainey, 2000:65) appearing in works such as Nunan (1990, 1992a), McDonough and McDonough (1997), Wallace (1998), Gierlinger (1998), and Burns (1999). However, these publications mainly draw on the literature, recommending action research as an alternative research methodology for ELT research for professional development. Few focus on action research practice in this ELT context. Furthermore, these publications are applicable more widely than the ELT community, as few justifications are raised that explain what makes it is ideally applicable to ELT. Burns (1999:13) proposes two arguments: one is that in a profession where women predominate, collaborative action research allows a feminist orientation of knowledge construction that is supportive and contextualized, and the other is that it could contribute to status enhancement in a situation where "second and foreign language teaching suffers from low status in broader educational settings" (Burns, 1999:48). Rainey (2000:67) identifies two major views of action research in an ELT context: action research for teacher's professional self-development and collaborative action research that brings about changes in the immediate classroom cases as well as the wider community through critical reflection. Her survey of ELT teachers in 10 countries reveals that 75.5% respondents have little knowledge of action research (ibid, 2000:72).

Higher education ELT in China explicitly embraced action research in 2000 in Wang's work (2000). This is still the only book addressing action research in this

context. The lack of action research as a research methodology is apparent from an analysis of publications in the four core ELT journals in China. I categorize these papers under "introduction" and "project reports" headings, with the former mainly a literature review, and the latter a report of a project using action research.

Table 6.6 Number of papers with "action research" as key words published in four core ELT journals in China

	Title	Since	Style	No. of papers
1	Language Teaching and Research (bimonthly, 15 papers/issue)	1957	Introduction	2
			Project reports	1
2	Foreign Language World (bimonthly, 18 papers/issue)	1994	Introduction	4
			Project reports	1
3	Modern Foreign Languages (quarterly, 15 papers/issue)	1978	Introduction	0
			Project reports	0
4	Computer-assisted Foreign Language Education (bimonthly, 15 papers/issue)	1979	Introduction	1
			Project reports	2

4. Action research in distance and online education

There was a lack of the literature on action research in distance and adult education until it engaged in modern educational technology innovation and for this reason this section covers the literature related to action research in distance, and adult education in an online context.

The literature review revealed three types of circumstances in which action research was employed.

1) Using Internet technology in action research

O'Brien (1998:15) recognized the growing convergence of action research and information technology which allows action research to be conducted with "larger-sized groups, more reflexivity, greater geographic reach, and for a longer

period of sustained interaction." He cited two cases (Comstock and Fox, 1995; Lau and Hayward, 1997) that used Internet-based communication to build a collaborative group community of action researchers. IT here is used as an enhancement vehicle for communication, resource survey (Wallace, 1998:254)[3], and data process and analysis.

2) Developing an online course on action research (as in Taylor, 2003)

3) Using action research to conduct research in a modern-technology-mediated learning context

My research falls in the third of these circumstances. In this context, the literature is surprisingly scarce and it is recognized that there is a lack of action research frameworks or models specifically applied to online learning (Ellis and Phelps, 2000:3). Since 2000, only one paper (Donche and Petegem, 2004) in Educational Action Research, the key international journal in this field, was set in distance education background. Furthermore, until early 2004 when I started my research, no single paper in this journal was set in an online education context.

A similar situation is to be found in China. Action research papers in distance and adult education started to appear in 2000 as shown in Table 6.7.

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[3] *"There is every indication that these developments in on-the-job training will be facilitated by the development of electronic communication through the Internet. Not only will communication between trainers and trainees themselves, as well as among trainers/trainees, become easier, but also the whole issue of access to library sources will be simplified."(Wallace, 1998:254)*

Table 6.7 Number of papers with "action research" as key words published in two core distance and adult education journals in China

	Title	Since	Style	No. of papers
1	Journal of China Distance Education (monthly, 15 papers/issue)	1981	Introduction	6
			Project reports	0
2	China Educational Technology (monthly, 18 papers/issue)	1994	Introduction	8
			Project reports	6

This lack of literature is in sharp contrast to either the long history of well-researched distance and adult education, or the rapid growth of the utilization of modern technology in education. Is it because action research is inappropriate for the context?

According to Ellis and Phelps (2000:3), action research and online education share some important themes as summarized below.

1) Change: Online teaching and learning is evolving rapidly with the fast advances of technology, so there can be hardly a strong body of theory or practice models that are readily applicable to individual situations.
2) Team approach: Online delivery involves people of different disciplines: instructional designers, subject experts, technicians, administrators. The situation calls for a research approach that addresses teamwork rather than isolated practice.
3) Context/case-based: There is a lack of application of theory and generalisable research in this field and relevant research is heavily based on cases of specific contexts.

Goodyear (1999), in his report of a large-scale European Union's Socrates Open and

Distance Learning (ODL) programme with a particular focus on the exploration of the use of technology, reported that almost all sub-projects adopted methods that had the characteristics of action research. He implies that action research is a most responsive research methodology when ODL as an educational innovation lacks theoretical framework, involves the essential activities of solving real problems, reflection and self-evaluation, and collective learning.

All these apply to my situation. Through a procedural focusing of the status quo of action research from the most general context to the most specific context against which my research is set, I can identify two gaps:

1) Though action research has been established as a legitimate research methodology in education more generally, it is largely neglected in an online education context nationally and globally.

2) While action research enjoys a well-documented literature, there is a lack of the literature related to its use in projects in an online education context nationally and globally.

5. Action research at the Institute

The first gap mentioned above is, however, not the case at the Institute. On the contrary, action research was a highly recommended research methodology promoted through the following activities.

1) The "Three new's movement" (New Technology, New Concept, New Roles) of all tutors (Gu, 2005b:73) to fulfil paradigm shifts from campus-based teaching to web-based education.

2) Action research as the only methodology among all to be presented and discussed in the Institute annual tutor training workshops.

3) An emphasis on embedding the research process in work process.

Nevertheless, there seemed to be a gap between recognizing action research as important and actually applying it to real working situations. My research, then, is taking the mission of bridging this gap.

6.2.3 A paradigmatic study of action research

This section will review the main schools of theories of action research in an effort to establish my research paradigm. It reveals that I was ambiguous about my paradigmatic belief towards action research at this stage.

1. From methodology to paradigm

The literature review of action research revealed a wide variety of possibilities from which I could select my action research approach and I needed to adopt an effective procedure to support my selection. I could not arrive at a decision until I discovered Dick's three-level illustration of the relationships among research paradigms, research methodologies and research methods as shown in Figure 6.1.

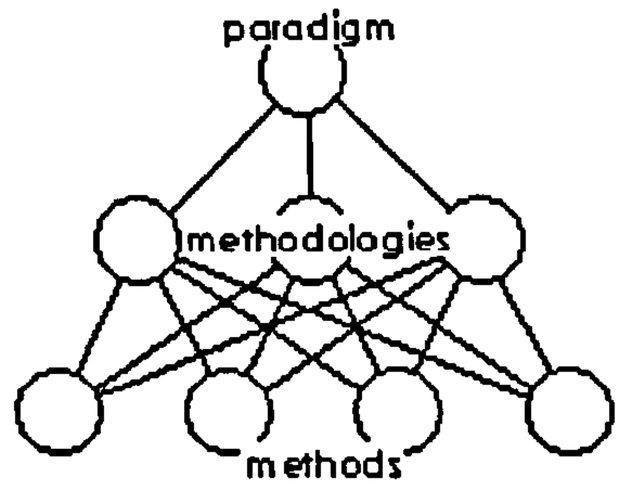

Figure 6.1 Dick's three-level illustration (1993)

Dick's illustration provides an approach to examining different schools of action research under paradigmatic categorization, and even more important, a guidance to

the identification of my research paradigm and further my action research approach to form my standpoint. Using this approach, I firstly reviewed the different schools of theories (research paradigms) of action research in both general and educational contexts. Then I examined my paradigmatic beliefs.

2. An examination of the schools of theories of action research

Kemmis (1993) recognizes that "what is action research" has remained a debate since it emerged, and different schools of theories have been developed as a result of the "climate" of times – cultural, political, or historical conditions.

In the general context, theories of action research can be classified into three major schools. The positivist paradigm used to dominate in the early stage of action research practice. This was characterized by a scientific method of problem solving (McKernan 1992:16), in which the researchers identify the problem and apply interventions, and the practitioners are involved in the implementation process (Holter and Schwartz-Barcott, 1993:301, cited in Masters, 1995).

The interpretive paradigm lays emphasis on the involvement of practitioners as researchers who aim at improving their understanding and practice via a process-oriented transformation to achieve professional development (Zuber-Skerritt, 1996a:4; McKernan, 1996:20-23). In contrast to the positivist perspective, an interpretivist carries a belief in social construction, and subjectively based reality (O'Brien, 1998:5), focuses on immediate problems in practice fused with research, and a procedural deliberation (McKernan, 1996:20/22).

Parcipatory/Emancipatory action research is described as being influenced by the

Frankfurt School of Critical Theory (Dick, 1993). Cyclical, participatory, critical and emancipatory is the essence of this approach.

Kemmis and McTaggart's definition of action research, said to be the standard definition of action research (Webb, 1996:147), falls in this paradigm (emboldened text is my emphasis).

> *"Action research is a form of* ***collective self-reflective enquiry*** *undertaken by participants in* ***social situations*** *in order to* ***improve the rationality and justice of their own social or educational practices,*** *as well as* ***their understanding of these practices and the situations*** *in which these practices are carried out."* (Kemmis and McTaggart, 1992:5)

Zuber-Skerritt (1996a:3) terms this approach emancipatory action research defined as below (emboldened text is my emphasis).

> *"It is* ***collaborative, critical and self-critical inquiry*** *by* ***practitioners*** *(e.g. teachers, managers) into* ***a major problem or issue or concern*** *in* ***their own practice.*** *They own the problem and feel responsible and accountable for solving it through* ***teamwork*** *and through* ***a cyclical process.***" (Zuber-Skerritt, 1996a:3)

This approach emphasizes, apart from collaborative, critical and self-critical nature, equality and empowerment of the individuals (Zuber-Skerritt, 1996a:3-5).

In the educational settings, two major theories employ a particular perspective of action research. Whitehead (1989) proposes a living educational theory to base action research on in contrast to a traditional view of theory and the propositional form of theory. This theory believes that there is no one correct way of either doing

research or thinking. A living educational theory addresses a belief that theory is living as part of practitioners' thinking in the process of the change and improvement of their practice (McNiff et al. 2003:164). It embodies some key disciplines of action research, such as the action/reflection cycle of enquiry and professional development initiatives of a person.

McKernan (1996:16-30), after examining three types of theoretical models of action research (the scientific-technical view of problem solving, practical-deliberative action research and critical-emancipatory action research), classifies his as a fourth type: rational-interactive dynamic action research in which he believes that "theories are not validated independently of practice and then applied to curriculum; rather they are validated through practice". His approach emphasizes the formation process of the theory. He defines action research as below (emboldened text is my emphasis).

> *"Action research is the **reflective process** whereby in **a given problem area**, where one wishes to **improve practice or personal understanding**, **inquiry** is carried out by the **practitioner** – first, to clearly define the problem; secondly, to specify a plan of action – including the testing of hypotheses by application of action to the problem. Evaluation is then undertaken to monitor and establish the effectiveness of the action taken. Finally, participants reflect upon, explain developments, and communicate these results to the community of action researchers. Action research is **systematic self-reflective scientific inquiry by practitioners to improve practice.**"* (McKernan, 1996:5)

McKernan claims two emphases in his approach. One is that action research is

rigorous, systematic inquiry through scientific procedures; the other is that participants have critical-reflective ownership of the process and results.

3. An examination of my research paradigm

There had not been the necessity to articulate my research paradigm until this stage of my research. I realized that any ambiguity would see me lost in different schools of action research. According to Dick's three-level illustration of research paradigms, methodologies and methods (Dick, 1993), my research paradigm will determine my action research approach.

O'Brien (1998: 5-6) suggests three types of research paradigms based on their degree of tolerance towards the subjectivity of the research.

Table 6.8 A summary of O'Brien's three types of research paradigms (1998:5-6)

Research paradigm	Degree of tolerance towards subjectivity	Degree of responsiveness to my situation
Positivist paradigm	It emphasizes objective reality and quantitative research methods.	Not responsive. (In my preliminary attempt, qualitative data naturally occurred; in further exploration, qualitative methods were desired for an in-depth interpretation of quantitative data.)
Interpretive paradigm	It carries a belief in social construction, and subjectively-based reality; however, its researchers should remain objective and passive of the researched context.	Partially responsive (The idea of construction and reality supported my situation; however, in my case, researchers were participants. They could hardly stand objectively and passively of the context.)
Paradigm of Praxis	It deals with the disciplines and activities predominant in the ethical and political lives of people; Subjectivity will not be intentionally avoided.	Partially responsive (The idea of subjectivity may reflect my situation, but I am not yet sure if my research deals with the issues defined in the description.)

O'Brien's description defines that I was not likely to hold a positivist paradigm, but it was still difficult for me to locate myself exactly in either of the other two types. Might it be the case that my situation was too complex to correspond to existing paradigms? Or was it because that I had not yet established a research paradigm? I chose to leave such ambiguity to be resolved as I progressed with my research (12.2.2 in Chapter 12 will revisit this issue to establish my research paradigm).

Based on the above paradigmatic review of action research, I can conclude that action research possesses the essential characteristics justified as a research methodology, but meanwhile it contains the following unique attributes.

1) It combines action and research, theory and practice.

2) It aims to bring about understanding, changes and improvement.

3) It takes place in real work situations;

4) It involves practitioners in the research;

5) It follows a cyclical process.

Different research and educational paradigms lead to different perspectives and thus, interpretations of action research. Still indecisive of my own category, I sought to explore these unique attributes, from a dimensional perspective, that may feedback to a less ambiguous paradigmatic perspective.

6.2.4 A dimensional study of action research

This section will attempt a dimensional approach to understanding action research at an operational level as to its initiative, focus, context, process, participant and method. It aims to form a practical guide to my action research.

1. Dimensions at the emergence of action research

Action research, in Lewin's view, emerges as an effective approach to tackling social problems in post-war period (1940s) (Masters, 1995; McKernan, 1996:10). According to Lewin, action research is "a spiral of steps, each of which is composed of planning, action and the evaluation of the result of action" (Kemmis and McTaggart, 1992:8). Lewin points out the importance of the inclusion of "practitioners from the real social world in all phases of inquiry" (McKernan, 1996:10). He also emphasizes the idea of "group decision and commitment to improvement" (Kemmis and McTaggart, 1992:6). The above discussions shape the dimensions of action research in its early stage based on dimensional analysis technique (Wikipedia) as shown in Table 6.9. I found later in Zuber-Skerrit & Fletcher's work (2007:42) an exact approach to aspects of action research.

Table 6.9 Dimensions of action research at its emergence

	Dimensions	Labels	Lewin's views
1	Why	Initiative	social changes
2	What	Focus	problem-solving
3	Where	Context	real social world
4	When	Process	spiral; plan-action-evaluation
5	Who	Participant	researchers; involvement of practitioners, in group
6	How	Method	inquiry

These dimensions have been the major themes in the advances of action research theory and practice, though they have been refined, enriched, specified, or elaborated with time. The following sections will further explore their meanings.

2. Initiative dimension

As action research was initially adopted to promote social changes, the "change" theme remains in almost all action research definitions. Such change is embedded

within the process of research, not just as a result of the research (Wadsworth, 1998). Therefore, change is not an added value, but an integral part of action research. A further frequently addressed initiative is to "understand" and/or to "improve understanding", so as to improve, reform, innovate or develop (Kemmis and McTaggart, 1992:21-22; Riding, et al. 1995; ZuberSkerritt, 1996b:83; Cohen et al. 2003:226; McNiff et al. 2003:15). These initiatives justify action research as a most appropriate methodology for change- and improvement-oriented research since many other forms of research set out to describe or to understand the situation being studied, yet seek little effort to bring changes to the situation (Lomax, 2002:123). Such changes may happen to individuals as in interpretive-oriented action research (Zuber-Skerritt, 1996a:4) and to groups, and even further to society in emancipatory action research. Kemmis & McTaggart's (1992:15-19) three-register framework seems to have a full coverage of the changes action research can bring about from theory to practice, from individuals to groups (emboldened text is my emphasis).

> *" ... change in the **use of language and discourses** – the actual ways that people identify and describe their world and work; changes in **activities and practices** – what people are actually doing in their work and learning; and changes in **social relationships and organizations** – the ways people interrelate in the process of education, and the ways their relationship are structured and organized in educational institutions to achieve consistency between the principles and practices of educational administration and teaching and learning. "*

3. Focus dimension

The focus of action research, or "thematic concern" in Lewin's term (Kemmis & McTaggart, 1992:9), can have the following interpretations.

1) To study a problem and to look for solutions and desirable outcomes (Wallace, 1998:15; Cohen et al. 2003:226).

2) To pose a problem (Kemmis & McTaggart, 1992:21; McNiff, 2002:15)

3) To examine an issue of concern or even interest (Zuber-Skerritt, 1996a:3).

Though it is seldom the case that action research starts with a clearly identified focus (Kemmis & McTaggart, 1992:91), Winter (1996:15) emphasizes a full recognition of the problem of interest, arguing that a failure to do this would "affect decisions as to how we should interpret and evaluate various events brought to light" by the research. However, he does not offer a clear guide as to the ways to reach such recognition.

Kemmis & McTaggart (1992:9) define that such a focus should be a group decision, though they admit that the core person needs to have some idea in mind before everyone else so that a research group can be reasonably formed.

4. Context dimension

The "real social situation" context of action research has not been challenged since its proposal. Instead, it is recognized as a major attribute that differentiates action research from conventional research (O'Brien, 1998:5). Such a situation usually requires "responsiveness and flexibility and action" (Dick, 1993). Flexibility determines the authentic (Cohen et al. 2003:241; Lomax, 2002:135), situational

(Cohen, et al. 2003:241), and relevant to professional practice (Wallace, 1998:21) nature of action research.

In addition, unlike traditional methodologies, its context-based and context-bound nature positions action research as being less concerned with what is universally true, or at least generalisable to other contexts (Wallace, 1998:16). This lack of generalisability, or external validity, is one of the common criticisms of action research (Heller, 1986, cited in Dick, 1993). Whitehead (1989:8), however, argues for a new concept of generalisability in his living educational theory. He points out that the "general" "refers to 'all' but instead of being represented in a linguistic concept, 'all' refers to the shared form of life between the individuals constituting the theory".

5. Process dimension

Action research is process-oriented, and almost all writers recognize such a process as cyclic/spiral (Kemmis and McTaggart, 1992:2; McKernan 1992:17; Masters, 1995; Zuber-Skerritt, 1996a:3; Wallace, 1998:12; O'Brien, 1998; Lomax, 2002:122). However, a study of the phases within each cycle of the process produce confusions as writers either use different terms to describe similar phases, or similar terms to describe different activities. I decided not to struggle with the terminology but to focus on the descriptions of the activities in each phase. Table 6.10 provides a summary.

Table 6.10 A summary of activities within each cycle of action research

Plan	Act	Analyze	Reflect
1) Kemmis and McTaggart (1992:54-90)			
Initially reflect on the situation in the light of the thematic concern (reconnaissance); In groups, decide "what is to be done about what, by whom, where, when and how" details.	Enact the plan and observe how it works by undertaking two major tasks: monitor the process, and analyse the data.		Reflect on the thematic concern, the plan, the action and observation, drawing on the achievements and limitations, consider consequences; draw implications for the new cycle, propose the rationale for improvement.
2) Zuber-Skerritt (1996a:3)			
Plan strategically.	Implement the plan; observe.	Evaluate and self-evaluate .	Reflect critically and self-critically; make decisions for the next cycle of action research.
3) McKernan (1996:220)			
Define problem, needs assessment, hypotheses, develop plan of action.	Implement the plan.	Evaluate plan in action.	Decide on a new plan.
4) McNiff (2002:12)			
Identify an area of practice to be investigated; imagine a solution.	Implement the solution.	Evaluate the solution; change practice in light of the evaluation	

Table 6.10 sees a merger of some phases, and differences in some activities, but a consensus in coverage of four phases. The cyclical nature is another consensus. It is viewed as crucial in action research determined by the following factors.

1) Determined by the initiatives.

Participants have a chance to learn and improve in this process (Kemmis and McTaggart, 1992:8)

2) Determined by the context.

It seems to be impossible to deal with everything given the complexity of an action research context at one go (Kemmis and McTaggart, 1992:8).

3) Determined by the rigour of research.

"Cyclic" increases the quality of the research data and interpretation (Dick, 1993).

Dick argues that conventional research will start with a precise research question, whereas action research usually does not. The cyclical nature allows fuzzy questions, fuzzy methods and fuzzy answers to become less fuzzy as they go through each cycle.

The process, however, is not as neat as suggested for phases will overlap, and initial plans can become obsolete or altered in the light of learning from experience (McNiff, 2002:12).

Kemmis & McTaggart (1992:22) suggest two beginning approaches: one is to "collect some initial data in an area of general interest (a reconnaissance), then to reflect, and then to make a plan for changed action"; the other is to make a change first, collect data, reflect and then start again with a refined plan. My research cycle 0 is part of the first approach, though I had not consciously adopted an action research approach at the start of my research.

6. Participant dimension

The participatory nature of action research has been established since Lewin's time (McKernan, 1992:10) and has remained as one of the most acclaimed features that distinguish action research from many other research methodologies (Kemmis &

McTaggart, 1992:22; McNiff et al. 2003:12; Davis, 2004).

In this dimension, I mainly explored the following three questions.

1) Who are the participants?

2) Why is participation important?

3) How do people participate?

Kemmis and McTaggart (1992:51) categorise the participants in three groups: "you, others you work with in the particular activities you are studying, and/or others affected by the activities you are studying". Wallace (1998:207) suggested an extensive range of possible participants, from students to colleagues, from colleagues in the same institute to colleagues of other countries in other disciplines.

Whoever the participants, the literature has identified two major participant roles in action research: practitioners and researchers. A dominant view about their relationship is that practitioners are researchers (Riding, et al. 1995; O'Brien, 1998:2; McNiff et al., 2003:12; Cohen et al. 2003:239), though some argue that participants can be either researchers or practitioners or both (Dick, 1993).

There is a strong argument for practitioners as researchers in that such participatory research can ensure that the researchers possess certain qualities otherwise absent (Dick, 1993; Winter, 1996:14; Davis, 2004) as summarized below.

1) They know well not just the reality of the practices, but also why the reality is as what it is.

2) They have the power to change practices.

3) They have genuine and instinctive concern about the consequences of the

changes since they are the ones that have to live with the changes.

Baldwin (2001:289) further emphasizes that a separation of the researcher from the researched would "invalidate knowledge created, because it would not construct a reality that has meaning for the subjects of the research".

There is recognition of the ownership and responsibility as a result of the participatory principle. It is believed that this can enhance the involvement and commitment of the participants on the one hand, and their caution and rigour on the other (McNiff et al. 2003:15).

Collaborative group work is regarded as an encouraged participatory pattern (Masters, 1995; O'Brien, 1998), or a determinate factor to justify action research as true action research (Kemmis & McTaggart, 1992; Zuber-Skerritt, 1996a).

Collaboration is viewed as an enhancement to depth and coverage, validity and reliability, and motivation (Wallace, 1998:209-210). It also "implies a commitment to equality and co-inquiry" (Kyle and McCutcheon, 1984:174 cited in McKernan, 1996:230). Thus, ways to build and maintain such commitment are crucial.

This privileging of the group over the individual view is severely questioned by Webb (1996:149-154) who raised three major concerns as summarized below.

1) The preference for the solidarity and conformity of group research is "patronising and gives one group the power to ignore the views of another";
2) There are potential tensions between an individual and the group;
3) There are potential tensions between the individuals of a group (e.g. power imbalance between teachers and students; or staff developers and staff members)

Based on the above argument, Webb proposes that the emphasis on group work, consensus (rationality, his term), and power equality of the group members, which may be regarded as being disempowering and anti-emancipatory, should not become the predetermining factors for action research (Webb, 1994:154).

Whitehead (1989) also presents his view that action research could be applied to an individual conducting research though he remains open to both group and individual work.

This participatory requirement, on the one hand, justifies that action researchers, unlike other research methodologists, make no attempt to remain objective, but openly acknowledge their bias to the other participants (O'Brien, 1998); on the other hand, it receives criticism due to this lack of objectivity often required of rigorous research (McKay and Marshall, 2001:46).

7. Method dimension

Inquiry as a primary method for action research has raised few challenges as action research has developed (Kemmis and McTaggart, 1988:5; Wallace, 1998:10). Inquiry by definition suggests the process of asking about or investigating something in order to find out more about it (Collins Cobuild, 1991). Therefore, "the act or process of seeking the answer to a question" (Wallace, 1998:10) is what inquiry is all about.

This is a dimension that requires major attention for the reason that if action research, or any other research, is challenged, it is usually the methods that are most vulnerable to attacks.

Action research is concerned with providing "tools for reflection" (Wallace, 1998:13), particularly self-reflection in a self-critical way (Elliott, 1991:49, cited in Cohen, et al. 2003:227; Kemmis and McTaggart, 1992:21-22; Wallace, 1998:12; McNiff, 2002:6). This is viewed as crucial in action research, and as one of the major distinctions from conventional research where researchers examine others whereas in action research, researchers examine themselves (McNiff, 2002:6).

There are quite a few descriptions of how such reflection and criticism should be made, for example, deliberate and conscious (Dick, 1993), scientific (O'Brien, 1998), systematic (Kemmis and McTaggart, 1992:21-22), controlled (Zuber-Skerritt, 1982:15 in Riding, et al. 1995), and structured (Wallace, 1998:15), which all express the view that inquiries are by no means random. Such emphasis may well answer the criticism that action research is "little more than consultancy" (McKay and Marshall, 2001:46), and distinguish it from practitioners' everyday practice to improve a situation (O'Brien, 1998:2).

McNiff et al (2003:14) introduce a "high order questioning" technique of three levels that enable inquiries to go beyond the face value of an issue, which I found beneficial. Table 6.11 outlines this technique and shows an example of my using this technique to explore this method dimension.

Table 6.11 McNiff et al. (2003:14) high order questioning

Order	Explanation	My example
First order learning	To learn about the situation.	What methods are used in action research?
Second order learning	To learn to question what has been learned.	How should these methods be used?
Third order learning	To learn to ask why the situation is as it is, and why one might need to change the way one thinks about it.	Why are these methods used in this way?

Another strength of action research concerning its methods is that it adopts a holistic approach, allowing a wide choice of methods (Wallace, 1998:28; O'Brien, 1998:8), or to be more specific, insisting on the inclusion of a variety of methods termed "triangulation" (McKernan, 1996:184; Winter, 1996:16; Wallace, 1998:36; McNiff et al. 2003:69; Silverman, 2005:121). It is believed that triangulation can increase the quality of the research data and interpretation (Dick, 1993:19), thus its validity (Burns, 1999:163; McNiff et al. 2003:69) and reliability (Wallace, 1998:36).

McKernan (1996:184) cites several interpretations of triangulation. I have summarized them into four types.

1) a combination of different methodological perspectives

2) a combination of different methods

3) a combination of different participant perspectives

4) a combination of different theoretical perspectives

The context-bound and participatory nature of action research makes it "impossible" and "undesirable" to seek for a high degree of reliability (Wallace, 1998:36) and validity (Burns, 1999:161), and action researchers make no effort to stay neutral (O'Brien, 1998:6). However, this does not mean that rigour required for all research

can be absent from action research. Triangulation, therefore, is a way to minimize the risk. Wallace (1998:36) considers that reliability can be achieved through an explicit description about the nature of the original data. Burns (1999:161-162) suggests five criteria (democratic validity, outcome validity, process validity, catalytic validity, and dialogic validity).[4] McNiff et al. (2003:28-31) offer three levels of validation, i.e. self-validation, peer-validation and wider-public-validation.

Action research is believed to be more suited to qualitative methods (Nunan 1992a; McKernan, 1996). Dick (1993) gives two reasons for this. One is that qualitative methods "can be more responsive to the situation" since researchers can avoid having to time-consumingly modify the metric for quantitative data each time changes take place; the other is that communications will not be hampered by numbers or technical language unfamiliar to practitioners.

The literature provides an abundance of methods from which to choose. For example, McKernan (1996) categorizes 48 action research methods in four groups: observational and narrative; non-observational, survey and self-reports; discourse analysis and problem-solving; critical-reflective and evaluative. His discussion of each method is impressive and comprehensive, covering the techniques, principles, procedures, examples, and cautions.

This section has attempted a literature review of action research from three

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[4] Democratic validity refers to the extent of the inclusion of all the stakeholders of the issues being researched. Outcome validity refers to the extent to which what is intended matches what is achieved of a research. Process validity refers to the extent to which the research approach addresses the problem. Dialogic validity refers to the extent to which the practitioner-researchers participate in the critical and reflective dialogues among each other.

perspectives – contexts, paradigms, and dimensions. Through this review, I have identified a lack of both theory and practice of action research in the online education context in China. In relation to theory, the literature notes that action research is developed from a variety of theoretical schools; however, this has not helped in supporting my choice of research paradigm (to be further explored in 12.2.2 of Chapter 12). In practice, action research can be approached from six dimensions, i.e. initiative, focus, context, process, participant and method. The next section will explore a research plan in the light of the literature review in both instructional design and action research.

6.3 A Modified Research Plan

Guided by the findings of research cycle 0 and the literature review of instructional design and action research, I will propose a plan for the new research cycle in this section.

6.3.1 A research plan informed by three sources

Though this chapter is entitled "plan", planning for the new research cycle actually started after I modified my research needs based on the findings of research cycle 0 as reported in Chapter 5. This modification was further informed by the literature review of instructional design and action research in the early sections of this chapter. For ease of reference, I summarize below the new approaches adopted as a result of the above for the new research cycle.

1) Findings of research cycle 0

I identified a dual-commitment research need with a preference for group work and

a multi-perspective, multi-phase, and multi-cycle approach. One commitment concerns the subject matter: the improvement in the product (beyond content) and the process of the design and development of the orientation module; the other concerns methodology: the identification of a methodology and the refinement of methods for data planning, collection, analysis and reflection.

2) The literature review of the subject matter

I replaced the concept "course design and development" with "instructional design" which is guided by instructional theories in the light of learning theories. It is viewed as both a process and a product. Process wise, it follows an ADDIE model (analysis, design, development, implementation and evaluation), with additional considerations of the methods (how), the development of the phases (when) and participants (who). Product wise, it targets the construction of a learning system/environment beyond the course content, with the ends, the means and the assessment as essential components.

3) The literature review of the methodology issue

I decided to adopt action research as my research methodology. My research paradigm remains fuzzy, as approaches to action research grow from a variety of theoretical beliefs. At an operational level, action research involves considerations of the initiative (why), focus (what), context (where), process (when), participant (who) and method (how), following a cyclical, reflective and critical approach.

In contrast to the rather hasty intuitive approach to research cycle 0 as a preliminary attempt, the next research cycle will be a much more informed exploration of using

action research within instructional design, thus, labelled as research cycle 1.

I attempted to follow closely ONE framework from the literature to conduct the planning (e.g. Kemmis and McTaggart, 1992:54-58; Wallace, 1998:20-34; Burns, 1999:45-76; McNiff at al. 2003:75-81), only to find that having a checklist that applied to my situation was unrealistic, especially when this cycle is actually built upon an initial trial. I was consoled by McNiff et al.'s remark that action researchers usually find that their project does not fall into neat sections as presented on printed pages, and overlaps, retracing of steps, review, redirection and refocusing will accompany the process (McNiff et al. 2003:75). I then decided to formulate my plan mainly against the six dimensions of action research discussed in 6.2.4, since this approach is how I built up my understanding of action research in my literature review.

In the following, I contrast this plan with the practice of research cycle 0, in order to demonstrate the changes and improvements the new plan makes.

Most importantly, this plan had to be developed to form part of an overarching plan of several cycles, research cycle 0 in spring 2004, research cycle 1 to take place in spring 2005, and maybe further cycles in the future.

6.3.2 A dimensional approach to research cycle 1 plan

This section aims to build up a framework for the research cycle 1 plan based on the six dimensions of action research.

1. Initiative

A single real-situation concern of adapting the orientation module that initiated

research cycle 0 had developed to dual commitments: to improve my understanding and practice of the instructional design process and product of the orientation module, and to explore the responsiveness of action research as a research methodology to my context. These initiatives were more than a change in number for the following reasons.

1) They were informed by research findings and literature review, instead of an intuitive response to a situation;
2) They started to consider the theoretical aspects as well as the practical issues;
3) They took a holistic perspective in addition to aspectual considerations;
4) They adopted a living change view via cyclical processes instead of a one-go solution-seeking approach.

The following discussions will all be presented twofold in line with the dual-commitment initiative.

2. Focus

Like the initiatives, my research focuses, or the thematic concerns, were formulated by the three sources. They were tentative at this stage since they would be negotiated later with my research group and further validated by the research. I would pay particular attention to discover context-specific issues at both conceptual and operational levels to examine the extent the existing theories and practices responded or failed to respond to my situation and the reasons. The focuses were thus formed as follows. I used "I" and "my" in all the statements. This did not mean that I excluded the possibilities of change and improvement in these aspects among a wider group of

people concerned. It indicated my uncertainty, or maybe modesty of the extent of impact this research cycle would have on other people. It remained to be seen, though I was certain at this stage that the new cycle must seek to be collaborative and involve a variety of stakeholders.

1) Concerning the subject matter:

   a) How do I improve my understanding and practice in relation to instructional knowledge? (e.g. What guidelines do I use to make instructional decisions? Why do I use them?)

   b) How do I improve my understanding and practice of the instructional design process of the orientation module? (e.g. What is the process? What are the considerations such as what, who, when, how, etc. within the process and why?)

   c) How do I improve my understanding and practice of the instructional design product of the orientation module? (e.g. What is the product? What are the considerations of the product and why?)

2) Concerning the research methodology:

   a) How do I improve my understanding of action research as a research paradigm? (e.g. What is my research paradigm? How does it impact my research practice?)

   b) How do I improve my understanding and practice of action research? (e.g. What applies and what does not of theories and practices of action research guided by the literature? What are the reasons? What are the possible

adaptive strategies?)

3. Context

The research would take place in my workplace, as in research cycle 0. It had not physically changed in this new research cycle, but conceptually, I found a simple claim of its authenticity and uniqueness far from enough for two reasons. One was that I must be explicit about the claim to uniqueness in order to examine its role in my research; the other was that I must adopt a broader view of context to anticipate the possible strengths and constraints it has. I therefore listed some features of the context that were believed to have potential impact on my research.

1) Concerning the subject matter

a) Globally, instructional design has become a contested area as open and distance learning, and later modern-technology-mediated learning started to boom (Murphy, 2003:280). This provokes the exploration of why and how technology plays its role.

b) Nationally, instructional design in online education is not an established discipline despite the fact that its practice is prominent in the field of higher education. This calls for a justification of the professional identity of instructional design.

c) Institutionally, a need for a new framework to replace the existing one of course design and development has been expressed.

2) Concerning the research methodology:

a) Both globally and nationally, action research has not been fully explored as

a legitimate research methodology in online education.

b) At the Institute, action research is encouraged through a management ideal, i.e. the concept of a combination of the research process with the work process is expressed as being desirable, though no practice has been undertaken.

4. Process

In my research cycle 0, though not clearly articulated nor explicitly understood as a key feature of my research process, the "cyclic" idea emerged as an important decision, for without any follow-up work, my research would be unlikely to have any influence. This idea was then well established by action research literature review. My research planned to take at least three cycles. Cycle 0 was a preliminary attempt driven by my situation; cycle 1 was an initial exploration informed by the literature; and cycle 2 would be a further examination enriched by my research practice. These cycles should apply to both the instructional design and action research processes.

My research cycle 0 went through similar stages and activities of action research as described in the literature. Table 6.12 has the details.

Table 6.12 Phases of research cycle 0

	Phase	Time	Activities
1	Plan	Feb. 2004	Identified my concerns by examining my situation, transferred the concerns into research questions, and made a plan.
2	Act	Mar. 2004	Implemented the plan and collected data.
3	Analyze and reflect	Apr.-Sept. 2004	Analyzed and reflected on the data to draw solutions to my research questions, discovered new needs and raised new concerns, leading to a revised plan.

As the literature uses different terms to describe similar phases, or similar terms to describe different activities (discussed in 6.2.4), I decided to follow the above three-phase approach as it corresponded well to the pre-, during- and post-module timeline in my research. I deliberately chose action verbs to label these phases to emphasize the actions of action research.

My plan for the phases of the current cycle was complicated by the effort of interweaving two processes (instructional design and action research), a situation not well addressed by the literature. I decided to embed the instructional design process in the action research process since the research plan was always one step ahead of the design plan. Table 6.13, a variation of an action research planner by McNiff et al. (2003:75), demonstrates the ways this was to be achieved.

Table 6.13 Research cycle 1 process plan

<table>
<tr><th colspan="2">Time</th><th>Action Research</th><th>Instructional Design</th></tr>
<tr><td colspan="4">1) Plan</td></tr>
<tr><td colspan="2">Accomplished</td><td>An initial research plan.</td><td>Guideline to the instructional design of the orientation module.</td></tr>
<tr><td rowspan="3">Dec. 2004</td><td>2nd week</td><td colspan="2">Form tutor-researcher group.</td></tr>
<tr><td>3rd week</td><td>Finalize the plan.</td><td>Analyze the needs.</td></tr>
<tr><td>4th week</td><td rowspan="2">Develop research tools.</td><td>Design the orientation module.</td></tr>
<tr><td colspan="2">Jan.~ Feb. 2005</td><td>Develop the orientation module.</td></tr>
<tr><td colspan="4">2) Act</td></tr>
<tr><td colspan="2" rowspan="2">Feb. ~ Mar. 2005</td><td colspan="2">Form learner-researcher group.</td></tr>
<tr><td>Implement the research.</td><td>Implement the orientation module.</td></tr>
<tr><td colspan="4">3) Analyze and reflect</td></tr>
<tr><td colspan="2">Mar. – May 2005</td><td>Analyze the data.</td><td>Evaluate the orientation module.</td></tr>
<tr><td colspan="2">June -- Sep. 2005</td><td colspan="2">Reflect on the research and design processes to draw solutions to my research questions, to discover new needs and raise new concerns, leading to a new cycle.</td></tr>
<tr><td colspan="4">4) Plan a new cycle</td></tr>
<tr><td colspan="2">Sep. 2005 on</td><td colspan="2">Plan for the new cycle action research and the instructional design of the orientation module.</td></tr>
</table>

5. Participant

The literature on both instructional design and action research expresses a preference for multi-perspective participation in the process, though instructional design emphasizes the multi-disciplinary nature of a staff group whereas action research stresses practitioners (stakeholders of the issue being researched) as researchers.

My research cycle 0 was conducted solely by myself. Therefore, I was not in a position to comment on the impact of group participation. However, in my reflection of research cycle 0, I made a strong proposal for the inclusion of all stakeholders in the next research cycle, not as a result of being convinced by the literature, rather as a decision informed by my reflections of the process.

When the notion of multi-perspectives became desirable for my research, it was the decision of exactly whose perspectives to involve that challenged me. I followed Kemmis and McTaggart's (1992:51) three-group proposal to construct my list of stakeholders.

Table 6.14 Proposed stakeholder list of research cycle 1

Categories		Specifications
1)	I	I
2)	Others I work with in the particular activities (in my case, the design and development of the orientation module) I am studying.	● Staff from Course Design and Development Centre ● Staff from Multi-media Resource Development Centre ● Staff from Courseware Development Centre
3)	Others affected by the activities (in my case, the delivery of the orientation module) I am studying.	● Learners ● Staff from Learner Support Centre ● Staff from Tutor Support Centre ● Local tutors ● Local administrators

The list appeared to be more overwhelming than helpful. The dual-commitments

further confused the matter. The term "activities" by Kemmis and McTaggart had two interpretations in my situation: one was action research activities and the other was instructional design activities. Were the stakeholders of these two types of activities separate, overlapping or merged? The answer was they must be completely merged as one group since instructional design and action research were dependent on each other in my research. Thus, I redirected my approach using core and peripheral categorizations. Those in the core group would have an intentional involvement in both instructional design and action research processes as decisions makers and actors; those in the peripheral group would have an unintentional involvement in both processes as instructional design practitioners and research data sources. Each group would then have its sub-groups as explained in Table 6.15.

Table 6.15 Core and peripheral participant list of research cycle 1

Core Group	Peripheral Group
1) **Tutor-researcher group:** ● I (Director of the Resource Sector) ● Tutor A (Assistant Director of the Course Design and Development Centre) ● Tutor B (the chair tutor) ● Tutor C (Director of Beijing learning centre) ● Unknown[5] (a local tutor at Beijing learning centre) 2) **Learner-researcher group:** A sampled group of learners?	1) **Peripheral learner group:** All newly-enrolled learners on the orientation module. 2) **Peripheral tutor group:** All local tutors. 3) **Peripheral staff group:** Those headquarters staff from Learner Support and Tutor Support Centres responsible to support learners and tutors on the orientation module.

I question-marked the learner-researcher group out of one determination and two concerns. The determination was that I must include the learners' perspective in this

[5] The invitation of a local tutor to the core group could only be administered a month before the orientation module was delivered, since only until then the list of local tutors could be decided.

research cycle. However, I was not sure how this group could be selected and how it could be turned into a group of intentional instructional designers AND action researchers. I left the issue to a tutor-researcher group discussion.

6. Method

The literature concerning the method dimension emphasizes systemic inquiries, (self-) reflection and (self-) criticism via a wide range of methods. My research cycle 0 followed a convenient approach of collecting naturally-occurring data with a mono-perspective which left many conclusions assumptions and many issues still questions. As argued in 6.2.4, availability of methods was rarely a problem – the challenge lay in the selection of the methods and the justification. In this new cycle, instead of moving to a decision of the exact methods, I first worked on essential principles enlightened by lessons learned from research cycle 0 and the literature review.

1) Perspective-related principle

   Methods should be able to collect data that reflect a variety of perspectives of both core and peripheral groups.

2) Process-related principle

In addition to data-collection methods, other method types were needed for different phases of the process.

a) Plan phase: methods to decide whose data, what data, why, how and when to collect the data;

b) Act phase: methods to collect the data;

c) Analyze and reflect phase: methods to analyze and reflect the data.

3) Focus-related principle

Methods should reflect the dual-commitment focuses of the research.

4) Quality-related principle

Methods should be valid and reliable by achieving the following.

a) Well-sourced and well-informed;

b) Triangulation by different perspectives, different methods, different time, etc.;

c) Awareness of the possible bias or limitations, and effort to minimize them.

5) Feasibility-related principles

Methods should be accessible to target groups physically and conceptually. They must be manageable within the ability, time, budget, etc. of the situation.

I made up a tentative plan for research methods, or data collection methods to be exact, based on the above principles. They were tentative in three senses. One was that I would leave the confirmation to my core group discussion. Second was that the plan was open for adjustments during the research process. Third was that these methods were mere nominations. The designs (e.g. questionnaire items, interview questions, journal templates, seminar structures, etc.) and the methods for administrating, analyzing and evaluating them were yet to be considered. Table 6.16 presents the plan in the format of addressing whose, when, what, why and how the data would be collected. I based the terms and their meanings on McKernan's (1996) comprehensive list of possible methods for action research.

Table 6.16 Plan for data collection methods of research cycle 1

When to collect	What to collect?	Why collect?	How to collect?
Tutor-researchers			
Through out the module	Activities and reflections	Process record	Journal
Pre-module	Their profile	To construct research situations.	Personnel management database
	Their existing perceptions and practices		Audio-recorded interview
	Their decisions and decision-making processes	Process record	Journal
During-module	Their formative reflections	Process record	Journal
Post-module	Their summative reflections	Process record	Audio-recorded interview
Learner-researchers			
Pre-module	Their profile	To construct research situations.	Questionnaire
	Their existing perceptions of the orientation module and the research		Audio-taped interview
			Video-taped seminar
During-module	Their learning process, and their formative reflections	To record their learning process; and their instructional and research process.	Journal
	Their formative reflections		Video-taped seminar
Post-module	Their summative reflections		Audio-recorded Interview
Peripheral learners			
Pre-module	Their profile	To construct instructional situations. (Reigeluth, 1999:8)	Questionnaire
	Print textbook purchase rate	To examine their possible learning media.	e-platform database
During-module	Number of posts, emails and calls	To examine learners' utilization of the support services	e-platform database from forum, call centre,

	Their concerns	To examine the extent the orientation module fulfils or fails to fulfil the intended goals; to surface learners' needs.	forum, call centre, etc.
Post-module	Evaluation (the course, self-reported achievements and problems/difficulties, etc.)		Questionnaire
	Assignment submission rate	To examine the learners' utilization of the assessment system.	e-platform data base
Peripheral tutors			
Pre- and post-module	Their perceptions of the course and learners' learning problems/difficulties	To examine tutors' perspective of the orientation module and of the learners' performances.	Audio-recorded interview
Peripheral staff group			
Through out the module	Activities assisting instructional design or action research	Process record	Work report

I would leave much detailed design work to a joint effort of the core research group, but I needed to initiate a detailed plan for the tutor-researchers at the start. This included the following tasks. In obtaining the guidance to these tasks, I mainly focused on the works of McKernan (1996), Wallace (1998), Burns (2001) and McNiff et al. (2003) for the reason that they offer a detailed description of a wide range of research methods under the framework of action research (Wallace and Burns in particular English language education context).

1) Planning ethical issues.

   a) Drafting a letter of permission

      I based the document on McNiff et al.'s framework (2003:50-54), eliciting the aim and plan of the research, duration, expected commitments and tasks, confidentiality issues, perceived benefits, working language, etc.

b) Administrating the document

i. Media of presentation. I planned to present the document in print in a face-to-face project orientation meeting. The meeting agenda would cover much of the issues raised in the document. I perceived that a face-to-face presentation with a printed document was essential to establish faith and clarity at the initial stage, and to clarify or add any issues missing out of the written document.

ii. Media of collection: I would then send the document by email to tutor-researchers to allow them time to read it in detail, and to suggest adaptations when necessary. I would ask them to hand in a print document with their signature if they agreed upon participation.

iii. Time allowed. I stated in the document that a response within a week would be appreciated.

2) Planning journals

a) Type of journals

Of all the terms (diary, journal, logs, personal accounts, etc.) and types (intimate journal, memoir, log, etc.) of journals suggested in the literature, McNiff et al. (2003:115) emphasizes the importance of a clear identification of the purpose (how journal data will be used for research) and types of entries. I decided to focus on these two issues, keeping to the term "journal".

b) Purpose, use and a template

I planned to use the journal as a record of both the instructional design and action research processes (when, who and what activities) and of the reflections (feelings, thoughts, comments) on these processes.

c) Administration of journals

Journals would be kept in Excel document format (accessible to all tutor-researchers). I considered establishing a journal exchange mechanism using group emails on a weekly basis.

3) Planning interviews

a) Type of the interview

I planned to adopt semi-structured interview (McKernan, 1996:129; Wallace, 1998:147; Burns, 2001:120) to capture the existing perceptions and practices of instructional design and action research of this group at the pre-module stage and the reflections on these issues at the post-module stage.

b) Time of the interview and the sequence

I initially wished to conduct pre-module interviews before everything else for I anticipated that by reading the letter of permission, and attending the project orientation meeting, tutor-researchers would have been provoked to ponder the issues raised. However, both the literature and the research regulations of the University of Nottingham warned that this conflicted with ethical procedures. I finally chose to do the interview after they signed the document. Post-module interviews would be conducted at the end of the orientation module. I did not view sequence as an issue. Therefore, I would arrange the

interview according to the time availability of tutor-researchers.

c) Documentation of the interview

I would audio-record the interview, accompanied by a written interview report sheet for the interviewer to fill out basic information such as the date, the time, the place, the names of the interviewer and the interviewee.

d) Interview questions

The interview questions were divided into two themes, with one addressing the research methodological issues, and the other dealing with the instructional design issues of the orientation module.

4) Planning seminars

a) Role of seminars

Seminar is not a commonly discussed research method in the action research literature. However, McKernan (1996:160-162) has a good argument for its role in action research with the following features (my summary).

i. It is an ideal method for inquiry/reflective mode of learning;

ii. It is best utilized in areas where there is lack of first-hand models or research literature;

iii. It focuses on a group-directed collective sharing of knowledge and ideas;

iv. It is organized around problems.

These features fit my situation well. In addition, a seminar is an accessible approach for tutor-researchers – these are part of their normal practice.

b) Frequency of seminars

In the pre-module period, frequency would depend on the progression of tasks required for preparation work. In during-module period, I planned to have it weekly.

c) Agendas for seminars

Agendas would be geared to the tasks at different times. They should include a report based on journal information from each tutor-researcher, and a collective and interchangeable reflection on the issues raised.

d) Documentation of seminars

I planned to keep agendas and minutes, in company with participants' post-seminar journals as documents.

Chapter summary

This chapter has explored ***the literature on instructional design and action research*** *so as to obtain guidance for a plan for a new research cycle. The plan has taken shape under a dimensional approach with specifications of the research* ***initiative, focus, context, process, participant and method****. Methods for data collection of tutor-researchers have been discussed in detail, whereas methods for other groups are left for a core group decision. Though this is a much informed and improved plan in comparison with that of research cycle 0, it is still an initial exploration open to adjustment in the process and ready for critical reflection at the end of this cycle. The next chapter will describe the action processes of instructional design and action research guided by this plan.*

Chapter 7: Act – Managing Four-group Data

Chapter abstract

This chapter first reports the process of ***forming a tutor-researcher group*** *and its* ***joint effort*** *in undertaking the analysis and design of the orientation module and in improving the research plan. From then on, I turn to use* ***"we" instead of "I"*** *to refer to the tutor-researchers including myself since decisions and actions have become a team effort. Actions will be presented according to the* ***pre-, during- and post-stages*** *of the orientation module. The presentation will see* ***an interwoven procedure*** *of instructional design actions with those of action research.*

7.1 Actions Towards an Improved Plan

This section provides a report on the formation of the tutor-researcher group and a team effort in designing the orientation module and improving the research plan I made in the "plan" phase.

7.1.1 Forming the tutor-researcher group

I hesitated about which chapter I should put Section 7.1. This section is about "act" in that I would start to take actions to set up the tutor-researcher group according to my plan proposed in Chapter 6. However, it is still about "plan" since this group would be first working on the improvement of the research plan to guide our further actions. Therefore, this section in fact described an action phase based on an initial plan, yet it is still a plan phase in the overall process of action research. However, the

move from individual to group research from this point on made the process so different that I decided to report it as an "act" phase activity rather than a "plan" phase one.

The set-up of the tutor-researcher group was the most immediate action to take since many undecided issues in the research plan waited to be dealt with by the wider group. According to my plan, tutor-researchers included Tutor A (Assistant Director of the Course Design and Development Centre), Tutor B (the chair tutor of the orientation module), Tutor C (Director of the Beijing learning centre), a local tutor at Beijing learning centre (to be decided) and me. I invited my target tutor-researchers to a project orientation meeting in which I introduced my research cycle 0 and my plan for the new research cycle. I also prepared a letter of invitation (Appendix 2.3) in print for each of them, expecting them to read it and respond within a week. They all signed it on the spot, which meant that we could start to work immediately as a group. Appendix 1.2 outlines their profiles in name, gender, marital status, age, education and major, years at the Institute, and previous work experience.

This profile shows that all group members had a strong campus-based teaching background, yet at least two year's working experience at the Institute. Below is a brief summary of their work responsibilities that proved to be essential information to understand their perspectives and views in this research.

1) Tutor A was responsible for the managerial issues concerning all course design and development tasks (e.g. budget, personnel, contracts, coordination across centres, etc.)

2) Tutor B was responsible for the maintenance and adaptation of online resources of the orientation module, the decisions concerning assessment, and the design and provision of online support services to the learners and tutors of this module. She was also the moderator of the forum.

3) Tutor C was mainly responsible for administrative management of Beijing learning centre. Her centre was expected to provide mainly face-to-face mediated learner support services (e.g. tutorials) at a local level as part of the learner support service system administered by the headquarters of the Institute.

4) A local tutor (yet to be decided) was responsible for the provision of regular face-to-face tutorials, and the marking of tutor-marked-assignments.

I conducted pre-module interviews after the group was set up, and immediately attempted a preliminary analysis of the data from the interview, since I needed such information to evaluate the readiness of the group for action research and to plan for support if needed. The initial findings are presented in Table 7.1.

Table 7.1 Research perceptions and practices of 2005 tutor-researchers

Themes	**Tutor A**	**Tutor B**	**Tutor C**	**I**
Research in general				
Attitude	Positive	Positive	Positive	Positive
Interested areas	Research process in instructional design	Task design	Research methods	Instructional design, and action research
Experience	A research project in process for MA thesis of a contrastive study in oversea	A research project for MA thesis of a study of using email to teach English	Assistant role in two research projects concerning tutor-support services at the Institute	A few research projects of materials development

	student enrollment strategies between China and Australia	reading and writing.		
Familiar methods	Document surveys	Questionnaire, case study	Questionnaire, interview	Questionnaire, interview
Publications	None	None	2 papers as the second writer	6 papers as independent or first writer
Action research				
Knowledge	Little knowledge	Little knowledge	Some knowledge (claimed)[6]	Knowledge based on the literature
Practice	None	None	Yes (claimed)[7]	None
Attitude to this approach	Positive (interested, motivated)	Positive (a new experience)	Positive, but skeptical [8]	Positive
Attitude to group work	Positive (sharing views, solving problems on a joint effort) Negative (different views, weak members, time-costly)	Positive (sharing views, gaining multi-perspec-tives)	Positive (sharing working load, increasing confidence)	Positive (informed by the literature and previous research findings)

The data led to two observations: this group was highly motivated to participate in this research, and was positive towards group work, yet it lacked both research knowledge and experience. To tackle the issue, I shared a booklist and papers addressing action research. Further, I delivered a presentation on action research based on my literature review.

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[6]& [2] Analysis of the answers to these two questions revealed that Tutor C confused action research with the traditional hypothesis-driven research approach.

[8] Tutor C's skepticism lay in that she doubted whether this could be an action research when participants (like her) did not know much about action research.

7.1.2 Analyzing and designing the orientation module

The agenda of the first seminar of tutor-researchers was to discuss and finalize the research plan. The discussion resulted in the prioritization of subject matter issues instead of methodological concerns. The argument was that we could not proceed to the decisions such as items of questionnaires, questions of interviews, entries of the journals, agendas of the seminars if we were not precise about the data we needed for the instructional design of the orientation module. This then meant that we should start the instructional design process to generate issues that needed to be supported, explained, or confirmed by research data.

7.1.2.1 Listing initial tasks

We decided to start by formulating the objectives of the orientation module. Process wise, this had been identified as a task in the analysis stage of ADDIE model; product wise, most instructional design models address objectives as a major consideration (argued in 6.1.2).

Many current practices of instructional design adopt Mager's three-element approach (1962 cited in Reiser, 2001b:59) to describing learning objectives: a description of desired learner behaviours; the conditions under which the behaviours are to be performed; and the standards (criteria) by which the behaviours are to be judged. Reigeluth (1999a) recognizes three domains of learning (cognitive, affect and psychomotor) instructional design should address, and further instructional taxonomies of the cognitive domain (Reigeluth and Moore, 1999:54), an affective development model of the affect domain (Martin and Reigeluth, 1999:493) and

instructional strategies of the psychomotor domain (Romiszowski, 1999:468). However, all this literature deals with the descriptions or analysis of the learning objectives, yet offers few clues as to the methods to generate them.

We made a checklist of resources that could inform us to formulate the objectives of the module. The research methods we planned to use are indicated in the brackets.

1) The objectives of the existing orientation module (document survey);
2) The objectives we (tutor-researchers) intend to achieve (interview);
3) The needs of learners (findings in research cycle 0).

The following sections are the reports of our research results which guided our final decision as to not only the learning objectives, but also the overall design of the module. In the process of our exchanges and discussions of the research results, we took two major actions described as follows.

1) The analysis and design phases of the instructional design process fused into one stage. When we undertook the above three research tasks, we found the process and the findings always led us to a chain of inquiries beyond the learning objectives to the instructional design of the overall module. Issues such as the resources and support needed to fulfill the objectives, the media for the presentation and delivery of these resources and supports, and means of assessment, etc. were raised as well. Therefore, the following sections of the research reports will discuss the findings related to instructional design instead of mere objectives.
2) We attempted to establish our own category systems to analyze the data and to

label our findings concerning the learning objectives and dimensions of a learning environment of instructional design. We started with the frameworks from relevant literature, but always found them inadequate for our situation. The development of the category systems at this stage was only guided by our experience and intuition. However, as we had to deal with more data from different sources and of different nature later at the "analyze" phase, we explored data analysis methods. The category system development process will be reported in detail in Chapter 8. To aid comprehension, the following reports are presented using the codes of category systems that the group established later. The original codes did not differ greatly from the later ones, which were more comprehensive.

Our reflections upon these research findings will be presented in 7.1.2.3, while 7.1.2.2 will be a mere report of the findings with little discussion.

7.1.2.2 Report of the findings

1. A study of the objectives of the existing module

This study was conducted by reviewing the objectives stated at the beginning of both the print textbook and courseware of the orientation module. The objectives were identified as follows.

1) Autonomous learning layer: to develop distance learning strategies (e.g. adaptive learning, self-management, planning);

2) Language learning layer: to develop English language learning strategies on specific skills (e.g. listening, reading, writing, vocabulary);

3) Affect layer: to develop self-confidence, persistence, and determination;

4) System layer: to know the three-year course, rules and regulations (e.g. modules, assessment, time requirement, etc.).

2. A study of our own views

This study was based on the data from pre-module interviews at the start of the research when tutor-researchers gave instinctive or experience-based responses rather than research-supported considerations. Though our views had been changing since then, they presented the preliminary visions we used to hold to indicate where we started and how we changed. The interview data identified four dimensions in the course design as shown in Table 7.2.

Table 7.2 2005 tutor-researchers' views of the design of the orientation module (via pre-research interview)

Category	Views
Objectives	● System layer: to acquire information of rules and regulations (Tutor A and Tutor C), learning path (Tutor A), support services (Tutor A and Tutor B), and resources (Tutors A & C) ● Learner autonomy layer: adaptive learning (Tutor A), resource-seeking and selecting (Tutor C); ● Affect layer: interpersonal skills (Tutors A & C) ● Technology layer: computer and Internet skills (Tutor A)
Content	● System component: introduction to the learning system (rules and regulations, resources, support services) ● Autonomous learning component: adaptive learning ● Affect component: interpersonal skills ● Technology component: computer and Internet skills
Media	Blended delivery mode, with face-to-face contacts to start with, and a gradual transition from face-to-face mode domination to online mode domination (Tutors A, B & C).
Time consideration	● Time to start: immediately after formal registration (Tutors A, B & C); ● Time to last: no more than three weeks (Tutor C); several weeks (Tutor B); 2-3 months (Tutor A)

3. A study of learners' needs

The study of learners' needs at this stage was mainly based on research cycle 0 data. Though that research did not directly collect learners' expressed needs, these could be inferred from the findings. Table 7.3 attempts a translation of these findings to instructional considerations.

Table 7.3 Implications of research cycle 0 findings to instructional strategies of the orientation module

Research findings	Design category	Instructional strategies
Learners' diversity in age, education background and occupations (Appendix 1.1)	Generic design principle	An open system that allows learners to have choices.
Learners' print-book purchase rate	Media of delivery (resources)	Provision of print textbooks.
Learners' high tutorial attendance rate	Media of delivery (support)	Provision of face-to-face contacts.
Learners reported concerns/difficulties/ problems via forum and call centre	Objectives and content	Instructions concerning the learning system; language learning strategies; autonomous learning strategies and technical skills
Learners' low utilization of learner support services		
Learners' assignment submission rate	Assessment	Instructions concerning technical skills
Tutors' high marks for the assignments		Purpose and administration of the assessment

7.1.2.3 Shaping the instructional design of the orientation module

Though our research findings did not provide a ready framework for the instructional design of the orientation module, they raised awareness of a variety of issues which we made decisions about in our daily work, albeit fragmentally and from our own intuitional roles. We now started to consider them based on our research findings

from the view of a learning environment. Appendix 8.1 shows the details of our design plan addressing these issues in the form of specific decisions about the learning objectives, activities and assessment of the orientation module. Appendix 8.2 shows the study plan (termed "orientation study plan") presented to learners. The rationale, or the design principles, informed by the above research studies, is discussed as follows under the headings of terminology, components of the learning environment, a learning- and learner-focused approach and dimensions of the instructional methods.

1) Terminology

In our seminar discussions, and later in the presentation of our decisions, we saw the need of a shared understanding of the following terms in our design language.

a) Resource: This refers to static resources of activities pre-prepared for the module that do not change within one cycle of delivery. It deals with the interaction between the learners and the content.

b) Support: This refers to dynamic activities/services to support learners' learning that take place during module delivery. It deals with the interaction between the learners and the tutors, and among the learners.

c) Assessment: This refers to both accredited (assessment whose result will become part of the final module score) and non-accredited assessment (assessment whose result will not be counted as part of the final module score). It again deals with the interaction between the learners and the content.

d) Media: This borrows Reiser's (2001a:55) definition that media is the physical means via which instruction is presented to learners. The adaptation is that Reiser excludes the teacher, chalkboard, and textbook, a so-called "three primary means of instruction prior to the 20th century", but we decided to include the textbooks and face-to-face contacts between the learners and the tutors in our definition to reflect the fact that they are still in demand in an online education environment.

2) A creation of a learning environment that addresses the ends, the means and the assessment

We aimed at constructing a learning environment instead of mere courseware. We did not follow any specific models reviewed in 6.1.3. Instead, we based the design of our learning environment on the three essential issues emerging in these models, namely, the ends, the means and the assessment. The ends were our objectives; the means were the activities we designed to obtain these objectives; the assessment was the methods we used to monitor and evaluate the achievement of the objectives.

3) A learning- and learner-focused approach

We viewed this principle as an important concretization of learning-focused instructional paradigm (Reigeluth, 1999a:19). It guided us to make the following decisions.

a) Negotiation of the learning objectives

We planned to seek learners' views about the objectives during the delivery

stage of the orientation module. We would design the module as such that learners could decide their own focus, pace, sequence, and extent within a general framework.

b) Availability and accessibility of a variety of learning media

Resource wise, we made resources accessible via print, CD-ROM and online versions; support wise, we made face-to-face, telephone, emails and online interaction available.

c) A gradual transition to the online learning mode

This aimed to provide learners with well-supported adaptation to the new online learning mode. Resource wise, such a transition was undertaken by the provision of a print orientation study plan as a guide to the study of the module via print, CD-ROM and e-platform; support wise, this transition was undertaken by the provision of a face-to-face orientation first that followed by online support services with weekly face-to-face tutorials.

d) A default-learner study plan

We created a default learner study plan (Appendix 8.2) to provide a day-to-day study guide as to the objectives, activities, expected study time, resource and their access to learners.

e) A learning-process-support assessment

Assessment design was one of the most time-consuming tasks among all our design work. We aimed at an assessment approach that was both pedagogically valid and administratively feasible. It aimed to help evaluate learners'

attainment of the learning objectives, monitor their learning process, increase their probability of reaching the intended achievements (Reigeluth, 1999a:11), and at the same time exert neither unnecessary anxiety on the learners, nor huge marking workload on the tutors. The final design was an intuitive decision, but later we found support for this in both data and the literature (to be discussed in 8.3.3 of Chapter 8 and 9.2.4 of Chapter 9).

f) An authentic situation preparing learners for authentic situations

Instructions should support learners to transfer knowledge and skills to authentic post-instructional contexts (Gustafson & Branch, 2002). After the orientation module, the remaining 14 modules of the post-diploma BA course adopted a similar weekly learning routine. To prepare our learners for such a routine, we extended the orientation module to a three-week study instead of one-week work. Starting from the second week, learners actually began their study of the proceeding module "English in Daily Life", yet still under the guidance of the orientation study plan. Our intention was to fully support learners through two typical learning weeks to prepare them for the study of the remaining modules.

g) A virtual learning community

Though we were not confident in claiming a specific learning theory approach, we were influenced by the literature (Jonassen, 1999:218; Bielaczyc and Collins, 1999:273-277; Moallum, 2003:87) that a learning community was desirable for effective learning. Given the distance learning situation, we

focused on the means of constructing a virtual community. We maintained the forum as an interaction channel between the chair tutor and the learners, and among learners. Meanwhile, we built in a weekly 2-hour synchronous programme (termed "Meeting Professor Guide[9]" using a chatting system called VOB[10] embedded in our e-platform) that allowed such an interaction to become real time voice communication.

4) A multi-dimensional approach to instructional methods

Reigeluth (1999a:22-23 cited Olson, Dorsey and Reigeluth, 1988 and Molenda, 1995) suggests a comprehensive list of instructional methods. How were we to make this choice? We needed a framework to cover all possible aspects in our decision to choose one particular method (or "activity" in our term). We elaborated on Reigeluth and Moore's framework of comparing instructional strategies (1999:56). Though they propose it for a different purpose, they provide a useful dimensional perspective of considering instructional methods.

Table 7.4 illustrates such a framework with a task as an example to demonstrate how this framework was used (Adaptations are indicated by italics.). The task is to support learners to learn to use the forum. It is a task out of Day One activities in the orientation study plan.

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[9] The existing oricntation module adopts a tutor-embedded approach that presents a virtual professor figure, Professor Guide, as the instructor of the module. We decided to apply this figuration to the chair tutor of this module in order to keep the association between the resource and support.

[10] VOB is the abbreviation for Voice of BeiwaiOnline. It is a chatting system that allows synchronous text + voice interaction.

Table 7.4 Framework for designing an instructional method

	Category	Descriptions	Our decision
a)	*Instructional method*	*Approaches to implement instructions*	Demonstration
b)	Type of learning	Cognitive domain; psychomotor domain or affect domain	Psychomotor domain
c)	Control of learning	Teacher-controlled to learner-controlled	Medium
d)	Focus of learning	Interdisciplinary, topic-oriented, problem-oriented, domain specific	Domain specific (psychomotor domain)
e)	Grouping for learning	Individual to pairs to teams (3-6) to groups (7+)	Individual
f)	Interactions for learning	Human (Learner-teacher; learner-learners, others); Non-human (learner-tools, learner-information, learner-environment/manipulative, learner-other non-human	Mainly learner-information and learner-tools
g)	*Media for learning*	*Face-to-face, print, cassette, CD-ROM, telephone, email, e-platform*	CD-ROM/e-platform
h)	*Resource for learning*	*Texts, audio/video documents, flash documents, etc.*	Step-to-step flash demonstration of using the forum
i)	Support for learning	Cognitive support, emotional support	Psychomotor support
j)	*Assessment of learning*	*Item types such as multi-choice questions, essay questions, reflections, etc.*	Demonstration (learners are asked to paste a post they sent in the forum in their assignment.)

7.1.3 Improving the research plan

We felt more ready to work on an improved research plan after we had outlined the instructional design of the orientation module, since both the design process and product helped us develop a more focused need for the research data. This section will first outline the changes made to my original plan and the rationale. It will then introduce the instructional design plan and action research plan. Finally, it will discuss the sampling principles for learner-researchers and the development of

research instruments.

1. Changes and the rationale

We made several changes to the original research plan (presented in 6.3.2). The major changes and the rationale are listed below.

1) Focus-oriented

The previous research plan categorized the research methods under each research group. In this new plan, research methods are categorized under different focuses of the research. This will provide a clear guidance of what each research method (e.g. questionnaires, interviews, journals and seminar) aims to find out.

2) An emphasis on triangulation

The new plan aimed to demonstrate the multi-perspective, multi-temporal, multi-method nature of the research on each research focus. Meanwhile, we wanted to distinguish the core data (data from tutor-researchers and learner-researchers) and the peripheral data (data from peripheral learners and peripheral tutors). Core data aimed to achieve the extensiveness and intensiveness of the research whereas peripheral data aimed to outline a general situation.

3) A dual-plan presentation

An action research-driven plan subordinated the instructional design focus. In fact, each planned research action would generate data for both commitments, but it needed to be planned separately to ensure an attention to both of them.

2. An improved research plan for instructional design

Table 7.5 presents an improved research plan for instructional design.

Table 7.5 An improved plan for research cycle 1 concerning instructional design

Focus		Par-tici-pants	Methods	Time
Conceptual level				
Perceptions towards instructional design		TRs[11]	Interview	Pre- and post-module
		LRs	Interview	
Operational level				
Instructional design process		TRs	Journal, seminar, interview	Pre-, during- and post-module
		LRs	Journal, seminar, interview	During- and post-module
Course objectives		LPs	Questionnaire	Pre- and post-module
		TPs	Interview	
		LRs	Interview	
		TRs	Interview	Pre- and post-module
Learning process	Study time	LPs	Questionnaires	Pre- and post-module
		LRs	Journals	During-module
	Resource media	LPs	Print-book purchase rate	Pre-module
			Questionnaires	Pre- and post-module
		LRs	Journals	During-module
	Support media	LPs	Tutorial attendance rate, forum posts, call centre messages, VOB attendance	During-module
			Questionnaire	Pre- and post-module
		LRs	Journal	During-module
	Study place	LPs	Questionnaire	Post-module
		LRs	Journal	During-module
	Study path	LPs	Questionnaire	Post-module
		LRs	Journal	During-module
	Learning difficulties, problems, and concerns	LPs	Questionnaire	Pre- and post-module
			Forum posts, call centre messages, VOB programmes	During-module
		TPs	Interview	During-module
		LRs	Journal, seminar	During-module
			Interview	Pre- and post-module
		TRs	Interview	Pre- and post module

[11] To save space, I used the following abbreviations in Tables 7.5 and 7.6: TRs=tutor-researchers; LRs=learner-researchers; LPs=peripheral learners; TPs=peripheral tutors

			Journal	During-module
Achievements		LPs	Questionnaire, assignment submission rate, retention rate[12]	Post-module
		LRs	Journal, seminar	During-module
			Interview	Post-module
		TRs	Journal, seminar	During-module
			Interview	Post-module
Background information				
Demographic features, previous learning experience, computer and Internet skills, attitude towards online learning.		LPs	Questionnaire	Pre-module

3. An improved research plan for action research

Table 7.6 presents an improved research plan for action research

Table 7.6 An improved plan for research cycle 1 concerning action research

Focus	Partici-pants	Methods	Time
Conceptual level			
Perceptions towards action research	TRs	Interview	Pre- and post-module
Attitude towards participation	LRs		
	TRs		
Achievement satisfaction of action research	LRs	Interview, seminar, journal	During- and post-module
	TRs		
Operational level			
Reflections on dimensions of action research	TRs	Journal, seminar, interview	During- and post-module
	LRs		
Background information			
Research experience	TRs	Interview	Pre-module
	LRs		

[12] According to the Institute's registration regulation, if learners apply for a registration withdrawal within 21 days from the start of the semester, they can have a full refund. Any application after this date cannot claim any refund. Learners who decide not to continue their study often choose to make the application within 21 days. This is exactly the period of the delivery of the orientation module. Retention rate at this stage can to some extent imply the effectiveness of the module. This period is referred to as the "refundable period" in this thesis.

4. Sampling principles for the core research groups

We decided to select learner-researchers first upon cluster sampling, then systematic sampling. We targeted the learner group at Beijing learning centre (geographical consideration mainly out of feasibility concerns since the research involved face-to-face seminars) and a group size of 4 learners from each class of approximately 60 learners, though the exact number could not be decided until the total enrollment was confirmed. An ethical statement letter (Appendix 2.8) was drafted based on the version of tutor-researchers'. We had concerns about this group's commitment to the research since it demanded time from them additional to their studies. We planned to give out two dictionaries as a gesture of our appreciation and a campus meal card credited with 50-yuan (RMB) lunch allowances as they had to stay for afternoon seminars for three weekends while others could leave after the morning tutorials. Only then did we realize the budget issue for this research. I decided to self-support it.

We also decided to choose a local tutor from Beijing learning centre to join the tutor-researcher group for geographical convenience. Usually there would be no more than 5 tutors for this module at the centre (including the chair tutor who usually headed one class). We would select a tutor on voluntary base.

5. Instrument development

Instrument development proved to be a time-consuming and uncertainty-loaded task as no established tools were available to suit this dual-commitment research. Thus, the focus of each research method specified in the two research plans became a key

guide. The final versions of the following instruments are presented in Appendix 2.

1) Tutor-researchers

   a) Pre-module interview (Appendix 2.4)

   b) During-module seminar agendas (Appendix 2.5)

   c) Post-module interview (Appendix 2.6)

   d) Journal template (Appendix 2.7)

2) Learner-researchers

   a) Pre-module interview (Appendix 2.9)

   b) During-module seminar agendas (Appendix 2.10)

   c) Post-module interview (Appendix 2.11)

   d) Journal template (Appendix 2.12)

3) Peripheral learners

   a) Pre-module questionnaire (Appendix 2.1)

   b) Post-module questionnaire (Appendix 2.2)

4) Peripheral tutors

   a) During-module interview (Appendix 2.13)[13]

After settling two research plans, sampling principles and research tools, we were ready to proceed to a real "act" phase of the research. A proposal was made by Tutor A of changing the term "group" to "team" for the core groups, because the former implied a physical state of being together, whereas the latter suggested an intentional joint effort.

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[13] According to the original plan (Table 7.5), there should be both pre- and post-module interviews for the peripheral tutor group. As the research went, only a during-module interview was conducted. This will be explained in 7.2.3 in this chapter.

7.2 Pre-module Action

This section describes the process of developing the orientation module and preparing for both the core team and peripheral group research.

7.2.1 Developing the orientation module

Tutor-researchers split instructional design jobs as follows. I would mainly manage resource and assessment development with Tutor A as coordinator and Tutor B as consultant; and Tutor B was responsible for support provision preparation for both learners and tutors with Tutor C as supporter. No seminars were conducted for the research purposes during this period as we busily engaged ourselves organizing working meetings, monitoring the development process, and dealing with problems. Data for this period mainly came from journals. I proposed to include an additional entry to the journal template ("staff involved") since we found a significant growth in the size of the development team. The module development ended up with the following achievements with their painstaking processes yet to be elaborated by journal data in Chapter 8.

1) Resources and their delivery plans

   a) A print orientation study plan to be dispatched as a free package to learners upon their formal registration;

   b) A print textbook to be purchased via the online bookstore;

   c) A CD-ROM-version of the orientation courseware to be provided free at the first tutorial of the orientation module;

   d) Orientation courseware to be released on the e-platform, accessible via

username and password provided immediately after the formal registration.

2) Support provision preparation

   a) A forum on e-platform, moderated by Professor Guide;

   b) A channel labeled "meeting Professor Guide" in VOB programme list;

3) Assessment development and its delivery plan

   a) An assignment and its answer sheet to be uploaded to the e-platform;

   b) An answer key and marking criteria guide to local tutors to be uploaded to the tutor e-platform;

   c) Assignment release date, submission deadline, and score release date to be uploaded to e-platform.

We originally planned to revise the existing print textbooks based on our new design and release an updated version, so that the print, the CD-ROM and the courseware were in agreement. However, this plan did not work due to three reasons. One was a time issue. Our university press required at least half a year for publication updating which obviously could not meet our time schedule. The second was a financial consideration. With still many old version copies in stock, and an estimated sale volume of the updated version of less than 10,000 copies annually (the minimum textbook sale volume requirement by the press for an endorsement of publication), the press refused to consider our proposal for a reprint. The third was the copyright issue. The Institute possessed the e-version copyright according to our contract with the author of the print textbook, but not the print-version copyright, which meant the Institute could not themselves make any decisions made to the print publication.

Finally, we had to give up our reprint plan, but we could not abandon the print textbooks entirely since research cycle 0 showed that half of the learners still purchased the print book for their study. Our design plan had to cope with the situation by carefully guiding the learners with the orientation study plan to select among the three media of resources of which CD-ROM and online versions had a full coverage of the content, whereas the print version had incomplete coverage and, with even some faulty information in particular units (explained in 3.1 of Chapter 3).

7.2.2 Preparing for the core teams' research

1. Forming the learner-researcher team

We had to wait until a week before the beginning of the semester to start this process, since a large learner population chose to confirm their registration[14] as late as then. Out of a total of 222 learners enrolled in post-diploma BA course at Beijing learning centre, the first one of every 15 learners (usually one class size is 60 learners) in ascending order of their admission numbers was selected. We contacted them by phone immediately after we sent the ethical statement letter (Appendix 2.8) to each of their email addresses. Nine declined to participate, so we repeated the process to the second one in each of the groups these nine belonged to. Only one learner declined this time, so we contacted the third one in that group. Finally, a team of 15 learner-researchers was formed. Their profile is presented in Appendix 1.3, including their demographic information, their previous learning experience, their attitude towards online education, and their computer and Internet skills.

[14] Registration is confirmed when the Institute receives the tuition.

We had a project orientation meeting on the first day of the semester. A research resource package was dispatched including a printed ethical statement letter, two dictionaries, a campus lunch meal card, and a print journal template. All of the learner-researchers signed the letter on the spot.

Tutor-researchers conducted the pre-module interviews of learner-researchers. 13 interviews were conducted via phone, and 2 in face-to-face settings.

2. No local tutor in tutor-researcher team

The list of the three local tutors was ready even later than that of the learners. I sent the letter of invitation (Appendix 2.3) to their email boxes, and a phone contact that immediately followed. No local tutor wanted to take part in this research. One of them agreed to a face-to-face communication to acquire more information, but declined his participation after the meeting. All the three local tutors were full-time campus-based instructors from the English Department of the University who took tutoring at the Institute as their part-time job. Among them, only one was new to this job. In the end, we had to give up the effort of the inclusion of a local tutor in our team (This issue is revisited and reflected upon in 8.4.2 of Chapter 8).

7.2.3 Preparing for the peripheral groups' research

1. Administering pre-module questionnaires to peripheral learners

The administration of questionnaires was totally ignored in our planning stage, but proved to be an important issue at the time when we were about to distribute the questionnaires. We had three major concerns.

1) The methods used to ensure learners' accessibility to the questionnaire;

2) The methods used to ensure a timely completion (pre-module questionnaires were designed to be completed before learners started their orientation module);

3) The methods used to ensure a high returning rate, but at the same time, not raising unnecessary anxiety about such an obligation on the learners.

We decided to upload the questionnaire to the bulletin board of the e-platform for learners to download, and proposed it as a pre-module task on the print-version orientation study plan. We wanted our learners to return their completed questionnaires via email to Professor Guide before a specified date.

2. Administering pre-module interview to peripheral tutors

The pre-module interview to peripheral tutors did not go as planned. The invitation, confirmation, appointment arrangement with all the 10 local tutors lasted until the second week of the start of the orientation module. Two tutors declined the interview, while the other eight said they were too busy to do the interview. We decided to combine the pre- and post-module interviews into one to tackle the situation.

7.3 During-module Action

This section reports the delivery of the orientation module, and the data collection process during this period.

7.3.1 Delivering the orientation module

All the activities went as scheduled except that we experienced an e-platform breakdown during our VOB programme on the first weekend of the orientation module when at least 200 learners (record-breaking number since VOB was launched in 2003) tried to log into the system. The subsequent three weeks'

programme went well as a result of adjusting the intake volume of the system and a decrease in the number of learner participants.

7.3.2 Collecting core teams' research data

1. Collecting tutor-researchers' data

With the start of the new term when daily work began to become demanding, journal keeping started to suffer from a serious lack of time. Team members suggested that they record time-consuming jobs only, and save their reflections upon seminars. So we decided to have regular weekly seminars during the orientation period and videotape them for documentary purposes.

2. Collecting learner-researchers' data

The three scheduled seminars became eight though all kept to the agendas. Table 7.7 shows the details.

Table 7.7 Seminar details of 2005 learner-researchers

	Time	Attendance	Remarks
1	1st weekend morning	7 out of 7	We split since some of the learner-researchers had their face-to-face tutorials in the morning while others had them in the afternoon.
2	1st weekend afternoon	8 out of 8	
3	2nd weekend morning (1)	5 out of 5	We decided to have smaller groups so that more information could be obtained from each learner-researcher.
4	2nd weekend morning (2)	2 out of 2	
5	2nd weekend afternoon (3)	5 out of 5	
6	2nd weekend afternoon (4)	1 out of 3	
7	3rd weekend morning	4 out of 7	We changed back to two big group routine since learner-researchers expressed their preference of having bigger groups.
8	3rd weekend afternoon	5 out of 8	

According to the research plan, learner-researchers should keep journals throughout 21-day orientation module. Table 7.8 shows the number of journal entries each

learner-researcher made.

Table 7.8 Number of journals 2005 learner-researchers kept (in descending order according to the number of journals)

No.	No. of Journal entries	No.	No. of Journal entries
S15	21	S6	17
S5	21	S10	17
S11	21	S14	16
S4	21	S8	16
S12	20	S13	10
S7	19	S1	5
S9	19	S3	5
S2	18		

7.3.3 Collecting peripheral groups' data

The following data were collected as scheduled.

1) Pre-module questionnaire from peripheral learners: The total enrollment of learners on post-diploma BA course in spring 2005 was 407 (N=407). 218 questionnaires were collected via email at a response rate of 53.56%, among which 206 were complete.
2) Forum posts: 911 posts among which 160 posts were from Professor Guide and 751 from the learners.
3) Call centre messages: Call centre database collected 20 phone calls and 39 email messages.
4) VOB programmes: Four VOB programmes were automatically recorded by the system, with the first one half-an hour long with an attendance of at least 210 learners (the system broke down when participants reached this number), and the other three 2-hour long each with an attendance of 128, 98 and 85 learners

respectively (high peak record).

5) Face-to-face tutorial attendance: Tutorial attendance records were collected from local administrators after the orientation module. Though records return rate improved in comparison to that of spring 2004, some centres still failed to report them.

6) Print-book purchase rate: 198 copies of print textbooks were sold, a purchase rate of 48.65%.

7) Interviews of peripheral tutors: We interviewed 8 local tutors out of 10 during the orientation module period. All interviews were conducted via phone. Appendix 1.4 outlines the profile of the eight tutors being interviewed.

7.4 Post-module Action

This section records the data collection process after the orientation module.

7.4.1 Collecting core teams' research data

Post-module interview of tutor-researchers was conducted as scheduled. Table 7.9 shows the number of journal and activity entries[15] kept by the four tutor-researchers from the launch of the research project to April 30, 2005 when the research was temporarily suspended for six months for personal reasons.

Table 7.9 Number of journal and activity entries of 2005 tutor-researchers

	I	Tutor A	Tutor B	Tutor C
No. of journal entries	68	50	33	22
No. of activity entries	89	58	38	27

Learner-researchers all participated in the post-module interviews with 5 face-to-face and 10 via phone. The plan did not include them in the analysis and reflection phases

[15] The number of journal entries was counted according to the number of dates in the journals. Sometimes, more than one activities were recorded on the same day, thus more than one activity entries was counted.

to avoid too much intrusion in their study, though they all agreed to join the process when needed.

7.4.2 Collecting peripheral groups' data

The post-module questionnaire was administered the same way as the pre-module questionnaire. But we made an important change after we received 53.56% return rate of the pre-module questionnaire. In fear that the return rate of the post-module questionnaire might be even lower, yet we desperately needed learners' feedback on certain issues, we transferred its three open-ended questions (addressing their major achievements, their difficulties and problems, and their evaluation of the orientation module) to the assignment as an additional part after we consulted our learner-researchers for appropriateness. It turned out that 128 learners (N=407) completed their post-module questionnaire, a 31.45% return rate (more than 20% lower than that of pre-module questionnaire) among which 118 were valid, in contrast to 95.82% (n=390) submission rate of the assignments. The retention rate within the refundable period was 97.79%, with 9 learners quitting their study.

Chapter summary

This chapter described the activities within the "act" phase of the instructional design and action research processes which produced rich data to be analyzed in the next chapter.

Chapter 8: Analyze and Reflect -- Emerging Confirmations and Tensions

Chapter abstract

*This chapter starts with an introduction to the **data analysis and reflection process** of this research cycle, with special attention to the **content analysis technique of qualitative data**. It then discusses the findings in both instructional design and action research processes with a focus on **emerging tensions**. In the light of this, it proposes **two major issues** to be further examined in the next research cycle.*

8.1 The Acting and Thinking at the Analysis Phase

This section explains the principles and processes for data analysis. It argues that action research lacks data analysis methods, and then introduces the methods, processes and tools for the qualitative data analysis.

8.1.1 Data analysis as an issue

The literature has recognized that action research lacks a sufficient methodology for data analysis (McKernan, 1996:219; Burns, 1999:152). But this cannot be an excuse to sidestep the reliability and validity of the analysis process (Cohen, et al. 2003:241) that I will describe in detail in 8.1.2 and 8.1.3. Tutor-researchers made several inquiries during such a process. They are listed below with the strategies we adopted to tackle the issues.

1) What were we looking for?

With the enormous amount of data, we found ourselves vulnerable to be disoriented. We focused on discovering tensions of three types. The first was the tension of neglect – issues we failed to recognize. The second was the tension between the reality and our assumptions informed by either the literature or our experience. The third was the tension aroused by the reality as a result of the diversity in groups, methods, or time of data collection.

Meanwhile, we recognized that action research data was labeled as "restricted data" (Winter, 1982, cite in Cohen, et al. 2003:241) that could make no claim to be generally representative even to our design of other modules, not to say in more peripheral circumstances. Therefore, we valued the significance of this data analysis process more in how the data was interpreted than what the data interpreted. We hoped to develop an informative and duplicable process to guide our future work.

2) Were we doing this as a team or individually?

Initially, I split analysis jobs among tutor-researchers only to find a uniform analysis was hard to achieve in this working pattern. In addition, unlike that I was interested in all data, other tutor-researchers were more concerned with the data relating to their jobs. Tutor C and Tutor B developed an interest in discovering the role of face-to-face tutorials in newly enrolled online learners' learning process, and Tutor B the role of the forum as well. We finally followed a mixed individual and team working pattern by mainly working on our own on the data of our own interests, and

relying on the team to resolve our uncertainties, to triangulate the analysis and to co-reflect on the results.

Learner-researchers were excluded from this process. A primary reason was that we decided that such a process would be more intrusive and less beneficial to learner-researchers' study than their during-module research tasks. Additionally, their lack of relevant background and experience to do this job was another reason. We planned to involve them again at the stage when we needed to make decisions for the new research cycle.

3) Which data did we work on first?

We had data from different groups (learner-researchers, peripheral learners, tutor-researchers, and peripheral tutors), via different methods (platform database, questionnaires, interviews, journals, seminars, assignments), at different times (pre-, during- and post-module), and on different aspects of activities (time, place, media, etc.). We decided to use learner-researchers' and tutor-researchers' data as the core to discover tensions, and peripheral learners' and tutors' data to confirm or refute our findings.

4) When did we reflect?

Reflection occurred naturally when we made inquiries about the data and explored answers to these inquiries. Such a reflection was initially fragmental because it took place with each individually-sourced data. It sometimes also proved to be a "waste" because a later discovery would offer a ready explanation. However, it functioned

like jigsaw pieces that led us to our final holistic vision (I term this "a jigsaw approach" later in this chapter). I decided to loyally present this reality with our immediate reflection after each type of data presentation, and my summative reflection at the end of this chapter.

Table 8.1 shows a summary of the data collected within the pre-, during- and post-module stages.

Table 8.1 A summary of the collected data of research cycle 1

Data	Collection	Descriptions	Focus of analysis
Learner-researchers (LRs=15)			
Pre-module interview	Phone- or face-to-face interviews conducted by tutor-researchers (audio-taped)	All LRs took the interview.	Research experience, attitude towards participation
Post-module interview			Reflections on the "gains" and "pains" of participating in the research project
During-module seminars	Weekly face-to-face seminars (video-taped)	8 sessions of seminars at three weekends with varied attendance (see Table 7.7), transcribed.	LRs' reflections on their learning process, the module design and the research design
During-module journals	Journals using the journal template (Excel document collected via email)	A 21-day journal from each LR that recorded their learning and research process of the orientation module (see Table 7.8)	LRs' record of their learning process (time, media, path, etc.); reflections on the "gains" and "pains" of their study, on the module design, and on the research design
Tutor-researchers (TRs=4)			

Pre-module interview	Face-to-face interviews conducted by me (audio-taped)	All 4 TRs took the interview.	TRs' research experience, attitude towards participation, knowledge of action research, suggested design of the orientation module
Post-module interview			Reflections on the "gains" and "pains" of participating in the research project
Journals	Journals using the journal template (Excel document collected via email)	A journal recording TRs' instructional design and action research activities (see Table 7.9)	TRs' design and research activities and their reflections on the "gains" and "pains".
Seminars	Face-to-face seminars during the delivery of the orientation module (video-taped)	4 sessions of seminars, transcribed.	TRs' reflections on their tutoring experience, learners' learner experience, the design and research activities
Peripheral learners (LPs=407)			
Pre-module questionnaire	Questionnaires delivered via the e-platform and collected via e-mail	218 copies of questionnaires collected, among which 206 were complete.	LPs' general information, previous learning experience, computer and Internet skills and attitude towards online education
Post-module questionnaire		128 copies of questionnaires collected, among which 118 were complete.	LPs' learning routines of the orientation module and their evaluation of the module[16].

[16] The post-module questionnaire originally contained 3 questions concerning LPs' "gains" and "pains" of the module and their comment on the design. These questions were later transferred to the assignment to ensure high response rate.

Forum posts	Forum posts collected from e-platform database	911 posts among which 160 posts were from Professor Guide and 751 from the learners.	
Call centre messages	Messages sent to the call centre collected via e-platform database	20 phone messages	LPs' learning difficulties, problems and concerns; LPs' utilization of support media
		39 email messages	
VOB attendance	VOB programmes attendance rate collected from chair tutor's record	4 VOB programmes high peak attendance record (see 7.3.3)	
VOB programmes	e-platform database	4 VOB programmes voice+text records	
Tutorial attendance	Tutorial attendance recorded by local administrators	Tutorial attendance record of 9 local centres (Appendix 4.16)	LPs' utilization of support media
Print-book purchase	Online bookstore database	198 copies of print textbooks were sold	LPs' utilization of resource media
Assignment submission	e-platform database	390 learners submitted their assignment.	LPs' utilization of online assessment device
Assignment score	e-platform database	All learners who submitted the assignment scored above 60 (a pass score) (Appendix 4.18)	LPs' completion of the orientation module
Peripheral tutors (TPs=10)			
During-module interview	Phone interview	8 tutors from local learning centres	TPs' views on the importance and the

	conducted by tutor-researchers (audio taped)	took the interview.	design of the orientation module; their knowledge of learners' difficulties, problems and concerns

The structure of this chapter will follow a research-theme-focused approach, with instructional design and action research as two main categories, and their sub-categories corresponding to each of the research focus within them. To keep both my readers and myself focused on the key issues of our reflections, I will present a summary at both the beginning and the end of each section to highlight the major findings.

8.1.2 Analyzing quantitative data

Quantitative data mainly came from pre- and post-module questionnaires to peripheral learner group, for example, their age, number of years they have studied English, number of years they have used the computer and the Internet, number of hours per week they have spent on the courses, etc. (See Appendix 2.1 and 2.2). This type of data was analyzed using SPSS 11.5 to obtain the results with the maximum, minimum, means and standard deviations in order to establish a profile of this group of learners. Three factors made the analysis process less stressful and time-efficient than that of the qualitative data. One was the straightforward data and a well-established processing system. Second was the supporting rather than dominating nature of the data. Third was that no teamwork was required in the process. However, the findings suffered by surfacing "whats" without "whys", a weakness widely recognized by the literature on quantitative data (Silverman,

2005:8).

8.1.3 Analyzing qualitative data

1. Methods, processes and tools

Qualitative data was analyzed using a content analysis method identified as appropriate for making inquiries in order to discover "hidden themes, concepts and indicators of the message content" of action research (McKernan, 1996:145). The analysis process followed McKernan's proposed procedure (1996:147-148) with my adaptations as described below.

1) Editing the data.

   Transcribe the data and key it in Excel documents.

2) Establishing a code.

   a) Select or synthesize existing category systems (a trial code). If no such a system was found, tutor-researchers would work on a selected sample to develop our own categories, then put them to a group review until a consensus category system was formulated.

   b) Select a sample and filter it through the trial code.

   c) Identify odd-out items and adapt the trial code until all items can be categorized.

   d) Establish a finalized code with clear nominations, definitions, criteria (word signifiers), procedure and examples for the codes.

3) Analyzing the data.

Apply the code to data analysis, seeking a group decision upon uncertainties or newly emerged ill-fitting items. Upgrade the code if new entries are added.

4) Triangulating the coded data.

Select samples of coded data for crosschecking among tutor-researchers.

5) Quantifying frequencies.

Count the frequencies of recurring issues and calculate their proportions.

6) Presenting the results.

Send the findings to the tutor-researchers and invite their reflections.

Table 8.2 shows an example of coding the data of the learners' feedback to the orientation module collected via their assignments.

Table 8.2 A sample of the coding process

Step 1: Identify and highlight the word signifiers	**Step 2: Identify the main category**	**Step 3: Identify 1st layer sub-category**	**Step 4: Identify 2nd layer sub-category**
*"You should invite **senior learners** to share their **learning experience** in **VOB programmes** in order to help new learners **build confidence** and set **goals.**"*	Learner support	Content-related	Learning experience
		People-related	Senior learners
		Media-related	Synchronous voice + text interactive media (VOB programmes)
	Objectives	Affect layer	Confidence
		Learner autonomy layer	Goal-setting

In the end, four category systems (codes) have been developed (see Appendix 3).

The rationale these systems were based on is specified in the following sections.

2. Code of learners' achievements ("gains") (Appendix 3.1) and their learning difficulties/problems/concerns ("pains") (Appendix 3.2)

This code was developed first, so it experienced more cycles of refinement than the rest of the codes. Meanwhile, it contributed most to the standardization of the analysis process, the establishment of a coding approach and the formation of a code template. Therefore, I will describe the development of this code in detail as it mirrors the rest.

I started with those established categories against an instructional design context which I believed would be relevant to my situation. These are as follows.

1) Codes for the main category: Reigeluth's cognitive, affect and psychomotor domains (1999);

2) Codes for the sub-category of the cognitive domain: the instructional taxonomies (memorize information, understand relationship, apply skills and apply generic skills) (Reigeluth and Moore, 1999:54)

3) Codes for the sub-category of the affect domain: emotional, moral, social, spiritual, aesthetic, and motivational development believed to have potential to influence learners' behaviour (Martin and Reigeluth, 1999:493)

4) Codes for the sub-category of the psychomotor domain: receptive or automated skills (e.g. typewriting, changing gear, running fast) and strategy or planning skills (e.g. painting, defensive driving, playing football) (Romiszowski, 1999:463)

I soon discovered difficulties with this approach since much of the data was closely bounded to the Institute's context-specific features such as a degree-bearing course, English language learning as the subject and web-based delivery. I raised this concern to my tutor-researchers and sent them a cluster of randomly selected data from learners' report on their concerns via their assignments. I asked them to code the data according to whatever category they found appropriate. Their responses covered the following grouping possibilities.

1) Tutor A based her coding on the five objectives of the orientation module, proposing a corresponding reflection of learners' concerns in the objectives.

2) Tutor B based her coding on taxonomies of language learning strategies (O'Malley, et al. 1985; Rubin, 1987; Oxford, 1990), proposing a dominant importance of those strategies in learners' three-year study.

3) Tutor C based her coding on the four sub-systems of learner support of the Institute (Gu, 2005b:73) and the ten "whole-person" qualities[17] the Institute expected its learners to develop (Gu, 2005b:73), proposing that these have been contextually developed so that they could reach a full coverage of the data.

Each of the above coding system had a strong rationale for use viewing the data from different perspectives. But they all needed to recognize the purpose of developing

[17] The Institute's four sub-systems of learner support and ten "whole-person" qualities were proposed by Gu as early as 2000, though they appeared in papers at a much later time. These are compulsory knowledge for all the staff, especially those engaging in learner support provision. The four sub-systems are language skills layer, technical skills layer, autonomous learning skills layer and affect layer. The ten "whole-person" qualities are 1) Able to learn independently as well as collaboratively; 2) Capable of self-discipline, self-management and self-monitoring; 3) Capable of resource-seeking and resource-selecting; 4) Capable of solving the conflict between study and other commitments; 5) Capable of initiative-taking; 6) Capable of applying interpersonal skills; 7) Capable of help-seeking; 8) Confident and persevering; 9) Capable of developing personal learning style and strategies; 10) Able to lead and control.

such a code: to inform the instructional design of the orientation module. Finally, I synthesized these approaches to form a tentative code using the five layers (learner autonomy, language learning, affect, technology and system) of the objectives of the orientation module as an essential framework, and other suggestions as guidance to sub-categories. This code was further developed by two types of triangulation. One was to apply it to data addressing the same theme yet from different sources, for example, forum posts, call centre messages, journal entries, etc. The other was to discover disagreement by inviting other tutor-researchers to work on coded samples.

3. Code of instructional design as a process (Appendix 3.3)

This code is based on the ADDIE model (Analyze, Design, Develop, Implement and Evaluate). Emphasis is given to the identification of specific activities taken within each phase and the staff involved. Activities are further categorized into academic, organizational and technological categories; and staff are further categorized into academics, administrators, managers, technicians, lawyers, financers, audio and video engineers and art designers.

4. Code of instructional design as a product (Appendix 3.4)

The starting point of this code was the framework design of the orientation module, namely, objectives, resource, support, and assessment each of which had sub-categories.

5. Code of action research process (Appendix 3.5)

This code falls into three major categories: phases (plan, act, analyze and reflect),

activity types (academic, organizational and technological) and dimensions (initiative, focus, context, participant, process and method).

8.2 Learner Profile

The literature suggested that the nature of learners (e.g. prior knowledge, learning strategies, and motivation) constitutes one of the instructional conditions (Reigeluth, 1999a:8) for instructional design. Data about the nature of our target learners was elicited via a four-section pre-module questionnaire on their demographic information – this covered their previous learning experience, their computer and Internet experience and skills and their attitude towards online education.

1. General information

Learners' general information is summarized in Table 8.3.

Table 8.3 General information of 2005 peripheral learners

Questions	**Max.**	**Min.**	**Mean**	**SD**
Age	49	19	29.1	5.647
Questions	**Choices**		**% (N=407/n=206)**	
Gender	Male		30.10%	
	Female		69.90%	
Marital status	Single		50.90%	
	Married		49.10%	
Education background	Diploma		69.40%	
	BA		21.40%	
	MA and above		6.30%	
	Full-time university student		2.90%	
Employment	Full-time employed		86.90%	
	Part-time employed		4.90%	
	Full-time university students		2.90%	
	Unemployed		5.30%	

Table 8.3 revealed a profile of a typical learner of the Institute as a single or married diploma-holder who is an in-service adult female.

2. Previous learning experience

We aimed to discover learners' readiness for their learning situation by finding out their previous learning experiences. Table 8.4 shows a summary.

Table 8.4 Learning experience of 2005 peripheral learners

Questions	Max.	Min.	Mean	SD
Number of years since their formal education	24	0	5.53	4.854
Number of years of their English study in formal education	20	0	7.13	4.273
Number of years of their self-taught English study	16	0	1.93	2.837
Questions	**No**		**Yes**	
Experience of online learning	87.9%		12.1%	

We made the following reflection on the data. Learners need an induction to: a formal learning situation (a mean suspension of 5.53 years), autonomous learning skills (a mean of 1.93 years' experience of self-taught English study) and online learning (87.9% learners have had no experience). We had recognized this issue in our design but we needed to examine its effect.

3. Computer and Internet skills

We aimed to discover learners' readiness for technology as summarized in Table 8.5.

Table 8.5 Computer and Internet skills of 2005peripheral learners

Questions		%
Equipment availability	Having computer which has a CD-ROM player and access to the Internet.	77.2%
	Having computer which has a CD-ROM player, yet no access to the Internet.	7.8%
	Having computer which has access to the Internet, yet no CD-ROM player.	12.1%
Means of Internet access	via broad-band	80.1%
	via narrow-band	11.7%
	I have access to the Internet, but I don't know the means.	7.8%
	I have never accessed the Internet.	0.5%
Weekly frequency of Internet access	Every day of the week	42.2%
	Two to four days of the week	24.8%
	Five to six days of the week	19.4%
	Less than once per week	8.7%
	One day of the week	4.4%
	I have never accessed the Internet.	0.5%
Attitude toward learning new technology skills	I learn and use it with ease. I am fully confident.	69.9%
	I am not very skillful, but I am willing to learn.	25.7%
	I am not very confident in learning it well, but I will learn anyway.	2.4%
	I have phobia. I won't learn it if I can help.	0%
	Other descriptions.	1.9%

Questions	Max	Min	Mean	SD
Years of using computer	20	0	7.58	3.621
Years of using the Internet	15	0	5.18	2.365
Average weekly hours on the Internet	100	0	16.08	18.615

Table 8.5 revealed a generally favourable situation with regard to learners' ICT experience (a mean of 7.58 years of computer experience, 5.18 years of Internet experience, and 16.08 hours weekly Internet use), accessibility (100% computer access, 92.2% Internet access, 80.1% broad-band Internet access), and attitude towards the use of the Internet as a major media for study. We needed to find out from our research to what extent learners studied the module via the Internet, and if

they encountered technical problems.

4. Attitudes towards online education

We aimed to examine learners' motivation in their choice of online other than other types of learning modes and their attitude towards such a choice. Table 8.6 has a summary of the data.

Table 8.6 Attitudes towards online education of 2005peripheral learners

Reasons to choose this online course (in descending order)		
●	Online education offers flexibility in time.	84.4%
●	I can work while studying.	72.8%
●	I have convenient access to the Internet.	32.5%
●	I want to try this new form of education.	27.1%
●	Online education has a low entrance policy.	8.7%
●	I have had online learning experience, finding myself quite adapted to this form of education.	8.2%
●	Online education demands comparatively lower cost than other forms of education.	2.9%
●	I do it for no particular reasons.	2.9%
●	I am denied of other forms of education due to physical, geographical or qualification reasons.	2.4%
●	Other reasons	3.3%
Attitude towards online education		
●	I won't choose otherwise even if I have other choices.	68.4%
●	I made this choice because I can't choose otherwise.	31.6%

Table 8.6 shows that the top two reasons for them to choose online learning were time-related (84.4% on "online education offers flexibility in time" and 72.8% on "I can work while studying").

This section sketched a profile of our target learners. It revealed that learner diversity was the essential feature.

8.3 Examining Instructional Design Issues

This section will focus on the examination of the instructional design issues in three aspects: instructional design as a discipline, as a process and as a product. These issues have been surfaced by research cycle 0 (argued in 5.3.2), reviewed against the literature (discussed in 6.1) and translated into the instructional design practice of the orientation module (presented in 7.1.2).

8.3.1 Instructional design as a discipline

This research cycle started with our understanding that instructional design was both a process and a product in the creation of a learning system following a learning- and learner-focused design approach. Such a belief was reinforced and refined in the research process as follows.

1) A translation of a learning- and learner-focused approach to instructional design

   In the creation of a learning system, tutor-researchers established this approach by designing and presenting the module in an authentic situation in line with the following principles: availability and accessibility of a variety of media for resources and support services; a gradual transit of learning modes; a default-learner study plan, a learning-process-support assessment design and a learning community (presented in 7.1.2). Such an approach was informed by Reigeluth's new learning-focused instructional design paradigm (Reigeluth, 1999a:19), and also inspired by research cycle 0 findings, tutor-researchers' previous work experience and the inclusion of learner-researchers in the process. The effectiveness of these designs will be examined 8.3.3.

2) An instructional design process dealing with phases, activities and people in a team approach

8.3.2 will discuss this in detail.

3) An instructional design product of the ends (the learning objectives), means (activities to support learners to achieve the learning objectives), and assessment (methods to monitor and evaluate the achievements of the learning objectives)

8.3.3 will discuss this in detail.

In addition, issues beyond a pedagogical vision of instructional design had been raised by the data from the tutor-researchers' post-module interview. They are as follows.

1) Instructional design as professional development

Tutor-researchers, in their response to the post-module interview question "Do you think you have benefited from this research project? If yes, what are the major benefits?", expressed their better understanding of their current job as a major achievement as cited below.

*"...**it helped me see clearly how I should do my job**. We do not have an established instructional design process with rules and principles. What we have now are fragmental, not systematic..."* (Tutor A)

*"I think there is a need to **redefine the responsibilities of the chair tutor**... This project is successful in that it adopts a holistic design approach to the objectives, resource, support and assessment. Each job is defined within a framework, not just a job as it is... A chair tutor should recognize such responsibilities of making the*

design, and coordinating and monitoring the implementation process, from the very beginning to the end..." (Tutor B)

"I think the most important gain is that ***I know my role as the Director of a learning centre****... I kept asking myself throughout this research that given that the services provided by the headquarters were good enough, what jobs are left to local learning centres? This project helped me have a clear understanding of those jobs that can only be conducted at a local level, and that are crucial to learners' successful learning..."*(Tutor C)

"This research has ***transferred my long-holding intuition of how instructional design should be conducted to data-supported sound decisions****..."* (I)

Tutor A also proposed the use of such an instructional design system for new staff training.

"Every time we have ***new staff*** *(to join our course development projects), I need to explain to them the development process verbally. This is painstaking and is not likely to cover all issues. Better that we have a system to tell the jobs for each step, with templates and principles."*

2) Instructional design as power

Tutor B, after her suggestion of redefining the responsibilities of the chair tutor in her post-module interview, stated that the current role definition of the chair tutor "leaves me **no power** at all to coordinate jobs across different centres of the Institute. We need **a mechanism to ensure this power**". Tutor A also recognized the difficulty of job coordination across the centres by pointing out that it was a much easier job in

this project than many others because I headed it. "Everybody has to **listen to what a deputy dean says** after all." was her remark.

This project was indeed a rare case at the Institute in many senses. It was conducted in the form of a research by a staff team across centres throughout the whole ADDIE process systematically and holistically. But did I want to consider changing the infrastructure of the Institute in order to establish a mechanism for a convenient duplication of such a process to all instructional design projects? I reflected in my journal at that time that I did not think that a single research cycle with an involvement of only four staff of the Institute on one module was sufficient to justify such a change at either the theoretical or practical level. Though my literature review on action research visited opinions on social relationships and organizational change (Kemmis & McTaggart, 1992:15-19) as a targeted outcome, I did not intentionally set out with this aim in my research. This issue will be further explored in 8.4.2 on action research initiatives.

8.3.2 Instructional design as a process

1. A process dealing with phases, activities and people

Tutor-researchers' journals provided the main source of data to reveal the process of the instructional design of the orientation module. I focused on the examination of the phases in this process by labeling the activities reported in the journals using the ADDIE model, and discovered that the data reflected three major issues: phases, activities and people. These will be dealt with under each of the following sub-headings. Table 8.7 presents a summary of our practice and improved

understanding of instructional design as a process in contrast to our assumptions.

Table 8.7 A summary of 2005 tutor-researchers' practice and improved understanding of instructional design as a process

Issues	Our assumptions	Our practice	Our improved understanding
Phases	A **five-phase** ADDIE model of analysis, design, development, implementation and evaluation	A **four-phase** model of analysis and design, development, implementation, evaluation and **reflection** in a **cyclical process.**	**"Reflection"** is an important component of the model. There should also be an emphasis on the **cyclical** process of this model.
Activities	Dealing with academic decisions.	Dealing with **technological and organizational issues** in addition to academic considerations.	Instructional design takes place in **a multi-faceted context.**
People	A multi-disciplinary team	A multi-disciplinary team of different educational backgrounds, administrative sections, and disciplines.	This reinforces the **multi-faceted context** reality where organizational issues have to be dealt with.

2. Examining phase issues

In labeling the activity entries of tutor-researchers' journals to the five instructional design phases suggested by the ADDIE model, I identified a variation version with the major differences in the combination of the "analysis" and "design" phases as explained in 7.1.2 and an emphasis on the "reflection" activities in the "evaluation" phase. This was because our activities at the "evaluation" phase were not only evaluative work. We examined the data we collected in a reflective and critical view rather than with a conclusion-drawing purpose. We took this phase as a lead-in to

another cycle of instructional design where we would be allowed to make improvements informed by our reflections. Thus, I termed this phase "evaluation and reflection" to emphasize the reflective work involved. Furthermore, it emphasized the cyclical nature of this model. Table 8.8 explains the activities of each phase.

Table 8.8 Phases of instructional design in research cycle 1

	Phases	Activities
1)	Analysis and design	Formulated instructional objectives and the design for resource, support and assessment based on the analysis of previous research findings, the literature review, current situation, instructors' expectations and learners' needs.
2)	Development	Established a learning system for learners to study the module by developing the resources, support services and assessment.
3)	Implementation	Delivered the module as designed.
4)	Evaluation and reflection	Evaluated the module and reflected on the findings to inform the improvements desired in a new cycle of instructional design.

Table 8.8 shows the number of activities each tutor-researcher recorded within each of these phases until April 30th, 2005 (tutor-researchers kept no journal records after this.).

Table 8.9 Number of activities within each phase of the instructional design of research cycle 1

	Phases	Tutor A	Tutor B	Tutor C	I	Total
1)	Analysis and design	5	6	2	5	18
2)	Development	27	7	3	33	70
3)	Implementation	8	10	9	11	38
4)	Evaluation and reflection	2	2	2	3	9
Total		16	25	52	42	135

Table 8.9 shows that despite our different roles in the instructional design process, which determined our different levels of activity at different phases, we were involved in the activities of all the four phases.

3. Examining activity issues

I decided not to list all the activities within each phase, since they were too case-specific to be useful to the instructional design of other modules. Instead, I approached these activities by categorizing them into academic, organizational and technological themes to emphasize the multi-faceted context of the instructional design process. The definitions of these themes and their examples are presented in Table 8.10.

Table 8.10 Definitions and examples of types of 2005 instructional design activities

Work types	Descriptions	Examples
Academic	Work that deals with pedagogical considerations and decisions	*Complete the outlines of four VOB programmes (Tutor B, Jan. 11th 2005).* *Tell Zhong that Professor Guide should be a female image instead of a male image (I, Jan. 11th 2005)*
Organizational	Work that controls or organizes the actions and work that carries out academic decisions.	*Complete the courseware development agenda and sent it to Zhong (I, Jan. 8th 2005)* *Contact the press for the price of printing the orientation study plan (Tutor A, Jan. 5th 2005).*
Technological	Work that deals with technology-related considerations and decisions	*Confirm with the Courseware Centre and the Multi-media Centre an appropriate voice format (Tutor A, Jan. 20th 2005)*

Table 8.11 shows the number of different types of activities in each phase.

Table 8.11 Types of activities within each phase of 2005 instructional design

	Phases	Academic	Organizational	Technological
1)	Analysis and design	14	4	0
2)	Development	25	36	10
3)	Implementation	0	34	6
4)	Evaluation and reflection	7	1	0
	Total	46	73	16

As shown in Table 8.11, each phase involved different types of activities, with academic activities predominating the first phase, and organizational activities the second and the third phases. Tutor-researchers seemed to be more ready to deal with academic issues than with technological and organizational decisions. This multi-faceted context seemed to arouse our concerns in the following aspects.

1) A concern of ignorance

In her journal entry of the event of the first VOB programme's system collapse as a result of a low pre-set volume capacity (presented in 7.3.1), Tutor B reflected, "I never considered volume capacity an issue or my responsibility as a chair tutor to remind the platform person of this. But anyway, I don't think he could be counted on to anticipate this. I should be the person who warned him of a possible high participation rate." (Tutor B, Feb. 21st 2005).

2) A concern of compromise

Our reflections revealed our frustration over the compromises we had to make due to technological limitations, financial policies, time tightness, publication laws, etc. For example, in my journal entry after the talk with the press, I wrote, "I should have predicted this ("This" refers to that the press refused the reprint of the orientation module textbook with time and finance reasons). Now we have to live with it and plan accordingly." (I, Dec. 21st 2004)

3) A concern of power

Tutor A recorded her anger about the event when the Finance Office first told her

there was no budget planned for posting the orientation study plans and the CD-ROMs to the learning centres, but later endorsed her application when I wrote an email to the office, "They must support the expense anyway. Why do they have to wait for a dean's notice?"(Tutor A, Feb. 12th 2005).

4) A concern of a lack of work mechanism

Tutor A showed that she was proud of working out a flow chart to coordinate courseware design and development work between Course Design and Development Centre and Courseware Development Centre, "I am glad that my flow chart made both centres happy. When I have time, I should develop a document series of the principles, template and process guidance for all the activities." (Tutor A, Jan. 22nd 2005)

The above concerns over a multi-faceted context reality in the instructional design process exposed the tension of overlooking the organizational and technological considerations at the beginning of our research.

4. Examining people issues

The journal data confirmed that instructional design for an online learning system followed a multi-disciplinary team approach. The journal data also outlined the disciplines and the number of personnel involved in different phases. These only included the Institute's staff the research team had direct contact with. It was possible that more staff, both inside and outside the Institute, had been involved in carrying out the jobs.

Table 8.12 Staff involved in the instructional design process that had direct contact with 2005 tutor-researchers (excluding tutor-researchers and learner-researchers)

Personnel type	Analysis and design	Develop-ment	Implement-ation	Evaluation and reflection
Managerial staff (e.g. project manager, centre directors)	0	5	3	0
Academic staff (chair tutors, academic committee staff, English editors)	0	1	0	0
Computer and Internet technicians (programmers, e-platform engineers)	0	2	2	0
Audio and video technicians (audio and video directors, cameraman, sound engineers)	0	3	0	0
Art designers	0	1	0	0
Legal counselors	0	2	0	0
Administrators	0	5	8	0
Financial staff	0	1	0	0
Total	0	20	13	0

Table 8.12 reveals at least two key points. One is the extensiveness of human resource investment in such a process. Staff came from different educational levels (from high-school graduates to Ph.D. holders), different administrative sections (All centres of the Institute got involved), and different disciplines (from English language education to technology to finance). The other is the intensiveness of human resource investment for the design and development of an online module. Such a team construction made the tutor-researchers' reflections about their organizational concerns stand to reason.

This section has gathered the data and our reflections upon the instructional design process leading to an adaptation of the ADDIE model, with four phases of analysis and design, development, implementation and evaluation and reflection. We have

included "reflection" in the ADDIE model, and viewed an inclusion of this crucial to our research purpose for the improvement in a new cycle design. We have also emphasized the cyclical nature of the model.

The data has confirmed our assumption that the instructional design process follows a multi-disciplinary team approach. It has also surfaced the tension caused by our lack of recognition of the multi-faceted context of the instructional design process where technological and organizational considerations are likely to be ignored.

8.3.3 Instructional design as a product

Product-related data represents the richest source of data. It covers issues concerning the objectives, the learning process (study time, place, and path, the utilization of resources and support media), "gains" (achievements), "pains" (learners' learning difficulties/problems/concerns) and evaluations. From this we have identified four major tensions repeatedly signaled by the data. They are time-related, media-related, assessment-related and interaction-related tensions as discussed in the following.

8.3.3.1 Time-related tensions

Online education appeals to adult learners with "multi-roles and multi-life commitments" primarily because it offers time flexibility and convenience (DuCharme-Hensen and Dupin-Bryant, 2004:8). This is confirmed by peripheral learners' choice of their reasons to choose the Institute in their pre-module questionnaire (discussed in 8.2). We recognized time as an issue when we designed our module, and we built in strategies to tackle it, e.g. orientation study plan to support learners' time planning and management. However, the data shows that our

efforts did not respond well to the reality. Time is recognized as the top concern from different groups. It is reported in learner-researchers' journals (26.44%, N=87/n=23) and seminars (50%, N=40/n=20) (Appendix 6.4); by peripheral learners in their post-module questionnaire (built in their assignment) (23.59%, N=390/n=92) (Appendix 6.3) and by peripheral tutors in their during-module interview (14.89%, N=47/n=7) (Appendix 6.6). It became a constant theme of discussion at tutor-researchers' seminars. This section will explore this tension from the learners' seven learning realities as summarized in Table 8.13.

Table 8.13 A summary of time-related tensions of 2005 learners

Category	Our design/assumptions	Learners' reality
1. Weekly study time	Learners should spend an average of 15-17 hours weekly.	Few learners could afford the expected time, and their time affordability varies greatly.
2. Weekend and weekday time distribution pattern	Learners spend more time on weekends than on weekdays.	Learners spent more time on weekdays than on weekends.
3. Day distribution pattern	Learners study every day.	Learners did not study everyday for a variety of reasons.
4. Day time distribution pattern	Learners study more in the evenings than at other times.	Learners did use evening time slots more often than other time slots of the day.
5. Time-segment pattern	Most activities take a consecutive 120 minutes.	Learners mainly adopted below 60-minute segment patterns.
6. Activity time design	We indicated in the orientation study plan the expected time for each activity.	Learners viewed the time indication as more anxiety-raising than helpful.
7. Study path	We expected our learners to follow the orientation study plan as their study path.	Learners started with the plan, yet changed to their own plans due to different circumstances.

1. Weekly study time

Table 8.14 shows both the weekly study hours of the learner-researchers based on their journal data and that of peripheral learners based on their post-module questionnaire data. The designed hours are also listed for reference.

Table 8.14 Weekly study hours of 2005 learners

Groups	Designed (hr.)	Min. (hr.)	Max. (hr.)	Mean (hr.)	SD
Learner-researchers	15-17	2	21.36	10.65	6.0600
Peripheral learners		2	115	12.16	12.076

From Table 8.14, we observed that neither group reached the time expectation of the module. In addition, learners' time affordability greatly varies.

2. Weekend and weekday time distribution pattern

In our design, we allocated 3 study hours a day on weekends and 2 hours on weekdays, assuming that learners may have more time for their study on weekends than on weekdays. Table 8.15 shows the weekend and weekday time distribution pattern of learner-researchers based on their journal data.

Table 8.15 Weekend and weekday time distribution pattern of 2005 learner-researchers

Category	Designed (hr.)	Min. (hr.)	Max. (hr.)	Mean (hr.)	SD
Average hrs. on weekdays (5 days)	10	1.39	18.19	7.96	4.9001
Average hrs. on weekends (2 days)	6	0	8	2.69	1.9368

Table 8.15 shows that learner-researchers actually spent more daily study hours on weekdays than weekends (1.59 daily hours on weekdays, 1.35 hours daily on weekends).

3. Day distribution pattern

Our design expected our learners to study everyday of the week during the 21-day orientation module period. Table 8.16 shows the number of days learner-researchers studied during that period (they were expected to have 21-day journals).

Table 8.16 Number of study days of 2005 learner-researchers (in descending order)

learner-researchers	No. of days studied	% (N=21)
S5	21	100%
S15	21	
S4	19	90.48%
S11	18	85.71%
S2	16	76.19%
S6	16	
S12	16	
S8	15	71.43%
S9	15	
S14	15	
S10	14	66.67%
S13	9	42.86%
S7	7	33.33%
S1	4	19.05%
S3	4	
Average	14	66.67%

The above study days were coded from Monday to Sunday. Then these days were totaled and a proportion of each day was calculated. Figure 8.1 shows the detail.

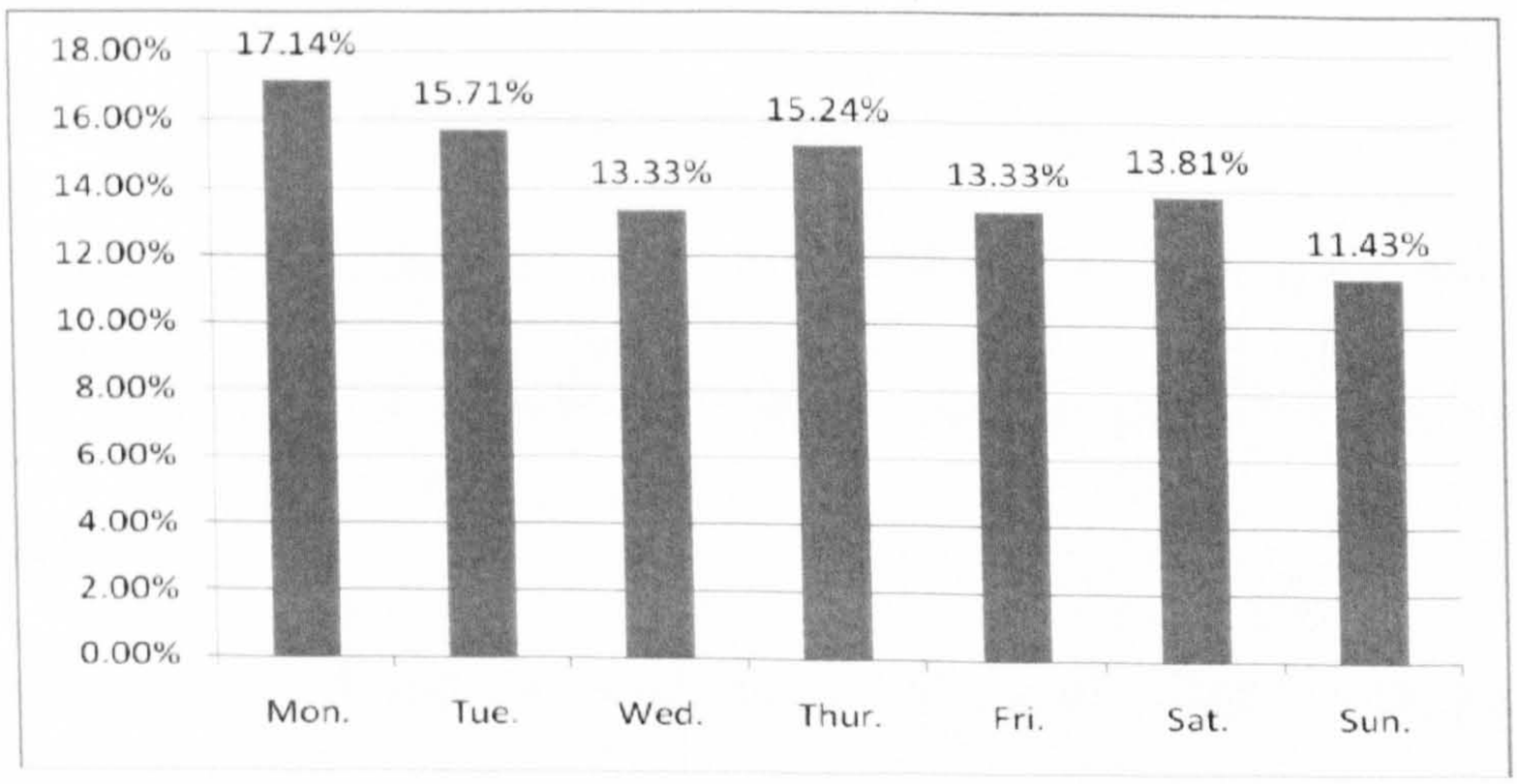

Figure 8.1 Study days of the week of 2005 learner-researchers

Table 8.17 has a summary of the reasons learner-researchers stated in their journals for not studying.

Table 8.17 Reasons for not studying reported by 2005 learner-researchers

	Category	No. of journal entries	%
1)	Work-related reasons	20	19.05%
2)	Leisure-related reasons	6	5.71%
3)	Health-related reasons	3	2.86%
4)	Family-related reasons	2	1.90%
5)	Study-related reasons[18]	1	0.95%
6)	Affect-related reasons	1	0.95%
7)	Technology-related reasons	1	0.95%
8)	No record	71	62.62%
	Total	105	

All learners reported (either at the seminar or via email) that they did not study on these no-record days, except S3 (4 journal entries) who reported that he studied on those days but he carelessly replaced his new record with the previous one by using the same document template.

We could observe the following facts from the above data.

a) 13.33% (2 out of 15) learner-researchers studied every day of the week for three consecutive weeks.

b) On average, learner-researchers achieved 66.67% of the expected study days, with a maximum of 100% and a minimum of 19.05%.

c) When learner-researchers did study, they studied every day of the week with a slight preference for Monday (17.14%), Tuesday (15.71%) and Thursdays (15.24%).

d) Learner-researchers did not study for a variety of reasons with their work

[18] "Study" refers to other non-Institute-related study commitments.

commitments ranking the top (19.05%), though the percentage could possibly be higher if those non-record days were also considered to be the result of the same reason.

The findings again confirmed the tension of learners' study time commitment against the module expectation as a result of the conflicts with other commitments. Given that all learner-researchers passed the module, we started to wonder if learners had particular strategies to complete the module with minimum time commitment.

4. Day time distribution pattern

In our design, chair tutor-moderated VOB programmes were arranged between 7-9 pm on weekends, face-to-face tutorials were arranged between 9 am to 12 pm and 1 pm to 4 pm on weekends, and a call centre phone service was made available from 9 am to 5 pm every day. We wanted to discover when learners studied during a day. We first coded the time entries from learner-researchers' journals into weekend and weekday category, then coded them into 24 time slots (from 0:00-1:00 until 23:00-0:00). We totaled these slots and calculated their proportions. Figure 8.2 shows the findings.

Figure 8.2 Study time of the day of 2005 learner-researchers

We observed that learners did not study at all either on weekdays or weekends between 0:00-5:00. For the rest of the time, the top three time slots (in descending order) were 20:00-21:00 (14.87%), 21:00-22:00 (10.80%) and 19:00-20:00 (10.09%) on weekdays and 21:00-22:00 (15.64%), 19:00-20:00 and 20:00-21:00 (11.17%), and 22:00-23:00 (8.94%) on weekends. Breakfast time (6:00-8:00) and dinner time (17:00-19:00) was not often used for study. This indicated that 19:00-21:00 was a good time slot for learners to participate in synchronous activities. This time slot can also be used to warn us of maintaining a maximum volume capacity of the e-platform. Importantly, our call centre service time did not correspond well to learners' study time. This might be an explanation of our findings later in the media tension section about learners' low utilization of the telephone service.

5. Time segment patterns

In our design, resource-based activities ranged from 10-minute to 2.5-hour requirements; support activities were 90 minutes for VOB programmes, and 180

minutes for weekend face-to-face tutorials; assessment activities were 10 minutes for self-assessment and approximately 120 minutes for the assignment.

We first categorized time entries from learner-researchers' journals by their activity types (resource, support and assessment), then we coded data within each type of activities into 9 time segment patterns (below 15 minutes, 15-30 min; 30-45 min; 45-60 min; 60-90 min; 90-120 min; 120-150 min; 150-180 min. and 180 min. above). Then we totaled these patterns and calculated their proportions. Figure 8.3 has the results.

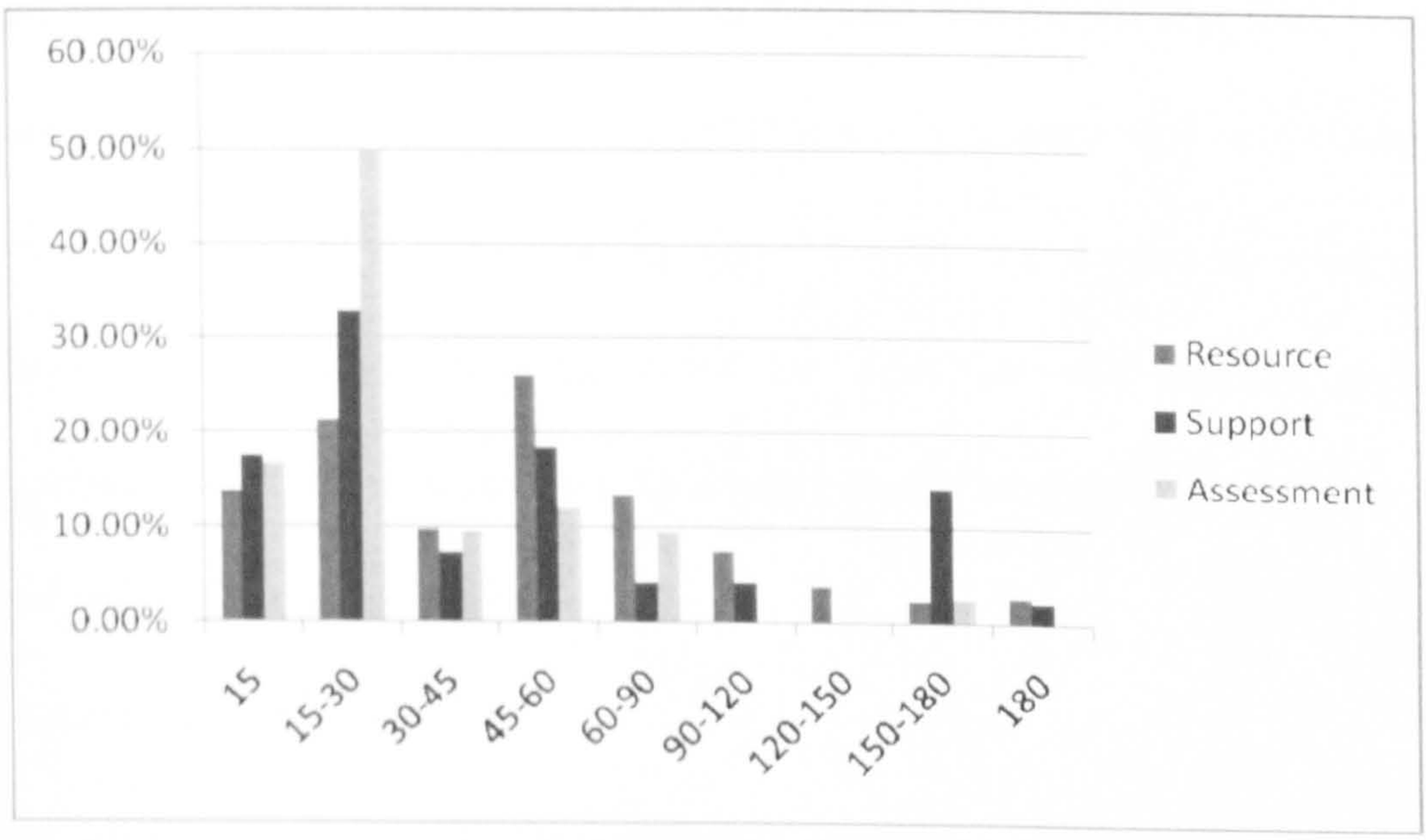

Figure 8.3 Study time segments of 2005 learner-researchers

The top three time segment patterns in each of the three types of activities are shown in Table 8.18.

Table 8.18 Top three time segment patterns in three types of activities of 2005 learner-researchers

Activities	Design	Top 1	Top 2	Top 3
Resource	120 min.	45-60	15-30	below 15
Support	Forum, telephone & email: open VOB: 90 min.	15-30	45-60	150-180
Assessment	Self-assessment: 15 min. Assignment: 120 min.	15-30	below 15	45-60

Apart from 150-180 pattern for learners' support activities, which reflect their participation of weekend three-hour face-to-face tutorials, we found that learners mainly adopted 15-30, 45-60 and below 15- minute patterns in all three types of activities. This exposed the tension between our dominant 120-minute activity design and the learners' 60-minute or less pattern. Was it possible that learners learned more effectively than we supposed? Or was it because that they could not afford a big chunk of 120 minutes to study? Maybe we needed to consider an instructional strategy of breaking down the activities into smaller units to accommodate learners' time patterns. This small-chunk learning might support them to deal with their time constraints.

6. Activity time design

In our orientation study plan, we indicated the expected time amount for each activity, hoping that this could support learners to plan their time well for the activities. However, the learner-researchers' seminar and journal data showed that this strategy did not work. Learner-researchers reported that this design was more anxiety-raising than helpful with their example reflections at seminar on Feb. 26th 2005 below.

"I always used up more time than what is required. That made me feel I am a slow learner."(S11)

"It said that I needed 60 minutes to complete the task. When I finished it within 25 minutes, I became doubtful if I missed something important." (S11)

"You should define the goal of the activity instead of the time requirement. If we can reach the goal, why should you care about how much time we use?" (S3)

The above reflections revealed that specifying the objectives or expected learning outcomes of the activities might be more important than indicating the expected time to do these activities.

7. Study paths

We considered our orientation study plan a key resource to guide learners' study path. However, an examination of day-to-day activity entries of learner-researchers revealed that they all started their first three-day study by following the orientation study plan, but they then turned to their own approaches as follows.

a) An assessment-guided approach

Learner-researchers used the assignment questions to guide their study. They read the questions, and selectively studied those resources that they assumed held the answers to these questions. They adopted this approach to "save time" and "increase efficiency" (S4 and S7 reported at seminar on March 5th 2005), to "have a focus" (S10 reported at seminar on March 5th 2005; and S2 reported at seminar on March 12th 2005), and to "evaluate achievements" (S9 reported at seminar on March 12th

2005). This approach might explain why learners could pass the module by spending much less time than required.

b) A tutorial-guided approach

Learner-researchers used the tutorial plan (available on the e-platform) as a guide to do those activities that were selected to be reviewed at tutorials. "I believe these must be the key activities of the unit." (S11 reported at seminar on March 12th 2005.)

c) An interest-guided approach

Learner-researchers chose to learn what was appealing to them. "I think the orientation study plan is made for those who do not know what to do. I did not follow the plan. I selected to learn those resources that appeal to me." (S2 reported at seminar on Feb. 26th 2005.)

d) A weekly-goal-guided approach

Learner-researchers recognized the weekly progress requirement specified in the orientation study plan. They counted the number of tasks they had to accomplish within the week and distributed equal amount to each day. (S5 reported at seminar on March 12th 2005.)

e) An adaptive approach to the orientation study plan

When learner-researchers fell behind the orientation study plan, they tried to stick to it by using squeezing (spending less time than the module allocated), skipping or postponing methods.

Data also showed that no learner-researchers followed the orientation study plan on a day-to-day basis, though they paced their study by adhering to the weekly

accomplishment required. They adopted a mixture of a) to e) approaches.

Our findings confirmed the usefulness of the orientation study plan to start off the learners' study, and to pace their learning on a weekly basis. We discovered that an increasing number of learner-researchers followed their own study paths after the beginning period.

The above discussion confronted us with a sheer reality that in an adult distance learning system, time-related design was among the priority instructional strategies of all aspects of a module. "*We chose your Institute because we have no time to attend conventional on-campus courses. If time requirement is as rigid, what's the point of this choice?*" S3 remarked at seminar on March 5th 2005.

8.3.3.2 Media-related tensions

An examination of learners' choice of media in both their study of resources and their use of support services made my argument in 6.1.3. that focused on the technology-mediated pedagogical enhancement almost meaningless. We came to realize that "online", though a most acclaimed learning feature of the Institute, and the attention of our time, effort and cost in our instructional design, was appreciated by our learners on a pragmatic decision rather than at a pedagogical level. The data showed that a variety of circumstances (e.g. place of study, time of study, computer and Internet accessibility, financial considerations, conventional learning habits, courseware design, etc.) contributed to learners' media choice. It challenged some of the assumptions we held and confirmed the importance of a provision of a variety of media for resource and support access. Table 8.19 summarizes the findings.

Table 8.19 A summary of 2005 media-related tensions

Our design/assumptions	Learners' reality
1) Learners' utilization of resource media	
We provided a print orientation study plan to support learners in a gradual transfer to CD-ROM or online learning modes.	Learners did show an increased orientation to CD-ROM or online learning modes. They tended to use a mixture of media due to different circumstances.
2) Learners' utilization of support media	
We provided both online (e.g. VOB programmes, forum, and email) and offline (e.g. face-to-face tutorials, telephone) media to support learners.	Learners chose to use different media at different times and for different purposes. Their face-to-face tutorial attendance was higher than for VOB programmes.

1. Learners' utilization of resource media

The design of the orientation module allowed the learners to decide upon their choice of media, i.e. print (accompanied by cassettes), CD-ROM and online (e-platform) resource. Figure 8.4 shows learner-researchers' selection of resource media.

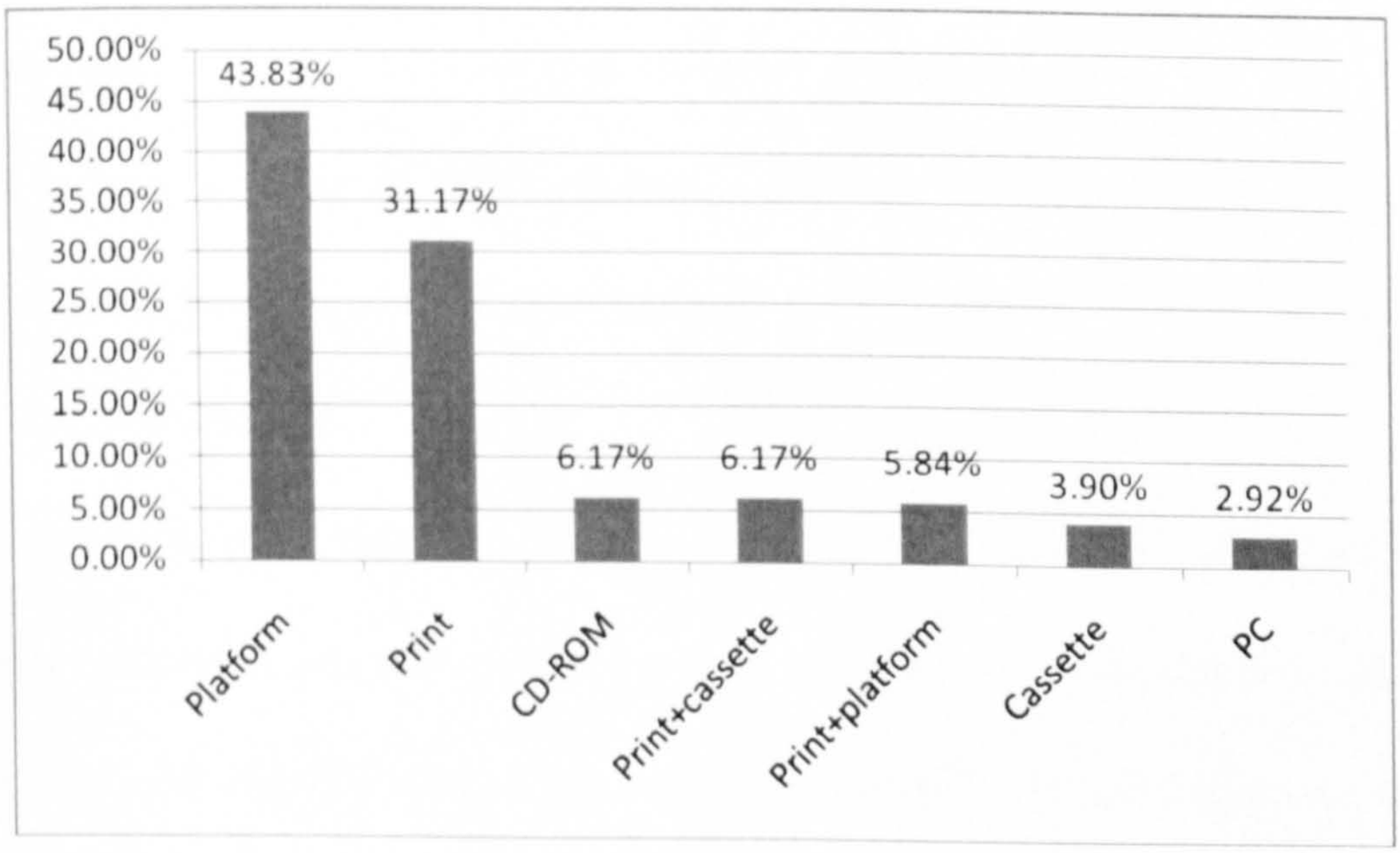

Figure 8.4 Utilization of resource media of 2005 learner-researchers

The findings revealed that learner-researchers mainly chose to study the module via e-platform (43.83%) and print (31.17%). Learner-researchers also used a combination of media (print + cassette and print + e-platform), and their PCs (with

downloaded resources from the e-platform or study notes) for their study.

One learner (S10) followed a mono-media (online) approach, while the rest adopted a mixture-media approach among whom six (S1, S3, S6, S9, S4, and S14) had no record of using CD-ROM, six (S1, S3, S7, S9, S10 and S14) had no record of using cassette and one (S8) had no record of using the e-platform.

Table 8.20 shows peripheral learners media choice as reported in their post-module questionnaire.

Table 8.20 Resource media selection of 2005 peripheral learners

Media	% (N=118)
I didn't learn the module	2. 5%
Print-based[19]	10. 2%
CD-ROM-based	30. 80%
Online-based	56. 50%

A 48.65% print textbook purchase rate suggested that nearly half the learners used print as either a main (10.2%) or supplementary media of learning.

Was learners' selection of media random or deliberate? Learner-researchers' journal and seminar data offered some clues to the reasons as follows.

a) Place of study.

Learner-researchers turned to cassette or print textbooks when they studied at unconventional places (e.g. S6 had 1 journal entry on using the print textbook when she was accompanying her boy at his swimming lesson; S15 had 2 journal entries of using a cassette on her trip to work.). Both S4 and S15 suggested in the seminar the provision of audio downloadable files to MP3 so that they could listen to the texts on their trips.

[19] The meaning "-based" was explained in the questionnaire as the medium used for more than half of the study time.

b) Computer accessibility.

At times learner-researchers did not have access to a computer (e.g. S15 had 4 journal entries of using print textbook when her computer was stricken by a virus; S6 had 2 journal entries of using the print textbook when she had to leave the computer to her husband for his work.).

c) Internet accessibility.

Learner-researchers were denied access to the Internet (e.g. S14 had 8 journal entries of using the print textbook when he had just moved to a new house with no Internet access.).

d) Financial concerns.

Learner-researchers chose not to use certain media to save cost (e.g. S3 at seminar on Feb. 26th 2005 said that he chose to use the CD-ROM instead of online courseware because it was "cost-free". He did not have to pay the Internet fee.).

e) Conventional approach.

Learner-researchers stuck to their conventional or habitual media for learning (e.g. S8 who did not use the e-platform at all said at the seminar on March 26th 2005 that she always read in bed so that she felt more comfortable with the print textbook; S4 who studied mainly online for the first week and then transferred to print-based learning explained at the March 21st seminar that she did so by an initial feeling of obligation of being an online learner, but later found herself more at ease with print + cassette mode which she had been following in her previous English study.).

f) Design of the courseware.

Learner-researchers used the print textbook because they could not annotate the courseware (e.g. S7 turned to print when she found that "I could not add notes to the courseware. Neither could I highlight the key information by bold, colour or underline", she remarked at the seminar Feb. 26th 2005.).

The above findings challenged our design assumptions. We assumed that learners chose not to use online resources because they had not adapted to online learning. The findings revealed that learners' media choice was not necessarily related to the adaptive issue. Neither did offline-learning hamper their learning progress. The findings also highlighted the importance of a multi-media accessibility to resources instead of a single-media dominant delivery to avoid disadvantaging learners who adopted either a single-media learning mode or moved from one media to another at different times, or with different resources, as a result of a variety of circumstances.

2. Learners' utilization of support media

Our support services were designed to be provided at two levels: at headquarters and learning centres. At the headquarters level, service provision venues were the forum, VOB programmes, call centre telephone and email. At the learning centre level, support provision venues were weekly on-campus tutorials (face-to-face) and local centre telephone and email. We examined the learners' selection of these support media from three aspects: the media they used, the time they used these media and the types of inquiries they made via these support media.

a) The support media learners used

Appendix 4.12 – 4.16 present data on learner-researchers' and peripheral learners'

utilization of support media, namely, their use of forum, call centre telephone and email, their VOB and face-to-face tutorial attendance. From these tables and figure, we observed that learners made use of all of our support services. This confirmed our effort in making support accessible by a variety of media. We noticed our neglect of the support service data from the learning centres when we reflected on the small number of calls and emails to the call centre (only 20 phone calls and 39 email messages). Tutor C explained that learners may prefer to calls and emails to learning centres who also provided support services via these two media. She herself was dealing with them all her time. We realized that we totally missed out the data at the learning centre level that might be a primary venue for learners to seek support, especially those off-put by the Internet support services.

b) Learners' selection of support media at different times

Both tutor-moderated VOB programmes and face-to-face tutorials were delivered at fixed times, so we only examined learners' time to send their forum posts and emails, and to make their phone calls. Figure 8.5 has the details.

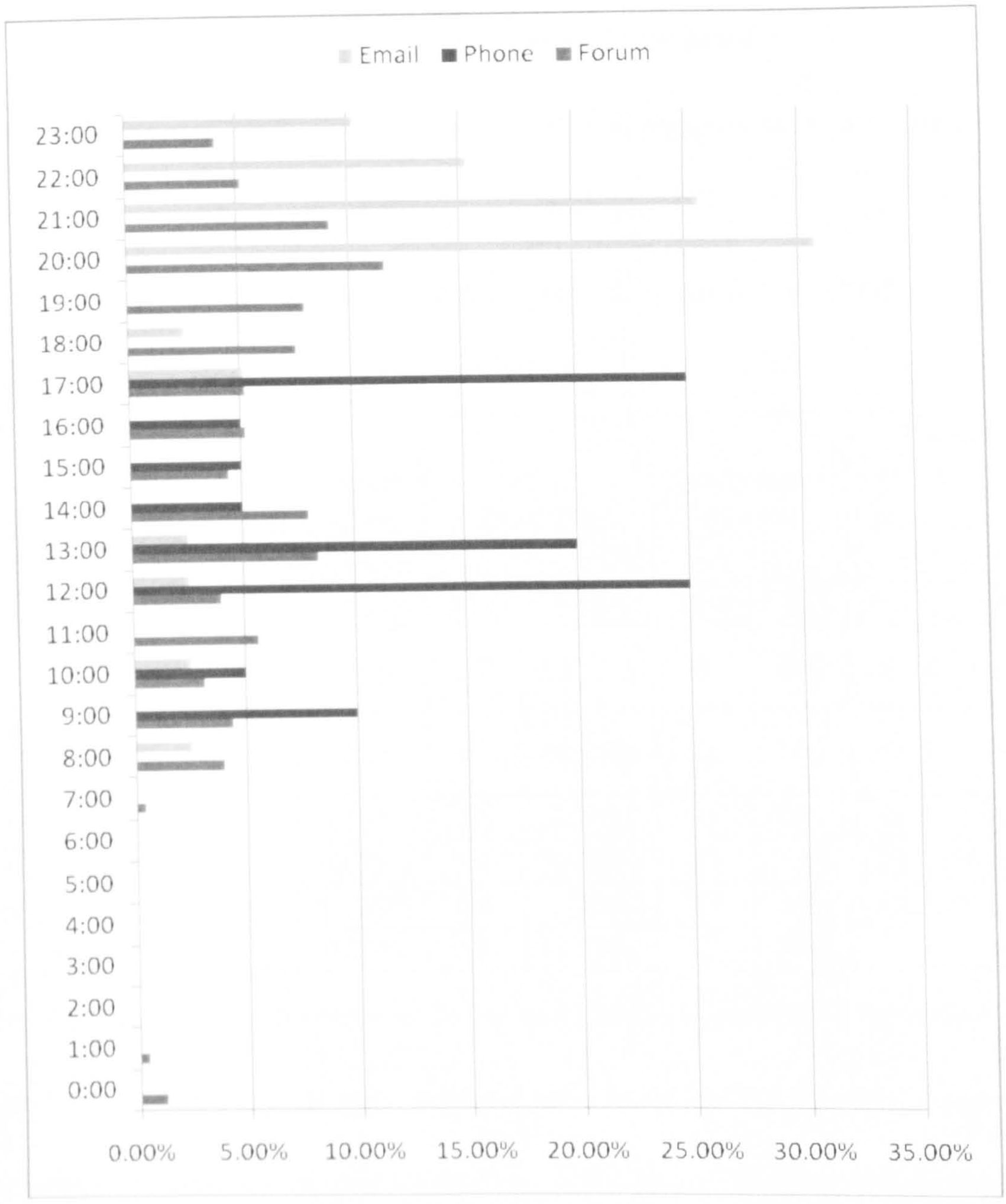

Figure 8.5 Time of use of support services of 2005 peripheral learners

Figure 8.5 showed that the forum and call centre email shared the same peak time (20:00-21:00 and 21:00-22:00), and call centre had its most call-ins between 12:00-13:00 (lunch time) and 17:00-18:00 (time right after work). We also found that the forum was used by learners in more time slots than the other two.

We therefore identified the need for both synchronous media access (e.g. telephone, VOB and face-to-face tutorials) and asynchronous media access (e.g. email and forum) to cater for learners' availability to use these services.

c) Learners' selection of media for different types of inquiries

We collected the inquiries learners made via the support provision media and categorized them. Table 8.21 summarizes the findings.

Table 8.21 Inquiry categories via support provision media of 2005 peripheral learners

Category	Forum[20] (N=351) (340 inquiry posts, 351 entries)		VOB (N=227)		Telephones (N=20)		Emails (N=39) (39 messages, 41 entries)	
	No.	%	No	%	No	%	No	%
Learner autonomy layer	10	2.85%	37	15.21%	0	0%	0	0%
Language learning layer	19	5.41%	42	18.88%	0	0%	0	0%
Affect layer	11	3.13%	16	6.54%	0	0%	0	0%
Technology layer	108	30.77%	92	34.97%	11	55%	22	56.41%
System layer	168	47.86%	36	21.08%	7	35%	18	46.15%
Others	35	9.97%	4	3.33%	2	10%	1	2.56%

Table 8.21 showed that learners tended to use telephone and email for system- and technology-related inquiries only, whereas they made use of the forum and VOB programmes to seek advice over all the five layers, though the largest inquiries were still on system- and technology-related issues.

To summarize media-related tensions, on the one hand, we felt justified in our effort of making a variety of media available to learners so that they were not disadvantaged when they were denied certain media access; on the other hand, we were challenged in our "the-more-online-the-better" belief. In my literature review of the role of technology in instructional design in 6.1.3, I was persuaded by the

[20] Data from these two sources (forum and VOB programmes) are not all inquiries. N refers only to the number of entries that make inquiries.

technology-enhancement argument. The data collected indicated that I needed to further examine its role to support my reality-based media decisions.

8.3.3.3 Assessment-related tensions

Tutor-researchers were initially upset at the discovery of the learners' assessment-guided approach to their module. We adopted the design of making our assignment questions match the day-to-day learning objectives of the module on a learning-process-support principle, not a short-cut strategy. At our seminar on Feb. 28th 2005, when I shared the finding with the other tutor-researchers to find out if they had noticed this type of strategy, Tutor B made the following remark.

> *"...I caught them exchange answers to their assignments via the forum. They may argue for a 0.5 point miscalculation in their self-assessment for ages. Passing the module is their priority... We* ***can't help*** *learners' attention to assessment. We need to* ***design good assessment strategy that guides and supports learners' learning.*** *I think our design idea is good. Even if learners exchange answers in the forum, that is also* ***a way of learning.*** *It is* ***why and how we design assessment that matters.****"*

I was impressed by her argument that we should not bother about changing the learners' assessment-oriented approach; instead, we should adopt appropriate assessment strategies to support learners to learn via assessment. This assessment-guided approach, as an effective timesaving strategy of learners, thus demanded our effort in assessment design to reach a balance between learners' pragmatic learning strategy and our instructional ideals.

8.3.3.4 Interaction-related tension

Lack of interaction was recognized as an aspect for improvement in the design of the orientation module proposed by peripheral learners in their assignment (20.59% as shown in Table 11.4). This concern was unexpected since we had deliberately designed parts of the module to encourage interaction. We had allocated four particular days entitled "Community Day" and "Communication Day" with the following activities.

a) Four face-to-face tutorials at the local centres on weekends, with average attendance rates of 96.67%, 80.4%, 70.67%, and 68% (Appendix 4.16).

b) Four tutor-moderated VOB programmes on weekends, with 51.60% (210 learners), 31.45% (128 learners), 24.08% (98 learners) and 20.88% (85 learners) (high peak record) attendance rate (Appendix 4.15). Learners also had access to learner-initiated and -moderated VOB programmes 24 hours daily.

c) Forum, with 751 posts from the learners, among which 155 posts (38.08%) were self-introductions aiming to make friends with other fellow learners.

The data showed a good involvement of learners in the above activities. However, these activities did not seem to satisfy the learners' need for interaction. We started to question what we had missed in supporting our learners in interactive activities.

Learner-researchers offered some clues in their journals and seminar discussions of VOB programmes and tutorials.

a) The grouping-related issue

"Class size is too big." (S6 reported in her journal on Feb. 26th 2005)

"VOB has too many people. I did not have a chance to have the mic throughout the whole programme." (S15 reported in her journal on Mar. 4th 2005.)

"I hope to have a fixed partner. Every time I met someone in VOB, I had to repeat my self-introduction lines and to look for topics. It took a long time before we started to practice English." (S7 reported at seminar on Mar. 5th 2005.)

"You should label different VOB channels according to learners' levels of English proficiency... I found it hard to talk with someone whose English was far below fluent than mine." (S3 reported at seminar on Feb 26th 2005.)

b) The theme-related issue

"VOB is good, but I found it hard to get into real talk with my fellow learners. It is always like that after we have exchanged our personal information, we do not know what else to talk about." (S15 reported at seminar Mar. 5th 2005.)

c) The people-related issue

"I don't think it an organized activity. There is no moderator. A said something, then B, then C. I listened for while – I did not even know why I was here. This is my only feeling about VOB." (S7 reported at seminar Feb. 26th 2005.)

"I was the only one in VOB. What a shame!" (S3 reported in his journal on Feb. 21st 2005.)

"I am not sure if you have attended a learner-moderated VOB. I think the core of VOB is to have a tutor there. Without a tutor, VOB is meaningless." (S3 reported at seminar on Mar 5th 2005)

Learner-researchers' remarks exposed our fallacy that making available and accessible a variety of venues for interaction could lead to good interaction. In reality, interaction did take place via these venues; however, it was not recognized by learners as sufficient and effective in supporting them in their study due to their lack of grouping, themes, organization, etc.

In contrast, we observed an unexpected ("unexpected" from the perspective that this was not intended in our research objectives) role of research activities in fostering learner-researchers' interaction for their study purpose. Some typical journal entries are cited in Table 8.22.

Table 8.22 Journal entries of 2005 learner-researchers reporting their gains in their study as a result of research activities

Skills developed	Reflection	Research activity	Data source
Gains in the learner autonomy layer			
Plan-making and implementing	*A week has passed. I kept journals every day. When I read them again, I found that they helped me a lot* ***in planning my everyday study.***	Keeping journals	S15 on Feb. 25th 2005
Self-discipline	***I have to do some study today,*** *even though I feel tired. I must have something to write in the journal.*	Keeping journals	S2 on Feb. 23rd 2005
Gains in the language-learning layer			
English speaking skills	(She practiced oral English with another learner-researcher after their weekend seminar.) *It seems that I have revived the experience at my school years when I practiced English with my classmates. If we persist, I am sure we can* ***improve our oral English.***	After the weekend seminar.	S1 on Feb. 26th 2005

English learning skills in general	*I learned a lot of* ***good English learning methods*** *from them* (refer to learner-researchers).	Attending the seminar	S2 on Mar. 5th 2005
Gains in the affect layer			
Motivational factor	*They all expressed that persistence is the most challenging task of all. But as we all* ***persist*** *until today, I think we can persist on.*	Attending the seminar	S6 on Mar. 5th 2005
Emotional factor	*I read others' journals and found everybody is working really hard. I* ***don't feel lonely.***	Sharing journals	S8 on March 3rd 2005
Social factor	*I am impressed by tutor-researchers' commitment to this module. This* ***enhances my confidence*** *in success.*	Impressed by tutor-researchers' commitment	S3 on Feb. 26th 2005
Gains in the technology layer: none			
Gains in the system layer			
System in general	(He visited the homepage and the platform.) *I* ***know more about your Institute.*** *I think I'd better prepare ahead to know as much as possible in order to do well in the project.*	Committing to joining the project	S5 on Feb. 21st 2005

The above data showed that by committing to this research project and by undertaking research activities, learner-researchers recognized their development in four layers (except the technology layer) of the module objectives. More evidence will be brought out in our review of learner-researchers' research-related data in 8.4.

By comparing this analysis with that of the concerns reported by peripheral learners on interaction inadequacy, we started to realize that we needed to employ strategies beyond a provision of a variety of interaction venues to make fulfilling interaction take place. These strategies could potentially be the research-orientated activities such as team approach, journal keeping, regular seminars, shared mission and felt attention from the tutor-researchers by the learners. This issue will continue to be

explored in 8.4 in the discussion of research-related findings.

8.3.3.5 A summative reflection

Section 8.3.3 has analyzed and reflected on the data of both the core and peripheral research groups. The main purpose of this process was twofold. One was to surface key principles in the design; the other was to construct a dimensional framework for the design of a learning system in my situation guided by these principles, so as to improve the next design cycle of the orientation module and further to guide the instructional design of other modules. To achieve this purpose, we reflected intensively on the emerging key issues to identify tensions between our design/assumption and the reality.

We were initially overwhelmed by all sorts of emerging tensions implied by the data. The data appeared to surface four separate major tensions, but when we viewed these tensions holistically, we recognized that these tensions were rooted in our struggle to achieve a balance between ensuring that our intended objectives were achieved with learners showing full understanding and accommodating learners' learning needs and contexts. It was a tension between existing instructional and learning perspectives. This was context-bound to a degree-bearing course in English language education via online delivery (the instructional perspective), and Chinese adult distance learners with diverse backgrounds, needs and situations whose primary aim is course success (the learner perspective). What were the strategies to address our learning- and learner-focused design paradigm in this tension?

Extensively, we confirmed that instructional design was not a mere product of course

materials/courseware. It was a system composed of the design of the learning objectives, the resources, the support services and the assessment. Major issues identified among these designs are as follows.

1) Time-related strategies as to the expected hours of study, their distribution on a week and day basis, appropriate time segment and time indication techniques for the activities.

2) Media-related strategies as to multi-media access to resources to cater for learners' different learning circumstances and multi-media provision of support services for learners different time and purpose needs;

3) Assessment-related strategies that guide, monitor and evaluate learners' learning.

4) Interaction-related strategies that promote interaction in the form of an organized group activity towards purposeful achievements.

In addition, all the above designs needed to take into consideration the diversity and uniqueness of the learners. Our next research cycle would explore these issues with reference to the literature and search for strategies to relieve or minimize the tensions.

8.4 Examining Action Research Issues

This section will examine the action research process in two aspects. One is tutor-researchers' and learner-researchers' perception towards this research methodology; the other is my improved understanding and practice of action

research concerning its six dimensions.

8.4.1 The value of action research

Table 7.1 has outlined the research background of tutor-researchers revealing that they were novices in action research. This section will examine the improvements in their understanding of action research from a perspective of the ways they recognized the significance of this research approach. It raises two major arguments. One is the high appreciation of the team approach by tutor-researchers and learner-researchers and the double-edge effect of such an approach. The other is the unexpected extensiveness and intensiveness (from tutor-researchers' research design perspective) of this research in motivating, supporting and monitoring researchers' work/study. This implies the possibility of expanding research-oriented interventions to a wider audience of staff and learners to obtain similar effects, but it should be guided by a further examination of the exact factors and the rationale that leads to such an effect.

1. Tutor-researchers' contributions to the team approach

As discussed in 8.3, through this research, tutor-researchers recognized the enhancement in their understanding and practice of professionalism in instructional design. When they came to reflect upon their major methodological improvements in their post-module interview, they all emphasized that the team approach brought about the most benefits with extracts cited below.

*"In contrast to the previous research, **the workload increased a lot as a result of***

this team approach *... I* ***felt an increased responsibility*** *that reminded me all the time to work for the best. I was relieved to know that all of us recognized that we benefited from this project. I came to realize that in the past we talked too much. But we did not act. Maybe this was because we did not know* ***a best way for research and professional development without sacrificing everyday work*** *that must be done. This action research approach allows us to research what we do as routines. Though it demands more time, it* ***enhances motivation, sustainability and quality of our work.*** *This* ***cannot be achieved by individual work.*** *It is* ***worth the effort.***" (I)

"I think ***team approach*** *makes action research different from the research methods I am familiar with. I have always known that I need to improve my research skills, but I don't know how. Read books? I don't know which books to read and even if I do read them, so what? But when we* ***work together*** *on a project closely related to our work, we* ***learn from each other and we also monitor each other.*** *I feel* ***much directed.*** *(I: But other research methods also allow team approach.) Yes, but I don't think they consider it an issue like action research does ... I was also impressed by the* ***inclusion of learners*** *as part of the research team ... Staff at Course Design and Development Centre seldom has direct contact with learners. This project* ***opens a learner perspective*** *in me ...*" (Tutor A)

"Many research projects lead to unrealistic results or false reflection of the reality. Action research avoids this by ***involving both the researchers and the***

***researchees** in **an intentional participation** of the research."* (Tutor B)

*"The team approach ... it is different from my previous research projects which were also conducted in a team. In those projects, jobs were clearly split. I was in an assistant role only responsible to collect data and analyze data according to instructions. But in this project, we **discuss and make joint decisions**. I feel **I have learned a lot more**. Meanwhile, **I feel proud that my ideas are shared by the team**."* (Tutor C)

The above remarks left me to wonder what it was within the "team approach" of action research that was different from the team approach adopted by almost all the jobs at the Institute, and the possibility in duplicating the team approach effect to these jobs. I will discuss this in the later part of this section in combination with my reflection on learner-researchers' data that raised a similar issue.

2. A possible dilemma in tutor-researchers' team approach

However, the team approach was not without constraints. Tutor A reported in her post-module interview that she felt pressure. "I am not like the others. Tutor B has been professionally trained (my note: This refers to the fact that Tutor B has an MA degree already.) and Tutor C has experience (my note: This refers to the fact that Tutor C had been involved in other research projects before this project.)."

A long-term effect of this research could be reviewed against the situation six months after it as listed in Table 8.23.

Table 8.23 2005 tutor-researchers' situation six months after the research

Tutor-researchers	Achievements
Tutor A	Resigned to take up a market sales job at a toy company.
Tutor B	● Had her paper "Developing online learners' learner autonomy through tutorial provision" published in Gu (2005 ed.) ● Had a presentation at Online English Language Education Symposium China 2005 on "The role of forum to newly-enrolled online learners".
Tutor C	● Promoted to Director of Learner Support Centre in charge of learning support provision to learners of all centres. ● Had a presentation at Online English Language Education Symposium China 2005 on "A research report on the effect of tutorial frequencies to newly-enrolled online learners".

Table 8.23 showed that both Tutor B and Tutor C demonstrated their professional development either in the form of their academic publications or symposium presentations, or of their administrative promotion in their jobs. However, Tutor A's resignation was of concern. The reason she gave me was that she wanted a better-paid job. A market sales job meant that she changed her career completely. I suspected, based on her "pressure" remark, that one of the reasons for her decision might be that the participation in this research project "zoomed" (her original word to describe the effect of journal keeping in her post-module interview) the gap between what she was competent of and what the position as Assistant Director of the Course Development and Design Centre required.

The stories of these tutor-researchers showed a dilemma in the team approach: action research might help some in their professional development, but it may scare others away from their profession as they realize the gap between their current level of

competence and job requirement.

3. Identification of "Hawthorne effect" of learner-researchers

As early as the first week when learner-researchers' involved in the research projec

Tutor B reflected in her journal after she observed the active performances o learner-researchers in the forum and at VOB programmes.

> *"I am **skeptical of the reliability of this research.** The **intensive involvement** **learner-researchers** in the research may result in subjectivity. Since they know th purpose of the research, they might, intentionally or unintentionally, a favourably to our expectations. **I don't think in the end their performance** **representative of the peripheral group** ... they know they are selected, and th are being observed and cared about. So they might be **more motivated** than th actually are. In addition, they have **more opportunities for interaction** w tutor-researchers and other learner-researchers than other learners, which is **added input or support to them** ... So they are **no longer representative.** Thou we may see changes and improvement in them, this does not mean we can see same changes and improvement in the rest of the learners."* (Tutor B)

I later found that this kind of phenomenon was described as Hawthorne effec research when the researchees, knowing that they are being studied, may cha their behaviour (Anderson and Taylor, 2005:32). When we vis learner-researchers' data, this effect could be identified even at the first orienta meeting. 9 learner-researchers described their being selected as "lucky" learner-researchers reported an immediate attitude change to their study.

"I registered in this course for a very simple purpose: to obtain a degree. I imagined that learning at the Institute was that I ***studied alone*** *at home via the Internet. At that time, I really* ***had little confidence*** *in my study...* ***But*** *now, I have been* ***deeply impressed by the commitment to learners*** *of the tutor-researchers. I have begun to have* ***very much confidence****. I hope I can make friends with you, and we* ***study together*** *to upgrade our English. "*(S9).

Three of them even compared this to winning a lottery. *"I think I am very lucky to be selected to join this research team. I have never* ***won a lottery*** *of any kind in my whole life. And this is it. "* (S4).

In their post-module interview, 13 learner-researchers recognized that their participation in this research made them act differently towards their study in relating to their achievements with examples as follows.

1) Learner autonomy layer. *"I started to like* ***keeping journals****. It helps me* ***plan my study and record my progress.*** *"* (S4 journal entry on March 1st 2005)

2) Language learning layer. *"I and Dushilan (S15) became oral partners. We* ***practise English*** *over MSN regularly."* (S1 at seminar on March 12th 2005)

3) Affect layer. *"If it is not for this project, I don't think I can* ***get to know so many friends****. I don't think I* ***have a chance to exchange ideas*** *like that (my note: she may refer to the seminars) with them."* (S9 in her post-module interview)

4) System layer. *"****I learned a lot by attending those seminars****. I think* ***I know your Institute better*** *than many other learners because of this."* (S15 in her post-module interview)

8.4.2 has more examples to show learner-researchers' attribution of their achievements to their participation in this project. Though we predicted this to happen (as stated in our letter of invitation to learner-researchers about the possible benefits), we did not expect it to have such a major impact. We then directed ourselves to discover the reasons. We identified three factors that may contribute to this, which may also be true in tutor-researchers' situation.

1) The commitment to a shared mission

By committing to joining the research, learner-researchers developed a sense of responsibility that motivated them to do more than they planned to do. *"I read Ms. Cao's email about joining the research project. I **think I should make some preparation for that**. So I visited the Institute's homepage to know more about it."* (S4 journal entry on Feb. 21, 2005). *"I feel **very lucky to be chosen** as a learner-researcher, because it makes me feel **I have more responsibilities than the others**. That is really **a good promotion** for me."* (S6 journal entry on March 8th 2005, message original in English)

Because of this commitment, they felt regretful when they thought they did not do as well as expected (S8, S13 and S14 reported this in their post-module interview).

2) Journals and seminars

Journals and seminars, which were intended by tutor-researchers to be pure research tools, were valued by learner-researchers as interventions to support their study in many ways. S15 reported at the seminar on March 5th 2005. *"Starting from this week, I have begun to feel if one day I do not study, that day is no longer complete. (I: Why*

*is that?) I **have to write something in my journal. I can't leave it empty.** And when I come to the seminar, when you ask 'what are your major achievements this week?', I **can't say that I have none because I did not study at all.**"* More examples are presented in the method reflection section later in this chapter.

3) The team approach

*"Simultanously, I'm very happy to meet you all. The three weeks' orientation training is going to be over soon, a fresh feeling suddenly come into being, that is, I **feel reluctant to leave our reseach groups**, either the teacher reseach group or the learner group. Ms. Cao and your collegue, such as Tutors A, B and C, etc., have impressed me deeply. You are all very dedicated to your professional. I'm truly moved from the bottom of my heart. The learner research group, my onlinemates, we'll share the learning life in the next three years! Just as a unit title in the orientation module tell us, Let us be friends! That is what I want to say too!"* (S6 on March 8th, 2005, message original in English). S6's remark is a good summary of the attachment learner-researchers paid to the relationships both among each other, and with tutor-researchers. *"I found myself **very close to this group**. I may have developed a group of this kind anyway, but **it won't be as soon and as close.**"* (S15 in her post-module interview).

Learner-researchers also reflected strongly on their observation of tutor-researchers working together with them. Upon responding to the post-module interview question "Did you find anything impressive about this research? If yes, what is it?", 8 learner-researchers reported that they were impressed by tutor-researchers'

commitment to the project as unexpected. S15 stated, *"At the beginning, I thought you did this for a show. Then write a report on it and that's all. But then I found out that you were really doing things. You shared your findings with us at seminars. You thought hard. So* ***I cannot let you down.****"*

S4 had five entries of reflection in his journal that tutor-researchers' committed participation helped him develop his confidence and commitment to his study.

> *"I was deeply impressed by the Institute's tutors* ***commitment and diligence****. This has* ***strengthened my confidence*** *in success."* (S4 journal entry on Feb. 25th 2005)
>
> *"When I went to the seminar, I saw they were all at work on weekend. I could see how hard working they were. So* ***I must study as hard.****"(S5 journal entry on March 5th 2005)*

Similar remarks could be found in journals of S3, S4 and S15.

4. Reflections on the "Hawthorne effect" of learner-researchers

Tutor-researchers were aware of the "Hawthorne effect" of this research on learner-researchers. They reported in journals and at seminars their observation of learner-researchers' performance at tutorials, forum and VOB programmes.

> *"S15 is not the monitor of the class. But as it seems that she* ***knows more about the Institute than others****, other learners tend to turn to her for help during the tutorials."* (Tutor C)
>
> *"S6 responded to quite a few inquiry posts* ***before I had time to do so.****"* (Tutor B).

*"S12 always seems to be **the first** to ask for the mic at my VOB programmes."*

(Tutor B)

When Tutor B brought her representativeness argument to the tutor-researchers' seminar on March 26th 2005, we had a heated discussion that lead to a bold proposal. If we finally proved the positive effect of research participation to learners' learning achievements, we may forget about methodological issues such as bias or subjectivity and think about the possibility of duplicating the research situation to the peripheral learner group in order to obtain a similar effect. Though we had identified three possible reasons as discussed in 3, we realized that we needed further work to pinpoint the exact factor(s) that exerted the positive effect and the reasons for this.

Learner-researchers also reported some negative effects of their research participation, though evidence was minimal. Working in groups gave them a chance to know exactly what others' achievements were. They could not help checking themselves against other members.

*"I read their journals. They all seemed to use less time than I did for the activities. **Am I a slow learner?**"* (S4 journal entry on Feb. 27th 2005)

*"It seems that they all spoke better English than I did. **I became very worried.**"* (S14 journal entry after his attendance of the seminar on March 5th 2005)

*"There are too many ideas (proposed at seminars). **I don't know which ones to follow.**"* (S10 in his post-module interview)

This section has focused on the examination of tutor-researchers' and

learner-researchers' recognition of the value of action research in their work and study, raising two major issues. The team approach was recognized by both groups as significant in this research methodology, yet it appears to be a double-edge issue in that there are positive and negative effects. The positive effect of research participation on the learner-researchers may take away their representativeness as peripheral learners, yet this Hawthorne effect might mean that certain factors of the research can be used as tools to promote learning in addition to supporting research.

8.4.2 Improvements in the understanding and practice of action research

This section aims to examine the effect of action research in this research cycle. My reflections will follow the six-dimension perspective to reveal major improvements in my understanding and practice as summarized in Table 8.24.

Table 8.24 Summary of the major improvements in my understanding and practice of action research in research cycle 1

Dimens-ions	Improvements in my understanding and practice
Initiative	● My action research has been driven by the initiatives for changes and improvements in what Kemmis and McTaggart (1992:15-19) define as first (**change in the use of language and discourse**) and second (**change in activities and practices**) registers, but is **cautious about** those in the third register (**changes in social relationships and organizations**)
Focus	● Consensus-oriented "thematic concern" should be interpreted as a shared umbrella theme under which participants enjoy their liberty of developing **sub-focuses** of their interests or concerns.
Context	● The real situation is **multi-faceted and contextualized** in methodological, organizational and technological issues.
Process	● My action research values the **cyclical nature** as essential in my unique situation, and provides **a redefinition** of the phases and

	their activities appropriate to my situation. ● The process has identified the subject matter and the methodological issues **dependent of** each other.
Partici-pants	● My action research has identified a need for guidelines for **stakeholders to clarify roles and responsibilities** so that an effort of all-stakeholder participation can be realistically directed. ● Participants play **different roles** in different areas at different phases, which requires an according expectations of their involvement as practitioners and researchers. ● The **team approach must not be rigidly interpreted** as a group participation in all activities throughout the whole process.
Methods	● Methods need **an extensive interpretation** of those for data planning, collection, analysis and reflection. ● **Reflection and criticism** did take place despite an unfavourable perception from the literature that Chinese culture is not a critical community. ● **Journals and seminars**, employed by tutor-researchers as tools for research purposes, are recognized by both tutor-researchers and learner-researchers as effective interventions to motivate, support and monitor their work/study. ● My action research proposes **a living view of reliability and validity** in a particular context at a particular time by a particular person.

1. Reflections on the initiatives

The "change" and "improvement" initiatives recognized by the action research literature (argued in 6.3.2) was the primary driving force of my research cycle 0 and had been developed to aim at dual-commitments of instructional design and action research methodology in my research cycle 1. However, this was not the only difference witnessed within this research cycle.

For one, it brought out changes and improvements as a result of a team work and led to the result of a team change of tutor-researchers. Learner-researchers also recognized their changes and improvements in their study as discussed in 8.4.1.

Secondly, it brought about changes and improvements at both practical and theoretical levels. Thirdly, tutor-researchers' post-module interview data further suggested that accompanying such changes and improvements was professional development, recognized by the literature as a close-linked initiative with action research in higher education in particular (McKernan, 1996:11-12; McNiff, 2002:8), though not intended as an initiative at the beginning of this research. This implied that professional development would be an embedded outcome of action research. Fourthly, there had been a dedicated effort for further changes and improvements in yet another research cycle reflected in our analysis and reflection phase.

With the above initiatives in mind, I revisited Kemmis & McTaggart (1992:15-19) three-register framework of the changes action research can bring about. I identified a match in the first ("change in the use of language and discourses"), and the second ("changes in activities and practices"), but I hesitated at the third ("changes in social relationships and organizations"). It was in fact proposed by tutor-researchers (see 8.3.1 of Tutor A and Tutor B's post-module interview remarks on a need for organizational reconstruction to ensure that this new approach and their roles in it had a recongised status in the Institute's instructional design process), but I dismissed the idea with an argument that this small scale project could not sufficiently justify the changes at that level – I was cautious about initiating social and organizational changes. This research revealed that instructional design-related jobs were administratively managed in different sectors of the Institute headed by different deans and our partner IT company. I was either unwilling or powerless to

get into their territory of management to make such a change.

2. Reflections on the focus of the research

I recognized at the beginning of this research cycle that my proposed focus was general and I relied on this research to crystallize this more precisely. The research process allowed us to obtain a full understanding of the issue being examined, and at the same time to identify major tensions that became potential issues on which to focus in our next research cycle. We employed a jigsaw approach (explained in 8.1.1) to the reflection process that was important for a procedural formulation of the most demanding issues.

There is a strong implication in the literature that "the thematic concern" of action research should be formed and shared by the group (Kemmis & McTaggart, 1992:9). This research cycle involved different groups of research participants and under this umbrella theme, the data revealed a multi-focused phenomenon.

This was "multi-focused" across groups. If we revisit the proportion of reflections tutor-researchers and learner-researchers made under self, course and research categories (Appendix 7.1 and 7.2), we can see that learner-researchers' attention paid to research was much less than that of tutor-researchers.

It was "multi-focused" within a group. Tutor-researchers expressed their different research interests in their pre-module interview (Table 7.1), and though they did not object to my proposed research focus, they developed their own areas of focus with the general focus (Tutor A in the instructional design process;Tutor B in the role of

tutorials and forums in learner support; Tutor C in local centre's role in learner support), and this development could be seen in the different level of attention paid in their journals, seminars and publications between their focused issue and other issues that arose.

This contradicted the consensus-orientated emancipatory action research model. Weiskopf and Laske (1996), in their research where both workers and scientists are involved in solving a severe economic crisis of an organization, identify an asymmetrical relationship between the workers (being researched) and scientists (researchers) since they held different interests. They propose a fusion model of emancipatory action research (Weiskopf and Laske, 1996:131).This model suggests that the researchers and the participants (workers being researched) may not share the same interest, yet they can still arrive at a "cooperation pact" (an agreement) because of their overlapping interest. In their view, it is the "cooperation pact" that provides a more productive basis, not the search for consensus. Though the roles of the participants in their project are different from mine, their challenge to the consensus idea fits my context.

A similar argument is raised by Webb (1996) who described that the researchers and the researched with common interests, common abilities and a common desire to participate in action research is a "fiction". Instead, a discovery of commonalities and a development of empathy for each other is more realistic (Webb, 1996:148). My research supported this argument.

3. Reflections on the context

The context-bound and context-based feature of action research seemed well suited to my situation, i.e. the design, development and delivery of a degree-bearing course in English language education for Chinese adult distance learners with diverse backgrounds, needs and situations. It was mainly this uniqueness that caused tensions between our literature-informed assumptions and the reality.

Moreover, this research cycle revealed a multi-faceted contextual feature of academic, organizational and technological issues (argued in 8.3.1). The withdrawal of the local tutors as tutor-researchers, the difficulty in obtaining local tutors' participation in the interviews, the lack of budget for the research were all organizational issues. Tutor A reflected in her post-module interview to the question "If there is another action research project, would you like to join in?" *"There **lacks a mechanism** to encourage and reward us for doing so. Joining a project like this costs effort and time. Though I gained from it, I did sacrifice a lot of my own time since I could not put aside my routine work. One project is alright. But if you ask me to work like this all the time, I really cannot afford it. (I: What mechanism do you have in mind?) For example, you can claim some jobs off if you join a research project, or you can have a salary raise or subsidies for doing that."* Tutor B echoed the time concern in her response.

Technological issues also appeared. Both Tutor A's and my journal entries recorded our frustration when dealing with the dispatch and collection of peripheral learners questionnaires via the e-platform.

4. Reflections on the process

The cyclic-natured action research process suited this context for two reasons. One was that this research followed on from previous module evaluation/research activities that formed part of the institution's natural cycle of module improvement activities; the other was that it provided targets for yet another cycle for further improvements. The value of this cycle idea has been well explored in the literature (argued in 6.2.4). Through these two cycles of research, I recognize its additional value in my situation where theory in relation to issues with practice was only just beginning to be considered and where circumstances were context-bound, and where participants were novice researchers.

Concerning the phases within this cycle, our practice seemed to reflect McNiff's (2002:12) three-phase framework with the activities described in Table 8.25.

Table 8.25 Phases and activities of research cycle 1

Phase	Activities
Plan	Decided the research focus informed by a previous research cycle, the literature review, and group interaction, and translated them into a research plan.
Act	Implemented the plan and collected data.
Analyze and reflect	Analyzed and reflected on the data to surface issues that demand attention in a new research cycle.

The major change concerning the phase issue within this research cycle is the merging of the subject matter with methodological issues. At the beginning of the research, we made separate research plans for instructional design and action research. However, in our practice at act and analyze and reflect phases, we found it hard to clearly distinguish the two types of activities. They were embedded in each

other leading to a dual-commitment research mission that aims to explore both instructional design and action research.

5. Reflections on the participants and their participation

This research cycle had core groups of participants of tutor-researchers and learner-researchers, and peripheral groups of learners, local tutors and the Institute's staff. An examination of their participation surfaced problems within the three participant-related issues identified in my literature review, namely who participated, what roles they played and how they participated, which will be dealt with under the following sub-headings.

1) Who participated?

The literature seems to favour an all-stakeholder participation. Stakeholders in their definition are all those affected by the research study (Kemmis and McTaggart, 1992:51). We identified a need for more specific guidelines for selecting the participants. Our practice followed McKernan's (1996:231) suggested core working group idea instead of an including-all approach, and even this approach was challenged by our unsuccessful attempt of having a local tutor as a tutor-researcher. Furthermore, our compromise of merging pre- and post-module interviews in a one during-module interview of all the local tutors as a result of the difficulty in having their commitment to the interview, and our repeated failure (in research cycles 0 and 1) in obtaining a full record of tutorial attendance from learning centres also signaled a necessity to clarify stakeholders into two types. The first type (termed "immediate

stakeholders") were those whose engagement in the activities being studied was of their primary concern either in their work or study, and who were administratively bound to the organization who managed the research. The second type (termed "remote stakeholders") were those whose engagement was a side choice and who were not administratively related to the organization (Tutoring or administering at the Institute was a part-time job to all local tutors and administrators. They were employees of our partner universities.). The former were more likely to commit to research participation than the latter.

2) What were the roles of the participants?

The literature proposes two roles of the participants as practitioners and researchers (argued in 6.2.4). This research cycle saw a need to make a distinction of different types of practitioners and researchers so as to ensure an appropriate expectation of them. As far as the core group was concerned, when tutor-researchers were producing the module, and learner-researchers were using the module, they were in fact practitioners of different areas. This was reflected in their data contribution where tutor-researchers' were more informative about process, and learner-researchers' more about product. In the research aspect, tutor-researchers involved in all phases of the research as plan makers, data administrators, contributors, collectors, analysts and reflectors. Learner-researchers, who mainly engaged in the "act" phase of the research, acted more as data-contributors than the rest of the roles. An expectation of them to undertake all the roles within the research was unrealistic given their limited research background and competence and their

primary aim of module completion.

3) How did participants participate?

The literature revealed strong arguments on group or individual participation (argued in 6.2.4). This research cycle decided to follow a group approach guided by both the literature and reflections on research cycle 0.

Both tutor-researchers and learner-researchers showed their high appreciation of such an approach as important to their achievements (argued in 8.4.1). There were two major effects of the group approach. One was that it ensured a multi-perspective believed to be important to the validity and reliability of the findings (Wallace, 1998:209-210); the other was that it motivated, supported and monitored participants' engagement in either their research commitment or their study/work commitment to ensure achievements.

This research indicates that there should not be a rigid adherence to the group approach where members of the group work and share in all the activities throughout the whole action research process. At times this was not necessary, and at other times this was hampered by different circumstances. For example, learner-researchers were only intensively involved in the "act" phase and their level of participation varied in that 2 out of 15 had full journal records of 21 days, and 7 had full attendance of the three seminars. Tutor-researchers followed a mixture of individual and group working patterns in all phases. When I resumed my research after my suspension, Tutor A resigned from her post and Tutor B started her maternity leave. So the

remaining work was mainly conducted by me with occasions when I had exchanges with Tutor C. These circumstances indicated that a pragmatic view of a group approach was more realistic, though the effort to obtain and keep to this approach was rewarding and should be encouraged.

6. Reflections on the methods

"Methods" in this section has an extensive meaning as to methods for data planning, data collection, data analysis and reflection, and data presentation.

The following provides an examination of methods in its extensive meaning; the generic method of inquiry and reflection; the major data collection methods of the core groups and the peripheral groups; and the reliability and validity of the methods.

1) Methods should take an extensive interpretation.

In the plan phase of this research cycle, informed by cycle 0 practice, I identified a process-related issue of the methods (argued in 5.3.3 and 6.2.4). Namely, there was a need for guidance on the methods for data planning, data collection, data analysis and data reflection. The method for data presentation was added later when I tried to synthesize the multi-cycle research reports. This research cycle witnessed our effort to explore these methods.

In the data planning stage, I proposed five principles: perspective, process, focus, quality and feasibility to outline a group-oriented research plan containing decisions about who, when, what, why and how (discussed in 6.3.2). Tutor-researchers later adapted this plan with a research focus-oriented approach.

In the data collection stage, while we found this plan useful, we realized our

ignorance of the administrative and technological aspects in collecting data, especially in our situation when our learners and tutors were geographically separated, and we depended largely on e-media (e.g. email and the e-platform) to introduce the research, dispatch the instrument, and collect responses.

In the data analysis and reflection stage, we established a code-formulation process for the analysis of the qualitative data, based on McKernan's content analysis method (McKernan, 1996) (discussed in 8.1.3). I will discuss the reflection method in the next section.

In the data presentation stage, the unexpected issue of an appropriate method to present my multi-cycle research surfaced. I finally decided to follow a narrative approach with its argument presented at the beginning of the thesis.

Through this process, I observed that the action research literature did not only lack data analysis methods (McKernan, 1999:219). It needed a full-range of methods for each of its phases and recognition of different roles they play. This would increase the quality of the process so as to enhance the data credibility.

2) Reflectivity and criticality took place.

Critical inquiry and reflection is recognized as a major distinction between action research and traditional research (argued in 6.2.4). Informed by the literature that a critical community works in specific cultural conditions such as the Western European and North American contexts (Lomax, 2002:123), I was concerned about the extent of reflections participants could achieve. I examined the data to discover the reality.

a) Did we reflect at all?

The answer was positive. Reflections took place either individually (as in journals) or collectively (as in seminars). Seminar data showed that all that participated contributed to the discussion. As to the journals, Table 8.26 presents a summary of the days with reflection entries in comparison with th e days with journal entries.

Table 8.26 Days with reflection entries in 2005 tutor-researchers' and learner-researchers' journals

	Maximum*	Minimum*	Mean*	SD
tutor-researchers	48.53%	36.36%	42.59%	0.0544
learner-researchers	100%	28.57%	88.27%	0.1835

*: %=n (number of days with reflection entries)/N(number of days with journal entries)

The data shows that in journals, all reflected on their activities, with learner-researchers more active than tutor-researchers in frequencies, and tutor-researchers more balanced among contributions.

b) Why did we reflect?

As far as the tutor-researchers were concerned, reflection was driven by our commitment to further changes and improvements and it drove us to further changes and improvements. As to learner-researchers, at first, they reflected out of their commitment to research, but later they reported a genuine likeness towards the reflection when they found it beneficial to their study of the module (Three entries reported this in their post-module interview.).

c) When did we reflect?

Reflections occurred at different times. At the "act" phase when tutor-researchers

and learner-researchers reflected on the on-going activities; at the "analyze and reflect" phase when tutor-researchers reflected on the data; at the "presentation" phase when I reflected on the reflections.

d) What did we reflect on?

Generally, we reflected on three types of tensions we discovered in the data (argued in 8.1.1). Specifically, our reflections were categorized under different themes as summarized in Appendix 7.1 for tutor-researchers' data and Appendix 7.2 for learner-researchers' data. I observed that reflections of both groups centred around the research focus on instructional design and action research. Tutor-researchers' reflections covered a larger range of issues than learner-researchers'. Both tutor-researchers and learner-researchers reflected more on themselves or their own work/study than others in their journals.

e) How did we reflect?

Were the reflections on our own practice, or on that of others? Were the reflections positive or negative? Appendix 7.1 and 7.2 provides a summary.

In general, tutor-researchers and learner-researchers tended to do more self-reflections on themselves or their own study/work, and these reflections tended to be criticisms (except in learner-researchers' journal data where they made more self-praises). The circumstances where praises surpassed criticisms were: learner-researchers' reflections on research-related issues in both their journals and seminars, their reflections on themselves in journals, and tutor-researchers' reflections on others in their journals. The above observations indicated that during

the research process, self-reflection and self-criticism took place among both groups.

3) Examining journals as a core group data-collection method

This research cycle used journals to collect data from tutor-researchers and learner-researchers. Tutor-researchers' journals ranged from Dec. 21st 2004 to April 30th 2005, with number of days with journal entries shown in Table 8.27.

Table 8.27 Journal entries of 2005 tutor-researchers

	I	Tutor A	Tutor B	Tutor C
No. of days with journal entries	68	50	33	22

Learner-researchers' journal ranged from February 21st to March 13th 2005 with number of days with journal entries shown in Table 8.28.

Table 8.28 Journal entries of 2005 learner-researchers (in descending order)

learner-researchers	No. of journal entries	% (N=21)
S5	21	100%
S15	21	
S4	21	
S14	21	
S7	21	
S11	20	95.24%
S12	19	90.48%
S6	18	85.71%
S2	17	80.95%
S9	17	
S10	16	76.19%
S8	15	71.43%
S13	9	42.86%
S1	4	19.05%
S3	4	
Mean	16.25	77.46%

Our intention of having learner-researchers keep journals was to collect data that reflected their day-to-day reality. The discussions in 8.2.1 proved that journals served this purpose well. However, beyond our intention was learner-researchers'

recognition of journals as an intervention to support their study in their development mainly at the learner autonomy and affect layers as explained below with examples.

a) At the learner autonomy layer

i. Self-monitoring and self-discipline skills (three entries in post-module interview, seven entries at seminars, and six entries in journals). "*I **have to do some study today,** even though I feel tired. I must have something to write in the journal."*(S2 journal entry on Feb. 23rd 2005)

ii. Plan-making skills (two entries in journals). "*A week has passed. I kept journals every day. When I read them again, I found that they helped me a lot **in planning my everyday study**.* (S15 journal entry on Feb. 25th 2005.) *"I became **more organized in my study** since I had to keep journals."* (S2 journal entry on March 3rd 2005)

iii. Self-reflection (two entries in post-module interview, one entry in journals). *"By keeping journals I started to **question myself** what methods I should use, or what was the effective way to learn."* (S7 at post-module interview).

b) At affect layer:

i. Motivational development (six entries in journals). *"I have **persisted** for a week. I think if I go on like this, I will persist till the end."* (S5 journal entry on March 1st 2005 in his reflection to his activity entry of completing that day's journal)

ii. Emotional development (three entries in journals). *"I started to like keeping journals. It makes me feel **fulfilled** every day."* (S5 journal entry on March

1st 2005)

The influence seemed to be so strong that S5 reported *"I even developed a habit that whenever I started learning, I must* ***place my watch*** *in front of me, since I need to* ***entre my study time in my journal.*** *"* (S5 at seminar on March 12th 2005)

Such recognition was also reported by tutor-researchers. *"... especially the journals, usually a job is done then it is done, but when I have to write it down, I usually* ***think twice about it****, especially when sometimes I also need to put down my reflection. It* ***zooms everything****, whether it is something I have never noticed, or something I have noticed, but never given it a thought. Good things become better, and bad things become worse. (I: Do you like this then?) I don't have a strong feeling about liking it or not, but true, it helps me* ***realize how I should do my job.****"* (Tutor A in her post-module interview)

Tutor-researchers and learner-researchers also reported some drawbacks of journal keeping as summarized below.

a) It was time-consuming (S9 and Tutor A in their post-module interview).

b) It was a one-way interaction (S7, I, Tutor C and Tutor B in their post-module interview).

"I think journals should be made useful. That's why later in the project, I chose to send my journals by email to tutor-researchers ***instead of keeping them to myself.****"* (I)

"Journals are ***one-way communication****, and it is* ***non-real-time****. Even if I send them to the group, I don't know whether others will read them or not ... The best*

way is to share, and real time communication." (Tutor B)

c) It sometimes made them feel obliged to write something, so what they write is for the sake of writing (S8 and S12, and Tutor C in post-module interview).

"... I think the reflections I put down in my journals are somewhat ***artificial****, as if I did so because I would like to show it to you ...It is at the seminars that I produce on-the-spot feelings and thoughts."* (Tutor C) *"It is part of the research, so I need to do it." (Tutor A)*

d) It was confusing. *"Sometimes my jobs are bits and pieces. I* ***don't know which ones to go into the journals and which ones should not****. And this project lasted a very long time."* (Tutor A in her post-module interview)

e) It had a "honeymoon" effect (S3, S11 and S2 at seminars.) *"At the beginning, I found it useful to regulate my study. But now I am on the right track, I found* ***my enthusiasm about it fading.***" (S3)

4) Examining seminars as a core group data-collection method

Tutor-researchers had a full attendance of all the 11 seminars throughout the project. Seven learner-researchers had a full attendance of all the 3 seminars, seven had attended two of them and 1 attended one of them.

Seminars seemed to be more welcomed than journals (recognized by S1, S2, S5, S6, S7, S8, S9, S11, S12, S13, S14, S15, and all four tutor-researchers in their post-module interview) due to the following reported reasons.

a) It allowed them to learn from each other (10 entries of learner-researchers, and 1 entry of tutor-researchers). "***I learned a lot by attending those seminars****. I think*

I know the Institute better than many other learners because of this." (S15)

*"My reflection became **more active** in seminars than in journals. I was inspired by the ideas of other group members."* (Tutor C)

b) It conveyed non-verbal communication (4 entries of learner-researchers). *"I can see their **body language**".* (S1)

c) It had a positive affect influence (1 entry of tutor-researchers, 5 entries of learner-researchers). *"(I: We have meetings all the time. Why do you find these seminars different?) Those meetings are to have jobs done. No one cares about how you feel about it. But at these seminars, we **care about each other** and we care about how we **solve the problems together.**"* (Tutor A)

d) It allowed real-time interaction (2 entries of tutor-researchers). *"The group got into **real discussions of issues**. Not like journals, questions remained as questions there."* (I) *"Seminars have **real-time sharing** of ideas. You have **feedback from colleagues on the spot.**"* (Tutor B)

In our "plan" phase, we considered the need to have seminars as well as the learner-researchers' journals. In fact, we did find that much of the information learner-researchers reported at seminars was in fact repeating what they had already recorded in their journals. But when these seminars seemed to turn out to be more helpful to their study than to our research, they made us realize their value beyond a mere methodological strategy. Seminar attendance data (presented in Table 7.6 in 7.3.2) showed that when we changed our grouping pattern in the second week from two big groups to four small groups as a result of the consideration that each person

could have more time to contribute to the discussion, most learner-researchers' reaction was negative (except S8 and S10) for the reason that big groups exposed them to more information from all the fellow learners so that they could learn more. So we decided to change back to the big group pattern in the third week seminar.

A reflection on the above argument linked back to the interaction-related issue constantly raised in 8.3.3. We realized that it was not sufficient to just provide venues for interaction. It was the way the venues were organized and conducted that determined the quality of the interaction, and hence how they were perceived. The seminars we adopted as a research method instead of an instructional design intervention unexpectedly achieved this. They went beyond a mere provision of interaction venues in the following ways.

a) Interaction was intentional. Members of both groups did not happen to be together for the seminar. We were organized and assigned responsibilities, and we were fully aware of what was expected of us and agreed to commit to it.

b) Interaction was organized. The seminars had agendas, fixed dates and places, and organizers (I played this role throughout the research process).

c) Interaction was documented. The seminars were videoed and transcribed. They led to a physical form of presentation to serve a clearly identified purpose.

As reported earlier, these features were however absent in our support services to the peripheral learners. This could be a possible explanation why peripheral learners showed their extensive involvement in using all the available interaction venues in

our support design, but still reported a feeling of a lack of interaction (argued in 8.3.3).

5) An examination of data-collection methods of the peripheral groups

Administration concerns seemed to dominate all the possible concerns of interventional methods due to the geographical separation of tutor-researchers, learner-researchers, peripheral tutors and learners. I recorded in my journal our frustration over the issues of how we could inform our learners of the questionnaires, how we could dispatch and collect them. Our fears of a low return rate made us even decide to transfer some key post-module questions to learners' assignments from the questionnaires. We also found ourselves seeking help from our IT company to implement an e-platform adaptation to tackle the issue. Our compromise of merging pre- and post-module interviews into one during-module interview was also a result of our difficulty in getting hold of the peripheral tutors. We also identified that though these methods achieved a good scope of subjects, the depth of information they could reveal was far below those of core groups. They surfaced issues, but did not reveal the reasons.

Naturally-occurring data can be difficult to access (Silverman, 2005:119). However, our situation, which was thought to deprive us of the opportunities of observing and recording the learning process in contrast to on-campus learning, offered a convenience in collecting an alternative kind of data more difficult to obtain in an on-campus learning environment, which was the learners' naturally reported inquiries, concerns, and support needs in the form of forum posts, telephone and

email messages, etc.

6) An examination of reliability and validity of the methods

Reliability and validity is an important issue, and often a criticism leveled at action research as argued in 6.2.4. This research used a triangulation strategy to tackle the issue by collecting data from different groups, at different times and with different methods, and by analyzing data in a team approach. Though the effort contributed to a cumulative view of the reality and reflections, the research still witnessed my frustration over the following issues.

a) The inclusiveness. For example, peripheral learners' questionnaire return rate, tutor-researchers' and learner-researchers' absence of journals and seminars, failure in having a local tutor as a tutor-researcher, difficulty in obtaining peripheral tutors' commitment to the interview.

b) The credibility. For example, I had concerns about having a critical community possibly jeopardized by Chinese cultures, or supervisor-staff and tutor-learner hierarchy relationships, though the research team felt that the trustworthiness of the data was not compromised by this.

c) The development. My understanding and interpretation of the issues is changing even at the very moment I am writing this thesis. So are the tutor-researchers and the Institute. The literature is also updating. Opinions that were true then may be no longer true now, or interpreted otherwise.

The literature suggests an alternative interpretation of validity in action research. For example, Burns (1999:161) argues that it is "more to do with using the knowledge

gained from the research in specific practical contexts than with creating knowledge or generating theories in order to disseminate them to a wider academic research community." I preferred a living reliability and validity view in that its value was living in a particular context at a particular time by a particular person. Even if some kind of reliability and validity problems were discovered, the discovery itself and an understanding of the reasons for this would also be of research value.

This section discusses my improved understanding and practices of action research in its six dimensions. While this action research cycle was mainly guided by a general literature review, the next research cycle will be more substantially informed by the practice of this cycle and a more focused further literature review on emerging issues. As my understanding and practice of action research will continue to improve with the new research cycle, it is the process of achieving such improvements instead of the achievements themselves that is mostly valued.

8.5 Emerging Issues for a New Research Cycle

Research cycle 1 in 2005 had explored a dual-commitment approach by combining the subject matter field (instructional design) and methodological field (action research) in a multi-phased process. It had witnessed my changes and improvements as well as other tutor-researchers' and learner-researchers' in our understanding and practice in the two fields. We confirmed that instructional design went beyond a process of design and the production of courseware. It was a profession aiming to create a learning system of objectives, resources, support services and assessment. It followed a four-phase cyclical process of analysis and design, development,

implementation, and evaluation and reflection guided by learner- and learning-focused design paradigm. We also explored the responsiveness of the action research approach to our situation and identified context-based issues in its six dimensions to be appreciated or guarded against for future research.

When I attempted a holistic view of all the tensions uncovered by this research cycle, I identified two major issues that required attention in the new research cycle as follows.

1) A dilemma of an instructional design paradigm between learning-focused and learner-focused in my context. Here, "learning" referred to what instructional designers (tutor-researchers) believed about learning and their according translation to instructional design; "learners" (learner-researchers and peripheral learners) referred to the reality of learners' diversity in their conceptual and physical circumstances. The tension was intensified by our mistaken understanding that a learning-focus WAS a learner-focus. In fact, learning and learner represented two perspectives in our instructional design practice. What were the strategies to deal with the situation?

2) Recognition of the value of action research approach for both staff professional development and for the learners' achievements. Was it possible to apply this approach to a wider audience to obtain similar effects?

Chapter summary

This chapter has reported a data-based discovery of the ***tensions*** *of instructional design and action research processes. It has identified some* ***more focused needs*** *for further exploration in the new research cycle. In the next chapter, I will explore the literature in relation to these needs, and in the light of that, formulate a new research plan.*

Part IV

A Further Examination

(Chapters 9-11)

Chapter 9: Plan – Designing a Tri-commitment Research

Chapter abstract

This chapter reports a ***more targeted literature review*** *of the two major issues that emerged from research cycle 1, searching for both* ***theoretical interpretations*** *and* ***practical strategies*** *to tackle the issues. It aims to establish* ***an improved understanding*** *of my research paradigmatically, and to formulate* ***a tri-commitment research plan*** *for a new research cycle informed by both my reflections of previous research practices and further literature review.*

9.1 Constructing the Plan

Research cycle 1, guided by the literature and conducted in a team approach with multi-perspectives, brought about improved understanding and practice in both instructional design and action research. The research surfaced two major issues that demanded further exploration. One was the instructional strategy to deal with the tensions between the instructional design of the orientation module and the learners' reality. Among them, decisions about the time, media, assessment and interaction demanded attention. The other was action research as an approach to tutors' professional development and learners' satisfaction and achievements.

When the time came for my research to proceed to a new cycle, I found it difficult to maintain my original tutor-researchers. Tutor A resigned and Tutor B had started her four-month maternity leave. Tutor C had been promoted as Director of Learner Support Centre and became much busier.

I also found it difficult to keep the original learner-researchers. Only three of them (S2, S3 and S15) attended the seminar for a report on the research findings and a discussion of a new design for the orientation module.

Maybe it was inevitable that a longitudinal multi-cycle action research would suffer from participant mobility, though I found no warning about it in the literature. I did not hastily set up new teams. Instead, I decided to repeat the cycle 1 process by starting with a literature review on those identified issues to obtain a focused direction for my next step. My literature review in the previous cycle aimed at establishing general concepts. This new cycle, with my improved understanding and practice in instructional design and action research, would search for arguments bound to similar contexts as mine and a better understanding of theoretical principles.

9.2 Instructional Strategies, Tensions, and Learning

9.2.1 Making inquiries

As argued in Chapter 8, research cycle 1 exposed the tension between the instructional perspective of learning and the learners' reality. Learners' time affordability, media choice, and assessment orientation relied on a pragmatic approach due to a variety of non-academic circumstances. This sidestepped the tutor-researchers' instructional design built on pedagogical beliefs.

As early as the 1970s, Snelbecker proposes the dilemma between learning theories and teaching/instructional theories.

"The ideal learning theory must be comprehensive as to why learning changes

occur, but may be incomplete as to practical implications for educators. The ideal instructional theory must be comprehensive as to practical principles but may be incomplete as to why such procedures are effective." (Snelbecker, 1974:17)

I also found an echoing opinion about the tension in Rogers' (2002:59) who proposes that, in an adult education context, teaching has "inherent tension" between "the discipline that education is and the freedom that it seeks to promote. There is no right solution to the problem. We all have to live with both sides of the equation."

The following sections will explore the literature in relation to time, media, assessment and interaction issues, and possible instructional strategies to tackle them. I use the following as an inquiry framework for this review.

1) Does the literature recognize the issue in similar contexts?

2) Does the literature provide theoretical argument for it?

3) Does the literature offer possible instructional strategies?

9.2.2 Time, learning and instructional strategies

The time issue is recognized in the literature as the most important factor affecting retention in distance education (Kotter, 2001:337). DuCharme-Hansen and Dupin-Bryant (2004:8) state that adult learners with their diverse social engagements have a need for learning options of time efficiency and flexibility. They argue that successful web-based distance education should be "centred on being responsive" to such needs.

Time pressure is not only aroused by adult learners' conflicting demands of their different roles, but also by increasing number of media (White, 2003:72). It may

increase time in two ways. One is due to the need to find the most useful resources within the different media and the need to make decisions about selection. The other is that further resources may distract some learners to learn more than necessary (Thorpe, 2001:128-129, cited in White, 2003:72).

Time pressure is especially intensified at the beginning of the programme/course when learners need to familiarize themselves with the system (White, 2003:27).

The literature suggests a variety of design methods to deal with the time issue. Among these, designing activities that are related to assessment as a strategy for time-poor learners (Jones and Tait, 2005:148) seem to be too straightforward from a pedagogical perspective, but exactly reality-responsive from a practical perspective.

9.2.3 Media, learning and instructional strategies

In my literature review of media issues, I found a need for a clearer and further (compared to the definition in 7.1.2) contextual definition of "media". It refers to the physical means through which instruction is delivered, including innovative vehicles such as the Internet, MP3, or CD-ROM (usually termed "technology" in the literature) and conventional channels such as textbook and face-to-face contacts. There is also a distinction between the media through which resources are presented and delivered, such as print-based or web-based materials, text, audio or video, and media through which support services are provided, such as face-to-face, telephone, online forum, etc. The former establishes learner-content interaction, and the latter learner-tutor and learner-learner interaction. This distinction was identified through our instructional design process, when we needed to make separate decisions about

which media to use to present the resources, and to provide learner support; and also through our data analysis process, when learner-researchers reported in separation the media they used when they studied the course materials, and when they participated in learner support activities.

The findings of research cycle 1 about learners' media choices in relation to resources and support services and their reasons for these challenged the tutor-researchers' perception that a benchmark for a successful online instructional design was to ensure everything and everyone was online, as well as the efforts in achieving this. I started to notice alternative voices in the literature about the roles of technology in online education, then criteria for media choice, and finally integrated media strategy, which is further explained in the following.

1. Technology matters, but ...

Technology should be considered as a "means to an end and not an end in itself" (Jones and Tait, 2005:147). There are pedagogical arguments for technology use. Green (1999:13) argues that technology does "transform" ways of teaching and learning, yet there is no consistent evidence to show that it enhances academic achievement and learning outcomes. Bothel (2002:101) proposes that technology minimizes face-to-face interaction and social bonds that are believed to be crucial in education.

There are organizational arguments. A golden rule is that "If there is a choice to be made between print and screen, go for print!" (Hulsmann cited in Simpson, 2002:118) to achieve cost-effectiveness. Technology requires tutors to play technical,

managerial, pedagogical, and social roles, yet tutors from on-campus backgrounds are not sufficiently trained in these skills (Bothel, 2002:101-102).

There are political arguments. It is believed that technology has given rise to a "digital divide" that disadvantages certain groups of learners who are denied access (Bothel, 2002:101-102; Gourley, 2005:171).

"Of the many lessons we can learn by reviewing the history of instructional media, perhaps one of the most important involves a comparison between the anticipated and actual effects of media on instructional practices ... " (Reiser, 2001a:62). Based on his review of history of instructional medium and their minimal impact on practice, Reiser (2001a: 61-62) states that though the Internet and other digital technologies will bring great changes to education, changes will come slowly and less extensively than people anticipate.

White (2003:2) argues that technology is not as important as other factors such as "learner motivation, an understanding of the distance language learning context and of the demands it places on participants, the responsiveness of the teacher, the accessibility of learning context, and the overall context of delivery".

2. Criteria for media choice

Simpson (2002:116) assumes it a difficult task to decide what media work best for particular institutes and for particular students. He emphasizes several types of awareness in media decisions as summarized as follows (ibid. 2002:116-119). The awareness that:

1) What appears technologically attractive to the institute may not do so to the

learners;

2) Different learners have different preferences towards media;

3) Learners select different media at different stages of learning.

Simpson (2002:117-118) emphasizes learner-perspective media decisions are affected by: accessibility (with respect to cost and time), study value (with respect to the progress and particularly to the assessment), and congruence (adaptation to new media, or preference for familiar media). Bates (2005:210) proposes instructional-perspective ACTIONS criteria, namely, access, costs, teaching and learning, interactivity and user-friendliness, organizational issues, novelty and speed. Jones and Tait (2005:147) suggest that media should match the message, and the choice should consider levels of learning – media choice for beginning and experienced learners are very different.

3. Integrated media strategy

The above argument supports an integrated media strategy. This should go beyond "blended learning" (Graham, 2004) that explores learning through the combination of online and face-to-face modes. Bates (2005:222) suggests making "all five media available" (face-to-face, print, audio, video, digital multimedia) to accommodate learners' diversity. However, there is also a warning of "too many media" (Simpson, 2002:117-118; White, 2003:72) that may result in a learners' time concern in their searching, familiarizing and selecting resources (White, 2003:72).

Many decisions made about instructional design in my context were media-related. In the literature review of the plan stage of research cycle 1, I focused on the

examination of the roles of the Internet as THE preferred media in instructional design. Nevertheless, my research revealed that such a focus was limited. Intensively, "media" choice was not a simple decision as to what, but included the following sequence of seven aspects for considering their use (in sequence).

1) Concerning enhancement: Is there added value in comparison with conventional print resources or face-to-face interaction? If yes, what is it?

2) Concerning institutional accessibility: Is it accessible to the institute? Does it demand extra effort, time and cost? If yes, does the intended learning outcome out-value the effort, time and cost?

3) Concerning learners' accessibility: Is it accessible to all learners? Does it exert extra effort, time, cost and equipment requirement? If yes, are there supportive strategies?

4) Concerning time: When and/or how long should it be made available?

5) Concerning purpose: What learning aspects does it target to address (learner autonomy, language learning, affect, technology or system)?

6) Concerning interaction: Does it support synchronous or asynchronous interaction? Does it foster interaction with the tutor or among learners? Does it encourage one-to-one or one-to-many interaction?

7) Concerning management and administration: How can it be made clear to the learners with a range of media choices how to avoid possible confusion?

Extensively, the Internet, CD-ROM, telephone, cassette, face-to-face and print all played roles in the learning process depending upon their different circumstances.

Learner-researchers' data also proposed an inclusion of mobile phones (for alert type of messages) and MP3 (for audio input) in their media list.

9.2.4 Assessment, learning and instructional strategies

In research cycle 1, tutor-researchers designed a learning-process-oriented assessment scheme that included e-platform-auto-marked self-assessments and a tutor-marked summative assignment. The items in both self-assessment and assignment corresponded to the day-to-day activities of the orientation module. Tutor-researchers hoped that this design would help SUPPORT the learning process. We discovered from the learner-researchers' journals that they actually used the assessment to GUIDE their learning process. This led us to an inquiry into the role of assessment in learning and our assessment design strategies as discussed below.

1. Assessment determines reality of learning

Assessment-guided learning is identified as strategic learning (Kneale, 1997). Assessment determines the learners' focus (Brown and Knight, 1994), their time commitment (Brown and Knight, 1994; Gibbs and Simpson, 2005:20), their affect development as in personal accomplishment, their feelings of self-worth, and their willingness to engage in the academic work of schools; value attached to education (Earl, 2003: 43), and their motivation (Jaques and Salmon, 2000:2).

Assessment is considered to be such an important factor in instructional design that it is described as the 'de facto curriculum' (Rowntree, 1987). An even stronger argument is proposed by Gibbs and Simpson (2004-05:22): "There is more leverage to improve teaching through changing assessment than there is in changing anything

else." In distance education, where learner-tutor face-to-face contacts are removed, learning outcome and assessment of the outcome are crucial and this must be designed at the beginning of the development process instead of the end (Jones and Tait, 2005:138).

2. Assessment presumes and informs learning theory

Speck (2002:6) argues that assessment must be a part of the whole learning enterprise, and assessment theory presumes and informs a theory of learning. Earl (2003) identifies three approaches of assessment: assessment *of* learning, assessment *for* learning and assessment *as* learning, with the last two as a preferred future. Assessment *of* learning is summative with a purpose to certify learning and to report to people concerned; assessment *for* learning is formative aiming to diagnose learning to serve the next stage of learning; assessment *as* learning involves learners in the assessment as learning activities (Earl, 2003:20-25).

3. Assessment design strategies

Jones and Harmon (2002:21-28) propose three roles assessment plays in the learning process. Assessment to monitor learners' progress at some defined points, both computer-marked or tutor-marked; assessment to aid learning with timely feedback with synchronous and asynchronous communication as an assessment tool; and assessment to evaluate course effectiveness using the data to improve future courses. Nicolay (2002:47-51) proposes five principles for group assessment: thoroughly structure the project (clear statement of the assignment, group leaders, dates, and writing expectations), construct the groups and match membership (group size, time

for group work, member selection policy), monitor and communicate effectively, evaluate consistently, and evaluate the many as one (score the group's performance instead of giving marks to individuals). Issues concerning feedback provision (Gibbs and Simpson, 2005), cheating and plagiarism (Jones and Harmon, 2002:22-23; Bothel, 2002:100) are also a concern of the literature.

Research cycle 1 practice and this further literature review formulated two dimensions for assessment decisions.

1) Theoretical dimension: Should assessment be of learning, for learning or as learning?

2) Operational dimension:

    a) Type: formative and/or summative; closed- or open-book assessment;

    b) Grouping: individual or group;

    c) Time: frequency; release, submission and feedback dates;

    d) Content: item types; amount;

    e) Scoring: type (100-point scale or other scales; accredited in the score or not; computer- or tutor-marked; instant or delayed); proportion; make-up policy;

    f) Feedback: single-score or other approaches; instant or delayed; computer- or tutor provision;

    g) Media: media for presentation, for delivery, for submission and for feedback.

Guiding all the decisions, there should be an awareness that learners were likely to adopt an assessment-based learning approach that implied the need for a deliberate

inclusion in the assessment of the key elements the module intended to achieve.

9.2.5 Interaction, learning and instructional strategies

Interaction-related issues had been raised in two contexts in research cycle 1. One was the instructional design context where both learner-researchers and peripheral learners recognized either a lack of or insufficient interaction (argued in 8.3.3 interaction section). The other was the methodological context where learner-researchers paid tribute to action research (argued in 8.4.1 methods section) as an effective approach to their satisfaction and achievements. The findings exposed two tensions. One was that a provision of a variety of media for interaction was not sufficient for interaction to really take place. The other was that even when interaction took place, if it was not intentional and organized, it was still not sufficient as an interaction. With this argument, I focused my literature review on interaction within an intentional group organization and on the instructional strategies to promote it. I used "group approach" to umbrella a variety of terminology in the literature to describe the situation when learning took place in the form of an intentional group organization. The decision needed to be mindful of the fact that a three-week orientation module might be limited in terms of the quality of any group dynamics (e.g. collaboration, community or cooperation) as it is argued that in an online environment, these take longer time to develop than they do in face-to-face situations (Jaques and Salmon, 2000:20; Tu and McIssac, 2002:132). Therefore, establishing the rudiments (that is to form a group) was an attainable goal of the orientation module and the group working skills to be further developed in a

later stage of the course.

1. The role of group approach in two contexts

My research cycle 1 provided evidence that a group approach played a role not only as an action research method, but also unexpectedly as a motivational instructional strategy to support learners' achievements. As argued in 8.4, the following action research strategies were recognized by learner-researchers to contribute to their learning.

1) A team approach including both tutors and learners;

2) Commitment to a shared mission;

3) Intentional, organized and documented reflections as individuals and in groups.

Initially, I tried to rationalize the group approach issue from the action research perspective, as I was impressed by the above findings. However, action research literature (particular those from critical and emancipation theory schools) views group approach (usually termed "collaboration") mainly as an essential component to fulfill the initiative of social and organizational change (Kemmis and McTaggart, 1988:5; Burns, 1999:13). It is also viewed as a triangulation strategy to achieve methodological reliability and validity (Wallace, 1998:209-210). These views barely explain the association between group approach and learning achievements. McNiff (2002:9), a living educational theory activist in action research, recognizes that new knowledge can most effectively be generated through dialogue with others who are equally interested in the process of learning. Based on this argument, it is the knowledge generation through which a group approach gains an influence in an

action research process. Still, I did not find this an adequate justification of my findings.

In contrast, when I turned to the educational context, I found group approach an attractive theme and was finally convinced that it was ultimately the learning in the form of a group that joined the two contexts of action research and instructional design. "Human knowledge power is not what we know and what we possess; it is what we share with others about what we know" (Tu, 2004).

Group approach is well documented in the literature as positive or even crucial in a variety of contexts similar to or the same as mine.

1) In the online learning context

Simpson (2003:129-130) remarks that though much is to be explored about online course design, "building in the equivalent of student-student and student-institution interaction from the start" is "critically important" and is "one key to retention". Similar views are echoed by Tu (2004:19).

2) In adult learning context

McKernan (1996:166) argues "studies have shown that in adult life a person is at least three times more likely to exchange meaningful information with others by speaking than by writing." Rogers (2002:167-168) points out that much of the teaching of adults is done in groups for four reasons. First is the habitual schooling structure; secondly is the economic utilization of teacher resources; third is the preference of adult learners to group approach; fourth is the effectiveness of group approach as contrast to individual approach. He points out "the importance of

'communities of learners' in adult learning is increasingly recognized" (Rogers, 2002:175). The advantages lie in that they provide a supportive environment for learning; they provide a constant change for the learner; they provide resources to build richer and more complex structures for learning and they have a life of their own, which can assist the learning (ibid. 2002:176-177). Group approach is also believed to highlight adult learning principles such as collaboration and shared responsibilities (DuCharme-Hansen and Dupin-Bryant, 2004:57).

3) In the language education context

In classroom-based language education, collaborative learning (learners work together rather than with a teacher to achieve common learning goals) is recognized to have a positive effect on language learning (Nunan, 1992b:3; Macaro, 1997:134). White (2003) argues that while traditional distance language education contexts are more characterized by independent learning, the emerging online context is marked by its focus for "communication, interaction and collaboration among participants" (White, 2003:25).

4) In the female learning context

Women value relationships and mutuality above rights and autonomy (Gilligan, 1982 cited in Jarvis, et al. 2003:79), and correspondingly their way of knowing lays more emphasis on the role of relationships, intimacy, and communicative talk than men's (Belenky, et al. 1986, cited in Jarvis, et al. 2003:84). Though these arguments are not without challenges (Jarvis, et al. 2003:84), it is important to recognize that women may learn differently from men. Women constitute a large proportion of the research

population in both learner and tutor groups (69.9% for 2005 peripheral learners, 73.33% for 2005 learner-researchers and 100% for 2005 tutor-researchers) in my situation. A strategy that emphasizes the establishment, development, and maintenance of relationships either in their learning or professional development may be highly valued.

5) In the Chinese learning context

Jarvis et al. (2003:85-88) present an overview of research on learners, especially Chinese learners from "Confucian-Heritage Cultures" (CHCs), who learn differently from Western learners. Among all the strategies is their strong identity with family, social and work groups. Though they may appear to be reluctant in classroom teacher-learner interactions, they are observed to be more active than Western learners in one-to-one teacher-learner and between-learner communication after class.

"Group approach" can be traced in a variety of alternatively named types of learning. For example, learning community (Gabelnick et al., 1990), communities of practice (Wenger, 1998), inquiry-based learning (Edelson et al., 1999), problem-based learning (Savin-Baden, 2000), peer-assisted learning (Topping and Ehly, 2001), cooperative learning (Jaques and Salmon, 2000:2), collaborative learning (Tu, 2004:12), and networked learning (Goodyear, et al. 2004). These types of learning claim a contextual-based perspective of learning (Rogers, 2002: 103-105) as one of their theoretical bases, for example, social-constructive theory, social cultural theory, and social learning theory which emphasize that learning, or effective learning, takes

place in a social context where learners learn by sharing with others.

When these theories are associated with instructional design, group approach again becomes one of the basic desirables (Driscoll, 2000 cited in Reiser, 2001b:63; Moallum, 2003:86; Louw and Sonnekus, 2005:202).

2. Instructional strategies for group approach

Forming groups and running them effectively may receive resistance from new learners for physical (e.g. geographical distance) or social (e.g. ignorance exposure, attitude, etc.) reasons (Simpson, 2003:62). Therefore, a simple release of contact information is of little effect (ibid.). "We should copy the example of the marriage bureau and set up systems for linking educational companions" (Young, 2001, cited in Simpson, 2003:63). A group is more than a collection of people (Jaques and Salmon, 2000:6; DuCharme-Hansen and Dupin-Bryant, 2004:50). The literature proposes a variety of strategies for group approach. I summarize these into the following four aspects.

1) Activities

Moallum (2003:98-101) proposes several principles for group approach activity design.

a) Task structure and organization influence the nature and quality of student interaction. A focus, timeline, clear expectations, and well-defined roles for each participant, and a clear evaluation format are all expected.

b) Collaborative learning tasks should be carefully designed and developed if they are to promote construction of knowledge through discussion and

conversation.

c) The nature and type of collaborative task influences the content of students' interaction and the concept of shared knowledge construction. A problem-solving task is most appropriate.

d) Augmenting group activities with individual assignments seem to improve the quality of interactions and to encourage student participation.

Rogers (2002:179) suggests the following steps to form groups.

a) Informing: see a common goal, need and willingness to interact, a common bond;

b) Storming: explore to an agreed goal; discover other bound they may share (common interests, concerns or acquaintances);

c) Norming: structure groups, adopt roles;

d) Performing: becoming a team dedicated to the achievement of commonly agreed goals.

DuCharme-Hansen and Dupin-Bryant (2004:74) emphasize the necessity of opening multiple communication pathways to cater for different learning styles, to decrease learners' sense of isolation and to increase interaction.

2) People

Group approach concerns both learners and tutors. As to the learners, it is proposed that an effective working group for efficient interaction should be members between 10 to 30 (Rogers, 2002:171-172). An explicit description of the responsibilities of the group members and identification of a group leader (Moallum, 2003:91) is

considered to be important to establish social norms and guarantee a smooth collaboration.

As to the tutors, DuCharme-Hansen and Dupin-Bryant (2004:92-101) propose the idea of "instructor immediacy". It is based on a theory of affective learning that refers to instructor's verbal and non-verbal behaviours. It is found to be positively related to learners' attitudes and learning outcomes. They argue that in web-based environment, when face-to-face contact is limited, instructor immediacy can be achieved through recognition (name, background), intimacy (mutual trust) and feedback (timely and informative) strategies. This argument is illuminating in explaining the role of tutor-researchers recognized by learner-researchers to their learning achievements in research cycle 1.

3) Media

Media consideration is important for group approach in online education characterized by physical separation of tutors and learners. In research cycle 1, tutor-researchers' and learner-researchers' interaction as a group was mainly fulfilled via face-to-face contacts. Absence occurred from the second week on, suggesting that even a face-to-face meeting was insufficient to promote attendance, due to a variety of circumstances such as time-related factors. Therefore, it remained a question whether this form of group was sustainable for a larger population of learners. Though group-learning-supportive technologies were not rare at this time, the e-platform of the Institute did not include an intentional device for online group interaction, though forum and VOB programmes could be used for this purpose in a

less distinctive way. These tools could not provide specific and identified zones for particular groups.

4) Assessment

Moallum (2003:91) identifies a selection of a group assessment tool for evaluation of its work to be an important factor. A group approach is related to assessment in three ways. First is the importance of establishing an assessment system that supports and rewards learning that take place in the form of a group (McConnell, 2006:13 as later reference). The second is the grading technique. Decisions must be made as to whether grades are given to individuals or the whole group (Tu, 2004:21). Third is group approach as an assessment method. Tu (2004:24) suggests a collaboration of self-assessment, peer-assessment and instructor-assessment that is believed to engage learners' in another collaborative learning process to further develop their collaborative learning skills.

As a summary to the above discussion, a group approach in a variety of educational contexts and based on a social perspective of learning is considered to enhance learning outcomes. The instructional strategies to ensure its efficiency include decisions concerning the activities, people, media and assessment.

9.2.6 Modifying the instructional design of the orientation module

Table 9.1 outlines the major changes in the instructional design of the orientation module for spring 2006 newly intakes (Appendix 8.3-8.4 present the design details). These changes were made in the light of research cycle 1 findings discussed in 8.3.3 and the above further literature review on the four identified tensions. The left-hand

column specifies the tension each change targets.

Table 9.1 An outline of major changes in the instructional design of 2006 orientation module

Category	2005	2006	Targeted tension
Objective design			
Approach	An equal emphasis of all the objectives; objectives isolated from the following modules	Three-phased objectives with different emphasis for Week 1, Week 2 and the rest of the semester	Assessment, time
Presentation	The objectives were not specifically stated in the module.	The objectives are clearly stated on daily, weekly and phase basis in the orientation study plan and in the section titles of the assessment	Time, assessment
Resource design			
Time	Resources available after admission	Resources available after registration	Time
	Specified dates and hours for the activities	Use of "Day 1" to "Day N" instead of the exact date; suggested dates/hours for the activities	Time
	A dominance of 120-minute activities	Most activities designed to be completed within 60 minutes	Time
Sequence	A fixed sequence of the activities	Star-marked activities to indicate level of importance; instruction to indicate that learners could re-order the activities according to their personal needs	Time
Content	--	A checklist of important events and their dates	Time
	A weekly-based study plan	A three-phase study plan (each phase has general goals and specific objectives corresponding to the activities)	Time

	--	An optional technology section including keyboard skills, software download package and step-by-step e-platform demo	Media
	--	Optional resources concerning online etiquette, stories from senior learners, videoed speeches from the President and the Deans to learners	Interaction
Presentation	--	Key information in emboldened texts (for all text documents)	Time
	Separate packaging of the orientation study plan and the CD-ROM	CD-ROM attached to the print orientation study plan	Media
	Orientation study plan in a 4-page leaflet	Orientation study plan in a 48-page handbook	Time, media
	--	MP3 downloadable audio documents	Time, media
Support design			
Opening ceremony (face-to-face contact to introduce the orientation module)	Not a compulsory	Compulsory, with a specific guide to administrators stating tasks to be completed	Interaction
	No attendance requirement of the tutors	Attendance requirement of the tutors and a specific guide stating tasks to be completed	Interaction
VOB	No planned specific themes	Planned themes corresponding to the goals of the orientation module (mainly addressing autonomous learning strategies)	Interaction
	Hosted by the chair tutor	Hosted by the chair tutor and senior star learners	Interaction
	--	Playback made available for learners who may miss the synchronous programmes	Time, interaction
Group work	--	A group work guide; compulsory group work to complete a section in the	Interaction

		assignment	
Mobile phone reminder	--	Sending alerts to learners prior to important events	Media
Assessment design			
Generic	Assessment appeared on the last day of Week 1 orientation study plan	Explicit instruction on Day One orientation study plan about assessment information.	Time, assessment
Formative assessment	Computer-marked multiple-choice questions	Computer-marked multiple-choice questions in sections entitled with and corresponding to daily learning goals	Assessment
	Right or wrong report	Right or wrong report with feedback specifying the activities that address the questions	Assessment
Summative assessment	--	An additional Part IV on an evaluation of the orientation module to be completed by group work	Interaction, assessment
	Sectioned with numbers	Sectioned with the learning objectives in addition to the numbers	Assessment
	--	Guide to tutors' feedback for assignments	Assessment
	--	Assignment feedback to be uploaded to the platform	Assessment, interaction

Among all the above interventional changes, "group approach" is highly featured.

This demonstrated my intention to duplicate the group effect brought about by action research strategies for 2005 learner-researchers (argued in 8.4.1) to a larger learner population in order to tackle the interaction tension.

The design followed the four aspects (activity, people, media and assessment) of group approach strategies (presented in 9.2.5) as shown in Table 9.2.

Table 9.2 Group approach design of 2006 orientation module

Aspects	Descriptions
Activity	Learners were asked to participate in the instructional design of the orientation module through group discussions of its strengths and weaknesses. The minimum requirement was one group meeting for this activity during the module study.
People	Learners were asked to form a group of 6-10 with the help of local administrators and tutors at the beginning of the semester. Such help would continue upon request during the module.
Media	Learners could choose the media (face-to-face, VOB, MSN, etc) negotiated among their groups.
Assessment	Learners were required to report the process and outcome of their group discussion as part of their assignments (Appendix 2.16).

The design tried to include the elements such as shared commitment to a goal, interaction through organized seminars, critical reflection, etc. of 2005 learner-researchers' action research approach. It aimed to foster effective interaction in the form of a learning group on the one hand, and on the other hand, to involve learners' collective effort to the improvement of the orientation module. I abandoned my original plan of involving all learners in keeping a reflective journal during the orientation module period and providing learners with tutors' feedback to these journals. Tutor C, upon her feedback to my design, proposed that it would be difficult to add yet another task to our contracted tutors to review these journals and provide feedback without there being extra budget. In addition, three learner-researchers who attended the seminar of the new design argued that learners would experience difficulty in distinguishing if this was a compulsory task thus increasing their anxiety and pressure on their time. Since in research cycle 1, journal data provided the richest information about the learning process, I did not want to give up the idea entirely. Tutor C and I finally decided to adopt an alternative

approach of inviting learners at Beijing learning centre to keep journals on a voluntary basis for a major research purpose. We built in some self-reflective questions in the assignment to compensate for the absence of journal keeping for peripheral learners and required local tutors to provide specific feedback to learners' answers instead of a single-mark approach.

To ensure a smooth group work operation, I included instructions as to the goal, assessment, group formation, organization, possible interaction media, meeting frequency, etc. in the orientation module. Tutors would also have a group work activity guide to ensure that their support was both timely and focused.

Section 9.2 explored the literature to decide upon strategies and their rationale to resolve the four identified tensions of instructional design in research cycle 1. It revealed that each of these tensions problematised the learning leading to deeper understanding which could be translated into instructional design. It has described the proposed improved instructional design of the orientation module in the light of both research cycle 1 findings and the above-mentioned literature review, with major changes targeting the four tensions. Among them, group approach (in this case for a research/evaluation purpose) was recognized to be a primary intervention.

9.3 Action Research, Professional Development and Learning

9.3.1 Action research as professional development

My revisit of the action research literature reveals that action research in an educational context is closely linked with the initiative for professional development (McKernan, 1996:11-12; McNiff, 2002: 8).

A philosophical examination of such a phenomenon leads to an understanding of what defines a teacher, or even further, what teaching is. According to McKernan (1996:35-43), "the teacher as researcher and professional" are viewed as crucial for professional development. He argues that research justifies teaching as a profession, and teachers, as practitioners of teaching, should be directly involved in research for curriculum development and knowledge other than being researched by external researchers. Teachers are no longer seen as mere distributors of knowledge; they are producers of knowledge. McKernan (1996:43) makes clear that the tool for a transformation is "research".

Action research seems to be well suited for fulfilling the transformation (Cohen, et al. 2003:234) in comparison to other research methodologies for the following reasons.

1) A demand of joining theory and practice

Zuber-Skerritt (1997:3-4) identified a huge gap between educational theory and practice who notes that most teachers in higher education have not had any professional preparation or training for teaching. Further, their primary concern is doing research rather than improving their teaching due to both internal incentives to enhance expertise in their own disciplines, and externally through the ways the promotion system rewards this.

However, there is a pressing demand for a balanced development in both areas. According to such an argument, action research as the potential to gain its ground in the higher education context because it can cater for both the research interest of the teachers and for the expected teaching improvement.

2) A demand for joining action and research

Education used to make a strong distinction between research and practice, putting off teaching practitioners who assumed they lacked knowledge and skill to do research (Burns, 1999:14).

Wallace (1998:4-18) argues for the value of action research for language teachers in particular in that it bridges the gap between professional development and conventional research, turning the process into an "empowering procedure instead of yet an additional burden".

3) A consensus in desirable methods

McKernan (1996:38-44) proposes that autonomy of inquiry, keen observation of one's own practice, community of discourse and self-reflection are desired in transforming teachers to professionals. Action research emphasizes these features more than other research methodologies.

The above arguments clearly state that research transforms teaching practitioners into teaching professionals, and action research methodology responds well to achieve such a transformation.

This statement is clearly evidenced by the findings of my research cycle 1 where tutor-researchers recognized their professional development in both the subject matter and research competence. My focus now turns to specific cases where action research is used as a tool for professional development in a context similar to mine to identify the key features that makes action research effective. A few cases emerged though none had been found in Chinese context (emboldened text is my emphasis).

Ellis and Phelps (2000) from School of Social and Workplace Development at Southern Cross University of Australia report the early phases of a systems change approach being implemented where a **collaborative team-based action learning model** is explored. Six academic staff involved in the development of five online units take part in the process. They conduct twice weekly **team meetings and training sessions** and a series of semi-structured **interviews** at various stages. They identify that "**enthusiasm, collaboration and a sense of ownership**" are major factors driving the change process.

Taylor (2003) reports a case of using **a situated model** to manage staff development for online education. She argues that personal barriers are the most critical barriers to educational changes (Taylor, 2003:76). Thus, in online education where change is the major theme, staff development must be included in the change process. An appropriate strategy is situated learning which means that staff learn in the social and physical context within which their learning will be used (ibid. 2003:76). Though the approach used does not claim to be an action research approach, **real situations, authentic activities, collaboration and reflection** as some of the key features of this learning process resemble those of action research.

The above cases may vary in their emphasis on different aspects of action research in professional development, but they address a team approach as being one of the key principles. This corresponds well to my research cycle 1 findings where the team approach was highly valued by tutor-researchers in supporting their improvements.

Action research in an educational context is ultimately to develop understanding and

practicing in relation to learning (Dick, 1993; McNiff, et al. 2003:12). McNiff (2002:9) further explains that it differs from professional training traditions in that it encourages the inquiry "How do I improve my work?" instead of relying on experts' advice. It assumes that professionals already possess good professional knowledge and learning capacity. What they need is to generate new knowledge most effectively through dialogue with others who share and value each other's learning interests. This argument relates to both the literature and research cycle 1 findings in the recognition of "group approach" as being an effective way of learning.

Professional development is related to transformative learning for adult educators (Cranton, 1996). Transformative development theory aims to challenge traditional development strategies (e.g. how-to materials, workshops, retreats, training programmes, and evaluations and performance appraisals) that emphasize the acquisition of knowledge and separate learning from practice (ibid. 1996:26-49), and encourage self-directed learning through a critical reflection process to achieve transformation of their epistemic (knowledge about teaching and learning and methods of gaining it), sociolinguistic (understanding of social, cultural and language influence), and psychological (understanding of themselves) perspectives (ibid. 1996:116). Action research is identified as one of the strategies for transformative learning (ibid. 1996:188-191).

9.3.2 Professionalism and strategies in my context

Blackwell and Blackmore (2003:3) argue that it is difficult to define professionalism without a context since it has local meanings – there is a need to address institutional

key concerns. I found this argument related to my situation where professionalism defined by MoE or even my University is too general to be useful as guidance. A local and contextual definition of professionalism has been interpreted in the three "new"s: new technology, new concept, and new roles (Gu, 2005b:73). Namely, our staff, with campus-based background, was expected to adopt pedagogical use of modern technology, establish a new understanding of teaching and learning, and adapt to their new roles in the online education setting. The Institute had been following what was described as traditional development strategies such as staff manuals, workshops, training programmes, and evaluations and performance appraisals (Cranton, 1996:26-46) to achieve the above defined professionalism. They were criticized for their sole emphasis on the acquisition of knowledge and the separation of learning from practice (ibid. 1996:48). In addition, they tended to be product-driven. For example, staff promotion depended largely on the quantity of papers published or presented at conferences at my University. They also seemed to be random in that they were characterized by self-initiated research projects. Organized team projects on clearly defined institutional concerns were rare. Finally, the strategies ignored professional development as a targeted consequence of the research projects.

If I examined my action research cycles as a professional development strategy, I could immediately articulate some of its strengths in contrast to the above-mentioned existing strategies. First, it aimed at generating improvements in the understanding and practice of and through real-situation tasks. Second, it emphasized the process of

exploration to achieve a quality product. Third, it was conducted through an organized and rigorous team approach. Though professional development was not initially defined as a focus of research cycle 1, it was recognized as a natural outcome in two ways. One was the improvements in our (tutor-researchers) understanding and practice in instructional design. The other was the improvements in our understanding and practice of action research through the experience of carrying out action research and reflecting on this. Professionalism could not be achieved without either. I considered the research-while-working nature and the low external training cost two other attractions of action research to my context. The Institute could hardly support its staff to pursue formal off-work further education or training for several reasons. As a young Institute, it suffered from staff shortages. As an Institute pioneering a field full of innovation, it found neither experts nor education/training programmes that could appropriately address staff's professional needs. As a financially self-supported Institute, it had a limited budget at its development stage to encourage costly research projects or education/training programmes. The Institute required a professional development approach that could support its staff to undertake work-based learning around real-situation tasks at low cost. Action research was an appropriate research methodology to meet this requirement.

9.3.3 Proposing a professional development plan

Inspired by research cycle 1 achievements and the above literature review, I decided to explicitly centre professional development as an intended focus in the new

research cycle. As few of my 2005 tutor-researchers remained, and I had developed an ambition of having more staff from more disciplines to benefit from the research, I proposed to the HR Department of the Institute to invite all newly-joined staff to become participants (to distinguish this group of staff from 2005 tutor-researchers, I would use "new staff" to describe this group). Staniforth and Harland (2003) undertook a collaborative action research for new academics at a UK and a New Zealand university. They emphasized collaboration and reflection through meetings, forums, emails, and interviews to tackle the issues about identity, and disaffection and injustice – the typical issues facing new academic staff. Hardre (2005) from University of Oklahoma, the United States introduced an approach of using an iterative process model of instructional design as a professional development tool for training teaching assistants to become teaching professionals. These cases further confirmed that an action research approach that involved new staff in my instructional design process could support their professional development.

I planned to work with these new staff in a team to go through this research cycle playing multi-roles as follows.

1) To learn as a learner: they would study the orientation module as a learner;

2) To work as an instructional designer: they would participate in decision-making in the instructional design process;

3) To research as an action researcher: they would participate in the above activities following an action research approach.

The purpose was to support new staff in the process of their development towards

professionalism which aimed at conceptual and practical enhancement in undertaking their current posts in a holistic twofold perspective of learners' learning system and instructors' design system using an action research approach. To be more specific, new staff should be able to answer the question "How can I improve my understanding and practice of my current post in view of its role in instructional design and the learners' experience of learning?".

This differed from 2005 tutor-researchers' mission in two ways. One was establishing professional development as an intentional goal of the research; the other was using instructional design and action research as a generic approach to support development in their current posts in a variety of subject areas[1].

Such a process would continue to adopt effective strategies recognized by 2005 tutor-researchers. Namely, a team approach with seminars and journals to support collective and individual critical reflections.

9.4 A Tri-commitment Research Plan

Section 9.2 discussed an improved design plan for the spring 2006 orientation module aiming to relieve or minimize the four tensions (time, media, assessment and interaction) that emerged in research cycle 1. Section 9.3 has proposed professional development as a newly identified mission for action research. These arguments formed a tri-commitment research plan for spring 2006 research cycle.

The two sections demonstrated both a link and a shift between research cycles 1 and 2. They were linked in the fact that the latter would be informed by the findings of

[1] New staff may vary greatly in their subject areas as they come from posts such as learner support, tutor support, multi-media resource design and development, administrative or managerial support, etc.

the former in addition to literature guidance. There was a shift in the improvements at both theoretical and practical levels. Theoretically, an understanding of learning was recognized as an overarching paradigm to interpret and guide issues in instructional design, action research and professional development. Practically, the plan/design, implementation and reflection of the interventions targeted the context-bound tensions replaced the process of the establishment of a general framework – the original intention.

In the following I present the research cycle 2 plan again using six-dimension approach in a contrastive format highlighting the major differences. The aim is to clarify the differences between the original dual and the new tri-commitment approaches. Table 9.3 offers a summary of these changes (emboldened text represents my emphasis).

Table 9.3 Highlights of the research plan of cycle 2 in contrast to that of cycle 1

Dimensions	Cycle 1 (discussed in 6.3.2 and 7.1.3)	Cycle 2
Initiative	A **dual**-commitment research	A **tri**-commitment research
Focus	**Mono-focus for tutor-researchers only**	**Multi-focus for different participants**
Context	An understanding of the context as a sole **academic** concept	Recognition of a **paradigmatic** context (learning) in addition to academic, organizational and technological contexts
Process	**An integration** of instructional design and action research processes.	An **integration of cyclical processes** of instructional design, action research and professional development
Participant	Core research groups of **4 tutor-researchers** and **15 learner-researchers** sampling from Beijing learning centre	Tutor-researchers extended to **all new staff** of different subject areas; learner-researchers extended to **all newly-enrolled learners**
Method	Recognition of five **general disciplines** for method selection (perspective, process, focus, quality, and feasibility).	Recognition of a **team approach and reflection** as the **key features** of the methods; **improved techniques** in planning, collecting, analyzing and reflecting data

1. Initiative

Professional development in both the subject matter and methodology was identified as an additional intended initiative, thus making it a tri-commitment research into seeking improvement and changes in instructional design, action research and professional development. These three themes arose within research cycle 1.

2. Focus

Research cycle 1 identified that different stakeholders may develop different areas of focus in the research process. Therefore, instead of defining a unified research focus for all participants, I planned the following areas of focus for different participants.

1) Concerning paradigm: What is my understanding of learning? How do I improve my understanding and how does it affect my practice? (I)

2) Concerning professional development: How is my current post related to instructional design and learners' learning processes? How can I improve my understanding and practice of my role? (new staff and I)

3) Concerning instructional design: How effective are the interventional designs? Are there newly emerging issues? (spring 2006 peripheral learners, new staff and I)

4) Concerning action research: What is action research and how can it help me in my work? (new staff) How effective are the interventional designs? Are there newly emerging issues? (new staff and I)

3. Context

Research cycle 1 revealed a multi-faceted context reality. I saw a continuous extension of this context concept in my formation of the new research cycle plan. There was a paradigmatic context in addition to academic, organizational and technological contexts that guided and interpreted the research. The context was limited to instructional design and action research in research cycle 1. It was enhanced to an understanding of learning as an overarching vision of all concerned areas in research cycle 2.

4. Process

An emphasis on the cyclical feature remained. Research cycle 1 started with two parallel processes of instructional design and action research, only to find their

dependence on each other and an interwoven professional development process. Therefore, research cycle 2 would explore with more attention the integration of the processes of instructional design, action research and professional development.

5. Participant

The core research group of the new research cycle was based mainly on the immediate stakeholders (argued in 8.4.2), namely, the Institute's full-time staff and its learners. I was ambitious and wanted to have more staff and more learners benefit from research cycle 2 as much as the 4 tutor-researchers and 15 learner-researchers in research cycle 1. Therefore, tutor-researchers extended to all new staff of the Institute from centres of different subject areas and learner-researchers extended to all learners newly enrolled in spring 2006. The team approach was strengthened by including a report on its process and outcome as part of the assessment of the spring 2006 peripheral learners. However, I had different role expectations for different groups. New staff were expected to be learners, instructional designers and researchers. Spring 2006 learners would be involved in the research process in two ways. One was their individual reflection on their learning and the other was their collective reflection on the orientation module, both of which were designed as their assessment tasks. In addition, two sampled groups would be selected. One was the learner group of Beijing learning centre who would be invited to keep journals during the orientation module period on a voluntary basis to provide day-to-day data of their learning process (termed "Beijing learner group"). The other was a group member (the one with the lowest registration number among all group members

within a group, termed "sampled group members") from each learning group for an interview to further explore their concept and practice of group approach.

6. Method

Research cycle 1 established five general principles for method selection (perspective, process, focus, quality, and feasibility) and standardized the processes and techniques for planning, collecting, analyzing and reflecting on data. It identified a team approach and reflection as central principles. Therefore, this new cycle would continue to make intentional effort to use these methods to undertake the research. Table 9.4 matches the research focuses with their specific data collection methods.

Table 9.4 A plan for data collection methods of research cycle 2

Research question	Data Collection Methods	Partici-pants	Time
Overarching paradigm			
What is my understanding of learning? How do I improve my understanding and how does it affect my practice?	Journal	I	Pre-, during- and post-module
Professional development through action research			
How is my current post related to instructional design and learners' learning processes? How do I improve my understanding and practice of my role?	Interview Journal Seminar	New staff	Post-module Daily during-module Weekly during-module
Instructional design through action research			
How effective are the interventional designs to	e-platform database data of forum, VOB, emails and phone calls to both the call centre and learning centres	LPs[2]	During-module

[2] LPs=peripheral learners

address learners' time constraints?	Journals	New staff and Beijing learner group	During-module
	Assignment (reports on learning problems, difficulties and concerns)	LPs	Post-module
How do learners choose and use media for their resources and support services?	e-platform database data from forum, VOB, emails and phone calls to both the call centre and learning centres	LPs	During-module
	e-platform data-base data of print-book purchased rate		During-module
	e-platform data-base data of VOB programme attendance		During-module
	Questionnaire		Post-module
Does assessment help? How and how effective is it?	e-platform database data of assignment submission rate and scores	LPs	Post-module
	Journal	New staff and Beijing learner group	During-module
	Seminar	New staff	During-module
Does group work happen? How and how effective is it?	Assignment (reports on both the process and outcome of group work)	LPs	Post-module
	Interview	Sampled group members	Post-module
	Interview	Local tutors	Post-module
Are there newly emerging issues?	All of the above methods	New staff	Pre-, during- and post-module
Background information			
Demographic features	Questionnaire	LPs	Pre-module
Previous learning experience			
Computer and Internet skills			
Attitude towards online learning			

Major changes between cycle 1 and cycle 2 plans and their rationale are discussed below.

1) Data concerning group work

The team approach was one of the important interventions to both instructional design and action research in this new cycle. Based on cycle 1 experience, I had confidence in new staff being able to work successfully as a team, yet I was uncertain about its suitability for peripheral learners who were in large numbers, geographically separated, and new to the system. Peripheral learners' reports on their group work process and outcome in their assignments (Appendix 2.16) would be used as a major data source to evaluate the operation of this approach. Post-module interviews with sampled group members should help me explore learners' perspectives towards group approach. Post-module interviews with local tutors should offer a different perspective towards the same issue.

2) Reflection data

New staff's journals and seminars were major venues for them to utter their reflections. Peripheral learners' reflections were mainly collected from their assignments which included self-reflective questions on their own learning and collective reflection reports on the orientation module. Their reflections on group work would be collected via post-module interviews of sampled group members.

3) Messages sent to learning centres via email or phone

Research cycle 1 found learners' low utilization of the call centre service. Tutor C proposed that learners were likely to seek support through learning centre email,

telephone, or even face-to-face services. Messages to these channels could not be ignored since they might come from the most vulnerable group of learners who lacked the ability of using online support services. In the new research cycle, I asked administrators of Beijing, Shanghai and Shenzhen learning centres (these three centres constituted 70% learner population) to collect messages learners sent through local channels of email, telephone and face-to-face contacts.

4) Questionnaire administration

Research cycle 1 obtained a 53.56% return rate and 94.5% completion rate for pre-module questionnaire, and a 31.45% return rate and 92.19% completion rate for post-module questionnaire. To enhance both the return rate and completion rate, I proposed an e-platform built-in e-questionnaire system that could dispatch and collect questionnaires, monitor completion and transfer data to SPSS. I had to leave this to the decision of the Institute partner IT company.

Chapter summary:

Section 9.4 has outlined ***a tri-commitment research plan*** *for research cycle 2 in the light of research cycle 1 findings discussed in Chapter 8 and further literature review in Section 9.2 on tensions and strategies of instructional design and Section 9.3 on professional development as an action research initiative. This chapter used* ***a contrastive approach*** *to highlight the changes brought about by the previous action research cycle and further literature review. The next chapter will report how these changes operated in the "act" phase of research cycle 2.*

Chapter 10: Act – Implementing the Plan

Chapter abstract

This chapter describes the actions of research cycle 2 within its three-commitment framework, focusing mainly on a ***report of unexpected incidents*** *during the "act" process. In the development of the orientation module, the organizational and technological contexts again raised constraints on the realization of the academic design. This chapter also reports that with my unexpected six-month absence from post, the implementation of the orientation module and the research followed the plan with the exception of the intended new staff' research activities.*

10.1 Pre-module Actions

10.1.1 Developing the orientation module

The development of the orientation module went exactly and smoothly as planned though the team was mostly composed of those who newly joined this project. I assumed that two reasons contributed to this. One was that I was much more experienced in managing this process, such as pre-training, supporting and monitoring. The other was that the procedure was much more guided and standardized by the work documents from the previous research cycle.

Two incidents stood out among my reflections. One was the constraint of the e-platform to the extent of the fulfillment of the intended instructional interventions. For example, it could not support group work. No function had been designed to administer grouping, to support and monitor interaction in the group form, and to

assess group work. This meant that the above jobs depended largely on offline work by local administrators and tutors. In addition, the intake volume of VOB was still a problem. Claimed to support 500 users synchronously, VOB would suffer from voice quality after 100 users. Our technicians advised me to use a more text-based interaction than audio in the actual delivery and to keep the number under 200.

The other was the publication of the CD-ROM-version orientation module. According to the newly released national electronic product publication policy with a firmer control over the content and the technology standards, it can take the press as long as three months to process the publication. Since I could not afford this much time, I finally chose to produce the CD-ROM in a non-sale mode[3]. This meant that the product would not be recognized as an official publication, thus making all the work of my development team a non-claimable credit in any official occasions. These two cases again confirmed to me that instructional design was never a mere academic activity. Academic decisions sometimes had to be a compromise to technological and organizational constraints.

10.1.2 Forming the new-staff-researcher team

The new staff team consisted of 12 new staff[4] from different centres of the Institute (Appendix 1.5 has their profile). They were all in their 20s, and all single females except Mr. Wu. Among them, 6 were from the Resource Sector (course design and development, multi-media resource design and development, assessment), 4 from the Teaching Sector (tutor support and learner support) and 2 from the Managerial

[3] A non-sale mode CD-ROM product does not have an ISBN code, nor can be it commercially sold. It is produced for internal use only. This type of mode does not have to follow the national policy.
[4] New staff is defined as those who have joined the Institute for no more than six months.

Sector (domestic and international cooperation). 10 of them were BA holders, and 2 MA holders. 9 majored in English applied linguistics, with the other 3 in English translation, multi-media resource production and business management respectively. This team had a wider range of similarities and differences.

Twelve staff attended an orientation meeting where the history of the project, their roles and tasks were introduced. As their knowledge and experience of either the orientation module or the newly enrolled learners was limited, I made their entrance point to the project as a learner of the orientation module. They were expected to study this module exactly like those newly enrolled learners, with an additional mission of reflecting on the module and their current post in relation to both the instructional design and the learning processes by keeping journals and attending weekly seminars.

10.1.3 Preparing for data collection

The method section of 9.4 discussed four major changes concerning the data collection methods: group approach, reflection, local venues and questionnaire administration.

All instruments (Appendix 2.14-2.19) were developed based on those of research cycle 1 except the one for the reflections of group approach which was a new theme in this research cycle. Interview questions for spring 2006 peripheral learners and tutors concerning group approach aimed at examining both conceptual and operational issues. At the conceptual level, I planned to collect their views of the importance of and the roles group approach played in online education; at the

operational level, I designed questions on the grouping rules, time, media and frequency for the activities, difficulties, etc. A checklist of instruments is presented below with their details in the appendix.

1) New staff

   a) During-module seminar agendas (Appendix 2.14)

   b) Journal template (Appendix 2.15)

2) Spring 2006 peripheral learners

   a) Pre-module questionnaire (Appendix 2.1)

   b) Post-module questionnaire (Appendix 2.2)

   c) Group work report (as a part of the assignment) (Appendix 2.16)

3) Spring 2006 sampled group members

   a) Post-module interview (Appendix 2.17)

4) Spring 2006 peripheral tutors

   a) Post-module interview (Appendix 2.18)

5) Spring 2006 Beijing learner group

   a) Journal template (Appendix 2.19)

10.2 During- and Post-module Actions

Three weeks before the delivery of the orientation module, I started an unexpected six-month absence from my post due to personal reasons. I had just enough time to assign Tutor D to coordinate both the implementation of the orientation module and the research. Her post at that time was the project manager of the Course Design and Development Centre. As the action was planned solidly upon the outcomes of

research cycle 1 and well prepared in the "plan" phase, I had confidence in a smooth "act" phase even without my presence.

Upon my return to post, I received a report from Tutor D that the orientation module was delivered as planned, and all relevant data had been collected as planned as well. The only incident was that Tutor D turned out to be the only new staff who participated in the research. Below is a participant-based checklist of the data collected during and after the orientation module.

1. New staff

Among 12 new staff, only Tutor D kept a research journal and one written research report. Another staff (Shen from Multi-media Resource Design and Development Centre) had a journal record with as few as four-day entries. The rest had no record at all, nor actions. Thus, neither during-module seminars nor post-module interviews of new staff were conducted as planned.

2. Learners' groups

The total enrollment of learners on the post-diploma BA course in spring 2006 was 359 (N=359). Table 10.1 shows the data information in the form of a comparison with that of spring 2005.

Table 10.1 Peripheral learners' data of 2006 in comparison with that of 2005[5]

Data type	**Items**		
Pre-module questionnaire	Total intake (N)	No. collected (n)	Return rate
2006	359	307	85.52%
2005	407	218	53.56%
Forum posts	No. of topics	Posts from Professor Guide	Posts from learners
2006	115	78	527
2005	911	160	751
Call centre messages	Mail	Phone	
2006	103	31	
2005	39	20	
VOB attendance (high peak record)	Opening day	Week 1 programme	Week 2 programme
2006	117	64	50
2005	210	128	98
Post-module questionnaire	Total intakes (N)	No. collected (n)	Return rate
2006	359	192	54.48%
2005	407	129	31.45%
Assignment submission rate	Total intakes (N)	No. submitted	Submission rate
2006	359	340	94.71%
2005	407	390	95.82%

Among 59 groups, 40 had a member interviewed. Among 212 learners from Beijing learning centre, 81 voluntarily submitted a full record of 14-day[6] journals of the orientation module.

3. Peripheral tutors

Among 9 tutors from 7 centres, 7 were interviewed. All interviews were conducted via phone. Appendix 1.6 outlines their profiles.

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[5] As a commercial strategy to increase the intake, print textbooks for the Year 1 module were provided free to all newly-enrolled learners in spring 2006. Therefore, there was no record of the print textbook purchase rate.

[6] According to 2006 orientation study plan (Appendix 8.4), the orientation module is divided into three phases, with the first two phases for two weeks (14 days), and the third phase for the rest of the semester. Beijing learner group was asked to keep a journal of the first two weeks' study of the module.

Chapter summary

This chapter has described the activities within the "act" phase of research cycle 2, reporting some particular ***incidents*** *that would have implications for the data analysis and reflection in the "analyze and reflect" phase, which will be reported in the next chapter.*

Chapter 11: Analyze and Reflect – Learning from "Successes" and "Failures"

Chapter abstract

*This chapter focuses on the reflections of the **effects of interventions** in both instructional design and action research in research cycle 2. It starts with an argument of my re-conceptualization of the **"successes" and "failures"** of action research both of which have helped me improve my understanding and practice. Then it discusses the findings concerning the instructional strategies to tackle the time, media, interaction and assessment tensions, exploring the reasons for their **effectiveness or ineffectiveness**. It further examines the research processes of new staff (who withdrew from the research) and Tutor D (who persisted with her research) to surface those factors overlooked by research cycle 1, in order to reinforce the argument that the **multi-faceted context** of action research requires attention to non-methodological issues such as organizational and technological factors.*

11.1 Learning from "Successes" and "Failures"

I originally planned to terminate research cycle 2 at its "act" phase and started afresh with another cycle the following year because I viewed new staff's lack of involvement and my absence as a research failure. But when I could not help wondering about the reasons why new staff failed to follow the plan while Tutor D persisted, I started to realize that this naturally led me to the "analyze and reflect" phase of the research. I finally learned to appreciate new staff's "failure" of keeping

to the plan as a data source to expose key principles for future successful actions. In addition, I found reward in the smooth delivery of the orientation module without my presence, whose reasons I was equally anxious to explore.

A further examination of the data revealed more than just new staff's failure to participate. Though the group work, assessment and media interventions resulted in encouraging outcomes, the time intervention proved to be ineffective.

McNiff et al. (2003:22) state that "asking questions with a view to improvement can reveal the hidden complexities of a situation and allow important dilemmas to be surfaced and addressed, and help us to learn how to find a way through, or to live with them." The rest of the sections in this chapter will describe those "successes" and "failures". I put these two words in quotes to indicate that they represent my original view about research. Reflection enabled me to challenge this view and to become honest about my research reality. Most importantly, I will demonstrate how such honesty has helped me learn.

I will approach this by examining the effects of the major interventions in instructional design that aimed to address the time-, media-, assessment- and interaction-related tensions identified in research cycle 1, and by discussing newly emerged issues. Then, I will reflect on the interventions of professional development with a focus on discovering the reasons for new staff's withdrawal and Tutor D's persistence.

11.2 Examining the Effects of Interventional Strategies of Instructional Design

11.2.1 "Gains" and "pains" of the orientation module

The spring 2006 orientation module adopted improvements that mainly dealt with the four major tensions identified in research cycle 1. Before I reflected on the effects of these improvements specifically, I examined the learners' performances in general by studying their performance, their reported "gains" (achievements) and "pains" (difficulties / problems / concerns) and their feedback to the orientation module via their assignments.

1. Learners' performance

The following data showed that a majority of learners followed and completed the module with success.

1) 98.05% retention rate within the refundable period (7 learners applied to quit the programme) (97.79% in spring 2005).
2) 94.71% assignment submission rate (95.82% in spring 2005).
3) An average assignment score of 93.61 points (92.82 in spring 2005) with a maximum of 100 points (the same as in spring 2005) and a minimum of 84 points (85 in spring 2005).

2. Learners' reported "gains" and "pains"

Learners' reported "gains" were analyzed in comparison with those in spring 2005.

Data showed an increased recognition of gains at all layers as shown in Table 11.1.

Table 11.1 2006 peripheral learners' report of their "gains" (via assignment)

Main category	2005		2006	
	No. of entries	% (N=390)	No. of entries	% (N=340)
Learner autonomy layer	301	77.18%	415	122.06%
Language learning layer	21	5.38%	115	33.82%
Affect layer	138	35.38%	336	98.82%
Technology layer	23	5.90%	41	12.06%
System layer	54	13.85%	122	35.88%
Others	3	0.77%	7	2.06%

Learners' reported "pains" were also examined. Table 11.2 presents a summary.

Table 11.2 2006 peripheral learners' report of their "pains" (via assignment)

Main category	2005		2006	
	No. of entries	% (N=390)	No. of entries	% (N=340)
Learner autonomy layer	173	44.36%	223	65.59%
Language learning layer	191	48.97%	76	22.35%
Affect layer	176	45.13%	146	42.94%
Technology layer	22	5.64%	19	5.59%
System layer	11	2.82%	7	2.06%
Others	75	19.23%	46	13.53%

The data showed that learners reported an increased recognition of "pains" only in the learner autonomy layer (an increase of 21.23%), while the other layers all experienced a decreased recognition.

I attributed learners' increased recognition of their "gains" in all layers mainly to the deliberate effort of presenting to the learners the relationship between the objectives, the activities and the assessment in the orientation study plan, and also in each section of the assessment (see Table 9.1).

3. Learners' feedback on the orientation module

Table 11.3 summarizes the learners' general comments on the helpfulness of the orientation module elicited through the post-module questionnaires.

Table 11.3 Summary of 2006 peripheral learners' evaluation on the orientation module

Choices		2006
		% (N=307)
1)	Very helpful.	16.2%
2)	Quite helpful.	59.2%
3)	Average	22.5%
4)	Not very helpful	1%
5)	Not helpful at all.	1%
6)	No opinions.	0

The table shows that 75.4% learners recognized the helpfulness (including "very helpful" and "quite helpful") of the orientation module. Learners' specific comments were collected via their assignments in the form of a report for group discussion on the strengths and weaknesses of orientation module. Among 1258 entries, 781 were positive comments and 477 were negative comments or suggestions for improvements. They were coded in five main categories: module generics, objective design, resource design, support design and assessment design. Table 11.4 shows the data summary.

Table 11.4 2006 peripheral learners' comments on the orientation module (via assignment)

Main Category	2005 (N=390)				2006 (N=340)			
	Positive		Negative		Positive		Negative	
	No.(n)	%(n/N)	No.(n)	%(n/N)	No.(n)	%(n/N)	No.(n)	%(n/N)
Module Generics								
General comment	169	43.33%	33	8.46%	207	60.88%	20	5.88%
Time-related	1	0.26%	39	10%	6	1.76%	68	20%
Objective design								
General comment	2	0.51%	0	0%	12	3.53%	0	0%
Learning-autonomy-related	33	8.46%	0	0%	118	34.71%	0	0%
Language-learning-related	6	1.54%	0	0%	1	0.29%	0	0%
Affect-related	5	1.28%	2	0.51%	52	15.29%	14	4.12%
Technology-related	3	0.77%	0	0%	2	0.59%	0	0%
System-related	2	0.51%	0	0%	6	1.76%	0	0%
Resource design								
General comment	1	0.26%	0	0%	11	3.24%		
Content-related design	1	0.26%	13	3.33%	198	58.24%	26	7.65%
Media-related design	0	0%	3	0.77%	21	6.18%	1	0.29%
Administration-related design	0	0%	1	0.26%	11	3.24%	5	1.47%
Quantity-related design	0	0%	7	1.79%	0	0%	33	9.71%
Language-related design	0	0%	1	0.26%	0	0%	4	1.18%
Courseware-related design	0	0%	0	0%	0	0%	30	8.82%
Learner support design								
General comment	0	0%	0	0%	2	0.59%		

Content-related design	0	0%	38	9.74%	4	1.18%	64	18.82%
Media-related design	2	0.51%	57	14.62%	83	24.41%	69	20.29%
People-related design	4	1.18%	48	12.31%	2	0.51%	24	7.06%
Time-related design	0	0%	12	3.08%	0	0%	16	4.71%
Administration-related design	0	0%	3	0.77%	0	0%	19	5.59%
Interaction-related design	0	0%	2	0.51%	0	0%	70	20.59%
Assessment design								
General comment	0	0%	0	0%	4	1.18%	0	0%
Content-related design	5	1.28%	3	0.77%	6	1.76%	12	3.53%
Time-related design	1	0.26%	0	0%	0	0%	0	0%
Media-related design	0	0%	0	0%	0	0%	2	0.65%
Others	70	17.95%	0	0%	35	10.29%	0	0%
Total	**305**	**78.21%**	**262**	**67.18%**	**781**	**229.71%**	**477**	**140.29%**

Comparison of the data with that of 2005 revealed the following.

1) Learners contributed more comments (1258 entries from 340 learners in 2006 vs. 567 entries from 390 learners in 2005).

2) Learners had an increased recognition of the strengths of the orientation module (229.71%[7] in 2006 vs. 78.21% in 2005) as well the weaknesses (140.29%[8] in 2006 vs. 67.18% in 2005), though the increase in the former was greater than that in the latter.

3) Learners' had increased positive comments in all categories among which the resource design (an increase of 61.21%), the objective design (an increase of 33.97%) and the support design (an increase of 21.57%) were the top three.

4) The sub-categories that received the most positive comments in the above main categories were as follows: content-related issues of the resource design (198 entries, 58.24%); the learner autonomy-related themes of the objective (118 entries, 34.71%), and media-related issues of the support design (83 entries, 24.41%).

5) Learners provided more negative comments about resource design (an increase of 18.03%), support design (an increase of 20.12%), assessment design (an increase of 2.71%) and objectives (an increase of 3%).

6) The sub-categories that received the most negative comments were as follows: interaction-related issues (70 entries, 20.59%) and media-related issues (69

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[7] 340 learners reported 781 entries of comments on the strengths of the orientation module. Percentage = n/N (n=number of strengths entries; N=number of learners).

[8] 340 learners contributed 477 entries of comments on the weaknesses of the orientation module. Percentage = n/N (n=number of weaknesses entries; N=number of learners).

entries, 20.29%) of support design and time-related issues (68 entries, 20%) of the module generics category.

The above results implied that 2006 peripheral learners were more actively involved in providing their feedback to the orientation module. This could be the result of "group approach" – they were required to discuss and report their group opinions instead of individual views. A greater increase in the recognition of the strengths than the weaknesses suggested learners' enhanced perception and reception of the orientation module. Learners were positively impressed by the activity design, learning-autonomy-related objectives and support media, while they were not satisfied with the design for interaction, support media and time.

This section has examined learners' general achievements in the orientation module from their performance, their reported "gains" and "pains", and their feedback to the orientation module in comparison with the data of spring 2005. Issues concerning time, group approach, interaction and media, the four major tensions identified in research cycle 1, continue to play a role in affecting the learner experience. The following sections will explore the effects of instructional interventions for these four major tensions separately.

11.2.2 Gaining a better understanding of group approach

The literature from different contexts recognizes group approach as an important factor in the enhancement of learning outcomes (argued in 9.2.5). It deserves special attention in an online education context due to two conflicting beliefs. Some argue that the separation of time and space between learners and tutors and among learners

is an obstacle to effective interaction (Bothel, 2002:101), while others assert that modern technology promotes interaction by breaking down the physical boundaries (Siemens, 2002; Reiser, 2001a:61; Murphy, 2003: 292). I will explore these in my situation using the following to frame the inquiry.

1) Did group work happen? If yes, how was it organized?

2) How did learners and tutors perceive it?

3) What benefit did it bring to learners?

4) What were the difficulties?

5) What is my reflection?

1. Group work happened.

Among 340 assignments submitted out of a 359 total intake, 336 learners (91%) reported that they joined group activities. There were altogether 59 groups with their sizes ranging from 2 to 12. Table 11.5 has a summary of their activity venues.

Table 11.5 Venues for group activities of 2006 peripheral learners (in descending order)

	Activity venues	No. of entries	% (N=59)
1)	Learning centres	34	57.63%
2)	External synchronous systems (e.g. MSN, QQ)	12	20.34%
3)	VOB	9	15.25%
4)	Public places (e.g. fast-food outlets, bars)	4	6.78%

Table 11.5 shows that 64.41% learners chose face-to-face mode to undertake their group activities, either at their learning centres, or at a public place, while the rest used internal or external online synchronous systems.

Among the four learners who reported not joining group activities, one was for personal reasons. The other three reported that they could not find themselves groups.

According to the group work guide in the orientation study plan, learners could form groups in two ways. One was organized by local staff. The other was self-organized within a centre or even across centres. These three learners did not succeed in either way. Given the fact that they came from the same learning centre, I made a further inquiry and found that the local administrator was new in her post as was the tutor. Furthermore, out of the total intake of 12 learners at that centre, only the above three submitted their assignments. The local tutor in her post-module interview reported.

> *"I only got to know this (my note: group work) at the end of my first tutorial. I did not see any announcement in the e-platform about it... I had a short notice to take up this class. The department just told me what to teach at the tutorial, nothing else."*

It seems that the local staff did little group organization work to help form the groups.

This revealed neglect in my design for administrator and tutor support arrangements, especially in the support and monitoring scheme for group activities whose organization largely depended on local staff. According to the post-module interview of 7 tutors, group work at their centres was conducted by administrators rather than the tutors themselves. This meant that administrators had a vital role in the implementation of this group approach intervention. While my support design mainly targeted learners, with some consideration of the tutors' role, it ignored support for administrators. And such ignorance made learners suffer. This affected the learner experience negatively.

Would group work take place if it were not required in the assessment? 29 out of 40 sampled group members in their post-module interview gave a positive reply, but they also pointed out that if so, grouping would take a longer time (21 entries), in smaller sizes (15 entries) and in a less organized manner (11 entries). Peripheral tutors thought otherwise. Among 7 interviewees, 6 confirmed the role of assessment in the group work design. 2 reported that they used to make attempt to organize study groups but because the study group performance was not directly related to learners' scores, only those highly motivated learners participated. A strong indicator to support the tutors' argument was that all 59 groups provided a record of only one group learning activity in their assignments (they were asked to enter as many as they actually undertook). Therefore, it was possible that they did it for the main purpose of satisfying the requirement of the assessment.

Would group work take place without local staff's help with grouping? 32 out of 40 sampled group members gave a negative reply. They offered two major explanations. One was that they needed teachers to start off when they did not know each other at all (13 entries). The other was that learners' differing needs, motivation, personality may prevent them from taking initiatives in forming groups (11 entries). One learner suggested that the commitment of the group leader was equally important. Below are some typical remarks.

*"We **did not know each other**. It is unrealistic to expect us to look for each other to set up groups."* (A learner from Shenzhen learning centre)

*"It depends. Maybe **some very initiative-taking learners** could. Some learners*

only care about passing exams." (A learner from Nanjing learning centre)

*"**Adults are different**. Not like those college students of the same age and similar interest, and they stay together on campus. **Chinese people are also shy.**"* (A learner from Beijing learning centre)

Peripheral tutors' responses to this question were quite similar to those of learners. They had much to say about this since all of them were experienced in organizing group activities in campus-based teaching, if not in an online situation. A typical argument is cited below.

*"It is difficult to get those sitting next to each other into group work in a classroom, **let alone** these learners who meet only occasionally and live at different places of the city."* (Tutor from Shanghai learning centre)

In summary, 91% learners participated in group activities. Learners did not agree that assessing group work tasks was the motive for their participation, though tutors confirmed its importance. Both learners and tutors recognized the role of local staff in organizing group work, strengthening the argument raised at the beginning of this section that support for local staff must be included in the support design.

2. Learners' and tutors' perception of group approach.

Both learners' and tutors' perception of group approach was collected from the post-module interview of sampled group members, and peripheral tutors. Table 11.6 has a summary of their responses.

Table 11.6 Perception of group approach of 2006 sampled group members and peripheral tutors

Perception		Sampled group members		Peripheral tutors	
		No. of entries	% (N=40)	No. of entries	% (N=7)
1)	Important	34	85%	5	71.43%
2)	Important, but …	3	7.5%	2	28.57%
3)	Not important	3	7.5%	0	0%

Table 11.6 shows that a majority of learners (85%) and tutors (71.43%) positively perceived the role of group approach. Nevertheless, 3 learners and 2 tutors raised their concerns about its feasibility. Typical remarks are cited below.

"I know interaction is important for English learning. But I think group approach is more suitable for those ***who have a lot of time.****"*(A learner from Beijing learning centre)

*"****Theoretically*** *it is important, but to put it into practice is a* ***different issue****. It demands* ***staff's time and effort****, as well as* ***learners' time, effort, attitude,*** *etc. Staff has to consider if their work can be* ***paid-off financially.****"* (Tutor from Shanghai learning centre)

3 learners reported that they found group approach not important. They gave the following reasons.

"I don't think it is important. I have my ***own arrangements*** *for family and work. It* ***is too much trouble*** *to get in touch with everyone.*" (A learner from Shenzhen learning centre)

"Not important. ***I like to work on my own****. I think this is a difference in one's learning habit.*" (A learner from Beijing learning centre)

"It is not that important. ***Everyone is busy****. We only met once in order to complete*

the assignment. Not an in-depth discussion at all." (A learner from Xia'men learning centre)

Though small in number, the above statements surfaced a pragmatic argument against group approach: the affordability of time and effort of both learners and tutors. This echoed the tension between instructional intentions and learners' reality, and in addition, tutors' work reality.

3. "Gains" of group approach

In their post-module interview, sampled group members recognized that a group approach could bring them benefits in three aspects: learner autonomy, affect, and English language. Table 11.7 summarizes their views.

Table 11.7 Benefits of group approach reported by 2006 sampled group members

	No. of entries	% (N=95)	Top three entries	No. of entries	% (N=95)
Learner autonomy	52	55%	Monitor and discipline.	18	18.95%
			Help each other.	16	16.84%
			Solve problems.	11	11.58%
Affect	35	37%	Don't feel lonely.	14	14.74%
			Feel motivated.	12	12.63%
			Gain confidence.	6	6.32%
English language	8	8%	Practice oral English.	8	8.42%
Total	95	--	--	--	--

The above data surprised me. According to the design of the orientation module, the only task assigned to the group work was to discuss the strengths and weaknesses of the orientation module and to include a report of the discussion in the assignment. However, learners also recognized the benefits of this activity to their learning in addition to their evaluation of the module.

When I compared this situation with that of 2005 learner-researchers'(described in 8.4 on the "Hawthorne effect" and learner-researchers' reported gains by participating in the research), I found evidence that group approach had achieved a similar effect, though this new group of learners was unaware of the research mission, did not keep journals, nor was there any tutor immediacy.

Meanwhile, learners' reported benefits revealed some context-bound value of group approach. For example, "practice oral English" was meaningful only in the English language education course. Two learners mentioned that group work was especially useful at the beginning of the course when they were challenged by the transition from conventional campus-based learning to online learning.

The post-module interview of peripheral tutors revealed that they had little involvement in the group activities so they had little information about the learners' benefits from it. Table 11.8 shows a summary of their views.

Table 11.8 Perceived benefits of group approach by 2006 peripheral tutors

	No. of entries	% (N=17)
Learner autonomy	3	17.65%
Language learning	4	23.53%
Affect	10	58.82%
Total	17	--

Table 11.8 shows that tutors' perceived benefits repeated the three aspects recognized by the learners, though they seemed to emphasize the affect value (58.82%) more than the learner autonomy achievements.

4. "Pains" of group approach

Did learners encounter any difficulties in group activities? In their post-module interview, 4 out of 40 sampled group members stated that they encountered none.

The rest reported the following difficulties.

1) Time-related (19 entries)

Learners reported that they did not have sufficient time for group activities or they could hardly find common time among group members to do them. *"It is **difficult** to agree on **a face-to-face meeting** time when everybody can be available. Even **an online meeting** will have the same problem to have everybody online at the same time."*

2) People-related (12 entries)

Learners reported that it was difficult to have a full attendance. *"This time there are 3 of us. Next time you will have some new faces. It is difficult to communicate if you have new faces every time." "Sometimes only 2 turned up. This influenced the effectiveness."* Some reported that it could not be done without a responsible group leader or a teacher. *"Our group leader did not show at all. We had to look for him." "We must have a teacher present as an organizer. Otherwise, things will lose control."*

3) Communication-related (6 entries)

Learners reported that they found it difficult and time-consuming to reach or keep in contact with other group members. *"Sending emails and making phone calls to everybody took me a lot of time." "Don't know a best way to keep everybody in touch. Someone is just hard to reach."*

4) Plagiarism (1 entry)

A learner from Beijing learning centre reported, *"I believe that I am a responsible*

group leader. But other members keep asking me to send them answers to the assignment questions. I understand that they are busy, and I did send them what they wanted. But I don't feel good about this. I hope that we can really get together to learn." Her remark made me wonder: did group approach make plagiarism more likely than the situation when everybody did not know each other as closely as group members?

In their post-course interview, 3 peripheral tutors reported that they had no information of learners' difficulties as they were not involved at all in their group activities. 2 said they had not identified any difficulties. The remaining 2 echoed learners' views about the difficulty of keeping in contact with all the group members and having a full attendance.

5. My summative reflection

This section has examined group approach as a major instructional intervention of the orientation module. Data showed that at both the conceptual and operational levels, a group approach received positive responses from a majority of learners and tutors. Among the four components in the group approach design (activity, people, media and assessment presented in Table 9.2), there was a lack of support for local staff whose role in group organization was recognized by both learners and tutors as crucial. This was especially important, as the e-platform was not designed to support group work, resulting in much offline work.

The time issue also deserved attention. Learners' reported difficulties indicated that group work which required synchronous communication among more than one

person made time affordability more demanding than individual work. Meanwhile, learners' geographical separation increased the organizational work thus also costing time, especially for face-to-face meetings. Though learners' reported benefits brought by group work were desirable not only in the orientation module, but throughout their whole learning process, if learners' time commitment to group work was not directly paid-off in their course achievement, it would be difficult for them to persist with this form of learning.

Was there an alternative that supported group work that would achieve similar effects but demanded none or less synchronous communication or face-to-face contact? The e-platform must have an important role to play. However, its absence of group work design features led to the adoption of an offline mode, thus intensifying the time and space constraints as well as adding to local staff workload. This technological constraint was recognized in the design phase, and confirmed in the implementation stage.

Reviewing the group approach data from a research perspective revealed that a group approach enhanced information density and quality. In spring 2005, learners were required in their assignment to individually comment on the orientation module. 390 learners made 567 comments with an average of 1.45 entries per person. 27 learners left the answer blank while 30 stated "no comments". This research cycle asked learners to do this as a group activity. 340 learners contributed 1258 comments with an average of 3.7 entries per person. All learners provided comments. This showed to some extent that group work supported learners in making more thoughtful

responses.

To conclude, the group approach intervention gained encouraging achievements, but at the same time, reconfirmed that organizational and technological issues, together with academic considerations, constituted a macro context of instructional design, and time again should become a top concern in the instructional strategies for this context.

11.2.3 Time remained an issue

Strategies were used to support learners to tackle their time issue in their study of the orientation module (discussed in 9.2.5). Data concerning learners' time commitment was collected mainly from during-module journals (n=81), together with post-module questionnaires (n=192), and their assignments (n=340).

Many observations in this section were derived from Beijing learner group's journal data. I was fully aware that sampling on a voluntary basis (instead of stratified sampling in research cycle 1) indicated that this group who submitted the journals would be among those who took more initiative in learning than those who did not (81 out of 212 submitted journals). The reality of these 212 learners or learners from other centres would likely to be not as good as that reported in the journals. However, it still made sense to collect and compare the data of this voluntary group of learners with that of learner-researchers in research cycle 1 who also made their contribution voluntarily.

1. **An increase in study hours**

The data showed that there was an increase in learners' weekly study time in both

Beijing learner group journals and peripheral learners' questionnaire responses (Appendix 4.1 and 4.2). A close study suggested some possible explanations for this as specified below.

1) More weekend daily hours than weekdays'

Unlike spring 2005 when learner-researchers reported that they spent more daily study time on weekdays (1.59 hours) than on weekends (1.35 hours), spring 2006 Beijing learner group spent more daily time on weekends (1.87 hours) than on weekdays (1.54 hours) (Appendix 4.1). Though the time for the resource, support and assessment all had an increase on weekends, the increase was mainly in support (a 0.39 hours increase) when group activities were added to tutorials and VOB programmes (Appendix 4.3).

2) A better achievement in the number of days of learning

13.58% (11 out of 81) Beijing learner group studied every day of the week for two consecutive weeks. This percentage was near that of spring 2005 learner-researchers (13.33%, 2 out of 15). On average, Beijing learner group achieved 78.57% of the expected study days, with a maximum of 100% and a minimum of 42.86%, while in 2005, it was 66.67% with a maximum of 100% and a minimum of 19.05%. This might be a result that the orientation study plan specified the objectives on a daily basis and the attainment of these objectives were assessed in the same sequence in the sections of the assignment. Learners were likely to follow either the study plan or the assignment sections to undertake the study tasks day by day.

3) More weekend daytime distribution

Unlike spring 2005 learner-researchers, spring 2006 Beijing learner group distributed more time on weekend mornings (28.22% between 8:00-10:00) (11.17% in 2005) than evenings (25.49% between 19:00-22:00) (37.99% in 2005) (Appendix 4.4-4.5). This corresponded to the increase in weekend study time for group activities in the daytime.

4) Sunday featured in the top three preferred study day

Like spring 2005 learner-researchers, spring 2006 Beijing learner group had a slight preference to Monday (14.94%) (17.14% in 2005) and Tuesday (15.62%) (15.71% in 2005), but Sunday (14.49%) (11.43% in 2005) replaced Thursdays (13.82%) (15.24% in 2005) to rank third (Appendix 4.7). Again, this responded to the increase in weekend study time for group activities.

2. Time remained as a recognized problem

The data also revealed that time remained as the top concern of the learners.

1) Both the Beijing learner group's and peripheral learners' weekly study hours (Appendix 4.1 and 4.2) were below the expected time requirement of the module. Beijing learner group did not study for a variety of reasons with their work commitments again ranking highest (38.11%) (19.05% in 2005) (Appendix 4.8).

2) In the learners' report of their difficulties in their assignment (Appendix 6.3), time-related concerns topped the sub-categories of the five layers (37.65%). There was even an increase of 14.06% for this concern in comparison with spring 2005 peripheral learners' assignment report on their learning

difficulties/problems/concerns.

3) In the learners' report on their desired improvements on the design of the orientation module in their assignment, time-related design of the orientation module received one of the most criticisms among all the sub-categories (20%) (Table 11.4).

4) In the Beijing learner group's during-module journals (Appendix 6.5), time-related concerns topped their reported concerns (29.38%).

In summary, time-related intervention strategies worked to a limited extent. However, though it appeared that a majority of learners did not satisfy the time requirement of the orientation module, this did not affect their successful completion of the module. This repeated dilemma in two research cycles demanded further literature review for enlightenment.

11.2.4 Learning via multi-media

Learners' media utilization was examined in two categories: resource media and support media. Data came from e-platform database, learners' during-module journals, and post-module questionnaire. This research cycle was designed to include a new source of data from three largest learning centres (Beijing, Shanghai and Shenzhen) on learners' utilization of their telephones, emails and face-to-face services. However, only Beijing learning centre collected their data. Appendix 4.10-4.16 present relevant data analysis results in comparison with that of spring 2005. I will summarize the findings under the following two headings.

1. Learners' utilization of resource media

Beijing learner group's data (Appendix 4.10) confirmed that though the e-platform was still the most popular media for study by the learners (49.28% from during-module journals), print (31.38%) and CD-ROM (6.74%) were the second and third most popular, and cassette and a combination of media were also in use. MP3 (0.67%) emerged as a new media.

Peripheral learners' questionnaire data (Appendix 4.11) confirmed that found from the Beijing learner group's report, in which 53.65% chose online-based learning, with the rest choosing CD-ROM (41.15%) and print (5.21%).

2. Learners' utilization of support media

Both Beijing learner group's and peripheral learners' data confirmed that they used a variety of media for support (Appendix 4.12-4.16). Mobile phone contact, which was newly introduced to alert learners to important events, was mentioned in peripheral learners' positive comments on the design of the orientation module (6 entries in media-related sub-category of the support design layer).

Inquiries made to the Beijing learning centre (Appendix 6.8) via telephone (275 calls), email (153 messages) or face-to-face contacts (84 messages) surpassed the number of inquiries made to the call centre (103 emails and 31 telephone calls). These inquiries raised similar concerns at system and technology layers. Though data from other learning centres was absent, I could assume that they experienced a similar situation as their Beijing learning centre especially in their phone service[9].

[9] In China, the local charge of telephone service is lower than that made to other provinces.

This again reinforced the importance of the role of local administrators within the whole support system.

According to Beijing learner group's record of media use in their during-module journals, none followed a single choice of media throughout the module in either their study of resources or their use of support services. In summary, it was important to provide a variety of media for learners to correspond to their mixed choice of media. In addition, the role of MP3 and mobile phones as two new media for study was yet to be fully explored.

11.2.5 Assessment and learning objectives

The assessment design for the spring 2006 orientation module had to be aware of the learners preferred "learning as assessment" approach (Earl, 2003) (see Table 9.1 assessment design). The orientation module designed study activities for 12 days with each day targeting a learning objective of the module. The assignment was therefore divided into sections to assess the attainment of these objectives. These sections were named after their corresponding objectives. Questions within each section aimed to help learners evaluate their fulfillment of the objectives. Learners could follow the assignment section by section as they progressed in their study.

Did learners follow the assessment-orientated approach to their learning? Among 81 journals collected, no learner claimed this to be the case in their reflections. Since the assignment sections matched the day-to-day activities of the orientation study plan, it was hard to tell from the analysis of the activities whether the learners were following the study plan or the assignment sections to do their tasks. One indicator

was their record of conducting assessment activities. Of 26 learners who had assessment activity entries, 5 made all their entries on weekends, while the rest (21) made them from Mondays to Sundays. It should be noticed that the journal data showed that 55 learners did not have any record of assessment activities. Given a 94.71% assignment submission rate, it was possible that these learners forgot to keep a record rather than forgot to do the assessment.

Did assessment help learners learn? The "gains" analysis in 11.2.1 presents a good argument, a 100% pass rate and high scores (Appendix 4.18) showed that learners achieved the essential objectives. However, the newly introduced function of the e-platform that required tutors to upload their marked assignments online exposed a serious problem. According to the design, tutors were expected to provide feedback in addition to a score. A guide to this feedback was released together with the assignment answers to tutors. But Tutor D's report showed that 3 tutors among 7 still followed a single-mark approach. 3 failed to upload the marked assignments and scores on time[10] – two excused themselves as being busy with their full-time work, and the other did not know how to do the upload. It seemed that a guide document was not adequate as a support for tutors. This revealed again the need for more appropriate tutor support as part of instructional design.

11.2.6 A summary of persisting and emerging issues

This section focused on the evaluation and reflection of the instructional design of the orientation module, particularly the effects of the intervention strategies to tackle

[10] Eplatform set a deadline for the uploading of the marked assignments and scores. If tutors were behind the deadline, they could only send the assignments and scores to headquarters staff to complete the operation through the technicians.

the four major tensions identified in research cycle 1. It reconfirmed that the introduction of a group approach, the provision of multi-media access to resources and support services, and the integration of assessment with the learning process gained encouraging outcomes for both learning and research purposes. However, time remained a concern of learners and designers.

The online context is jointly bound by organizational and technological feasibilities in addition to academic considerations, a more complex situation than a lecturer delivering a course face-to-face where interventions are primarily the act of the individual. This is especially problematic in my situation, where the technology was entrusted to a commercial partner IT company, and instruction delivery involved learning centres whose staff had loose geographical, administrative and financial connection with the Institute. This multi-faceted context made the situation a demanding one. The dependence on a simple support strategy of sending a guide document appeared to put at risk the smooth implementation of the key instructional design interventions.

11.3 Examining the Effects of the Interventional Strategies of Professional Development

As described in 10.2, the professional development intervention for new staff met with low participation. Tutor D was the only person who kept a research journal. The scheduled during-module seminars and post-module interviews were not conducted at all. I used to consider this intervention a failure until I started to reflect on the reasons for Tutor D's survival and the others' withdrawal. As a result, I found that I

learned about action research as much, if not more than, as I did in research cycle 1. The failure revealed some important strengths of action research that had been masked by the success of the previous research cycle. This section will focus on my reflections of these strengths and demonstrate how these reflections helped me further improve my understanding and practice of action research. I will approach this by discussing the new staff case, Tutor D's case and my progress.

11.3.1 Examining new staff case

To explore the reasons for new staff absence of the research (except Tutor D), I started by comparing the background, the research design and process of research cycle 2 with that of research cycle 1. I found five major differences that helped explain the differences in participation.

1. Lack of ownership of the research.

Zuber-Skerritt (1996b:88) argues that "action research only works successfully if all members of a team own the problem and are interested in solving it; if they work on the project collaboratively and voluntarily, rather than being co-opted, manipulated or forced to be part of the team by a sponsor or superior; and if they are open for change, critical review, reflection and self-evaluation."

When I reflected on my research design, I found that several factors may have worked against new staff development of their ownership of the research. First of all, unlike spring 2005 tutor-researchers whose jobs were closely related to the instructional design of the orientation module or supporting newly-enrolled learners, most new staff was not directly involved in these jobs nor would they be in the near

future. Staniforth and Harland (2003:88) observe that new academics are more motivated to deal with immediate concerns than with theoretical and methodological issues. Thus, the research question "How can I improve my understanding and practice of my current post (as a tutor) from the perspective of my role in the instructional design and the learning process?" may seem to be remote to their immediate needs.

Secondly, though the letter of invitation stated that participation was voluntary and they would be free to withdraw anytime, the fact that it came from a supervisor may leave new staff little option but to be involved.

Thirdly, unlike spring 2005 learner-researchers who all held relatively senior positions either academically or administratively, new staff was all junior members who may well have had a different view of developing professionalism via action research. Cohen et al. (2003:241) cite a case of Moyra Evans, a deputy headteacher of a large comprehensive school, who wanted to improve staff development via action research. She finally realized that the ways she had seen as most appropriate for developing teachers' practice came from her own concerns as deputy headteacher. She provided a hierarchical learning situation in which her staff felt no ownership. There existed a gap between the headteachers' and teachers' attitudes to the possibility of change as a result of action research.

2. Lack of process support and monitoring

Monitoring is another important issue concerning the action research process (Kemmis & McTaggart, 1992:78). My absence from the research left new staff on

their own. Wang (2000:28) proposes that resource and research techniques are one of the obstacles to ELT teachers undertaking action research in the Chinese context. New staff had no experience in either online education or research. On reflection, the invitation letter, a brief training workshop and a reading list must be far from sufficient preparation for the research. Furthermore, there was no seminars, no feedback to their journals, no interviews. This lack of process support and monitoring made the situation worse.

3. Lack of a sense of team

Zuber-Skerritt (2002:147) proposes that inadequate methods for the participants to develop a sense of belonging in community/culture are one of the reasons for unsuccessful conduct[11] of action research. Three incidents may cause this to happen in new staff case. For one, since seminars did not take place at all, the only method that could be used to maintain a sense of community during the research process was the journals. However, as argued in 8.4.2 where 2005 learner-researchers preferred seminars to journals, the one-way communication nature of journals was not sufficient to establish a sense of a team. Secondly, a team needed an organizer. My absence left this position empty, thus no one was there to keep new staff together and to organize team activities. Thirdly, unlike 2005 learner-researchers who kept a close contact for routine work both before and during the research, some new staff did not even know each other. This situation actually required more effort in team building, yet this effort was absent.

[11] Unsuccessful is defined as "participants fail to learn and develop" (Zuber-Skerritt, 2002:147).

4. Unrealistic scale

Only 4 staff participated in research cycle 1 as the core group. Their achievements encouraged my ambition of having all staff benefit from similar experiences. However, as the aim of action research is to work with a relatively small group of people in depth as "participants" in the research (Zuber-Skerrit & Fletcher, 2007:423), 12 new staff with diverse backgrounds appeared to be too unrealistic to manage under a unified research goal.

5. Lack of organizational culture

As argued in 9.3.3, action research as a staff development strategy was an innovation at the Institute. No mechanism had yet been established to encourage this form of development. New staff felt no obligation to participate or to make the research a success, since it had little relevance to their appraisal, salary, promotion, etc. The HR Department was not involved in this process at all, nor did it consider the research as part of the staff development scheme. A lack of conceptual and operational framework at the organizational level towards this type of professional development made its success largely dependent on the particular person who initiated and organized it. However, when that person (It was me in this case) was absent, the project became vulnerable. It demonstrated the importance of establishing at least an operational framework for a project that involved staff for a variety of areas in the organization, for example, the human resource manager and directors of the relevant centres.

In summary, the roles of ownership, process support and monitoring, sense of team,

scale and organizational culture all interplay within action research and need to be paid attention to if interventions are to be successful. When these factors came together naturally in the small-scale research cycle 1, their importance was masked. The scaling up within research cycle 2 exposed the tensions when these factors were not dealt with adequately. These tensions could only be addressed from the organizational perspective to develop an understanding of the benefits of action research.

At the same time, this process taught me to learn to appreciate action research from a different perspective – it revealed that both "successes" and "failures" are equally important as data sources for further development. Problematising a "failure" to fully complete the intended research plan can reveal important lessons and it is interesting that this seems not to have signaled in the literature – as there are few reports of unsuccessful cases of action research that explore these "risk" factors. My reflection on this "failure" case proved to be of value in improving my understanding and practice of action research.

11.3.2 Examining Tutor D's case

Despite all the factors that disabled new staff from following the research plan, Tutor D persisted to accomplish a series of tasks. As the coordinator of the delivery of the orientation module, she ensured that each job was attended to as planned. As the coordinator of the research, she conducted the interviews of sampled group members and peripheral tutors, collected Beijing learner group's journals, and peripheral learners' data via pre- and post-module questionnaires and during-module e-platform

database. As a researcher herself, she loyally followed the orientation module as a learner and recorded all her learning and research activities in her 77-day journal. She also wrote a research report which was unexpected. Her case was in sharp contrast to that of new staff performance, though she herself was part of that team. The only work she did not attend to was organizing new staff research activities. I do not raise this issue as a criticism. It was my inquiry into what, why and how she accomplished or failed to accomplish that continued my further discoveries of the value of action research. I approached this by considering her background and her research data, and reflecting on the reasons for her actions.

1. Clues in Tutor D's background

Was Tutor D in any way different from the rest of new staff? A 28-year-old single female with a BA in English applied linguistics, Tutor D had a background similar to the others (Appendix 1.5 for new staff profile). A determining difference was that, as a project manager of the Course Design and Development Centre, her routine work was coordinating course design, development, and delivery, and as a result, her work was highly relevant to the instructional design context of the research. Another factor that might contribute to her achievements (which I learned from her research report) was her plan of applying for an MA study opportunity, which worked in favour of the research project in two ways. One was that she had obtained some knowledge of educational research in her preparation for the entrance exams. The other was that she knew the research experience was desirable and valuable for her future MA study. To conclude, her current post and her personal future plan fitted well with an

involvement in the research; therefore, she was better prepared than others in the subject matter and methodological issues.

Her project manager position gave her the authority to approach her "subjects" -- peripheral learners, Beijing learner group, sampled group members and peripheral tutors – to collect data, but left her powerless to organize new staff activities across centres. I could see her withdraw from this work as she did not "chase after" her colleagues for data as she did to the other "subjects". She later explained in her report, *"I regretted that I did not do this job well. I'm part of them. I am* ***as confused as them to know what is right and what is wrong. I can't give orders.***" Her contextual role made her choose differently of her research tasks to different people. Of course, this is my perspective. From her perspective, this was more to do with not fully understanding what to do and so not being knowledgeable enough to do this. Not being in the position of authority was another reason.

2. Clues in Tutor D's research data

Tutor D made 77-daily journal entries, of which 10 recorded her preparation for the delivery of the orientation module, 12 her study of the module, and 55 her post-module research activities. However, she left the column of reflections empty except for a summative comment at the end of the 12-day study of the orientation module (*"The module is well-designed, but it offers too much information -- I feel time shortage throughout the module."*). She also left the time record column empty for most of her post-module research activities. Her record of "place" showed that she had only 14 entries of "office" (14.14%), 1 entry of "classroom" (0.01%), and

the rest 84 entries were all "home" (85.85%). This suggested that she conducted most of the activities during off-work hours that corresponded to her comment on the time tightness due to the "work while research" situation in her research report.

Her journals with so few reflections offered no clues to the reasons for her persistence. I actually found evidences in her research report that functioned as a summative reflection of her work. As mentioned previously, this report was not part of the research plan. Her purpose was mainly to report to me the factual difficulties she encountered during the research process. She mentioned little about her gains in either instructional design or action research. Instead, she described in detail three groups of people who kept her going despite the difficulties.

The first group was sampled group members. She wrote, "*Those who took my interviews actually spared time for this from their tight work schedule, or during their meal times, or on their business trips. One even had it when she was waiting for her treatment in a hospital. Those interviewees did not know me at all. I can well understand those who refused my interview. But more learners were extremely cooperative. ... (She mentioned two learners who impressed her greatly in their effort of making time for the interview). **I could not help respecting them, and felt that my work has been well rewarded.***"

The second group was peripheral tutors. She recalled, "*The tutor from Shanghai learning centre first declined my interview saying that he had no time. I did not want to give up easily. I called him again a couple of days later, explaining the importance of the interview to our research project and relating it to his work. To my surprise, he*

took the interview immediately and his answers to my interview questions were among the longest and most thoughtful of all. I ***learned a lot from his responses.*** *"*

The third influence was me. I was her immediate supervisor. Since the first day she reported to post, she worked with me. This allowed her to know me better than the rest of the new staff. She ended her report with these words, *"Finally, I would like to thank Ms. Cao* ***for her trust in me****. Though I have encountered a lot of difficulties, I told myself not to give up. This is* ***my return to your trust.****"*

From the above data I could conclude that without the research team being established and the lack of reflection activities, Tutor D's professional development did not take the path that was planned. The difficulties intensified by the research solitude overshadowed the original intention. However, in spite of these missing elements, an affective element, i.e. feelings towards sampled group members, peripheral tutors and me that developed through interactions, encouraged her to persist.

Though I believed that she could accomplish more if I reflected together with her on her research process and the data she collected, I did not get the chance. She resigned soon after my return to take up a CEO post of a small-scale English training company. She had gained the experience of coping with changes and taking new challenges through the research and this would have been good preparation for this new position.

11.3.3 A multi-faceted context of action research

In 11.3.1 and 11.3.2, I focused my discussion on exploring the reasons for new staff

withdrawal and Tutor D's persistence. When I turned to analyze Tutor D's report on her difficulties in data collection, I found the following four factors working against a smooth operation of the task.

1) Organizational constraints

Tutor D reported her difficulty of obtaining precise contact information of peripheral tutors for two reasons. One was that the information held by the Institute was out of date. The other was that learning centres gave last-minute or even no notice to the Institute of any changes in their arrangements for tutors.

2) Technological constraints

Deficiency in e-platform design wasted a great deal of time in questionnaire key-in. In addition, as it failed to support ready data transference to SPSS system, Tutor D had to enter the data one by one from one system to the other, making the process time-consuming with the added risk of keying errors. Furthermore, due to an unknown system reason, it took her 6-10 minutes to download a single completed questionnaire – she had to download 499 in total (307 pre-module questionnaires and 192 post-module questionnaires)! Though my intention of developing an e-platform-administered questionnaire system to increase the return rate was fulfilled, the follow-up work proved to be no less time-saving than that of research cycle 1.

The fact that the e-platform could not manage group work also caused problems. Tutor D had to rely on local administrators to send her the grouping list. As some of them were not as cooperative, she had to search for clues from learners' assignments.

3) The learners' reality

Tutor D first used email to book interviews with learners. She got few replies. When she turned to telephone contact, she succeeded in getting members from 40 groups (67.8%, N=59), but the remaining 19 groups refused her proposal of which 18 explained that they had no time, and one even doubted her identity as a tutor.

4) Tutors' work reality

Two tutors' declined the interview, stating that they had no time.

A review of these factors together with those in new staff case (methodological and organizational factors) and Tutor D's case (background and affect factors) reconfirmed the multi-faceted context of action research (an issue discussed in 8.4.2 based on research cycle 1 findings). In the previous methodological literature review, I focused on the examination of the educational values of action research. However, both research cycles 1 and 2 demonstrated that organizational and technological factors also played important roles. To some extent, these factors appeared to be more disruptive for two reasons. One was that researchers were likely to ignore them in their plans, so that they did not have strategies to deal with any issues that occurred. The other was that it was usually beyond the research team's power to deal with them.

This current research indicated that in an online educational setting, action research involves methodological, organizational and technological considerations. In this context, "professionalism" means an overarching skill to recognize and deal with all of the above issues.

Chapter summary

This chapter has analyzed and reflected on research cycle 2 findings, leading to my improved understanding of instructional design and action research, thus my professional development. Though some interventional strategies did not work as planned, I equally ***learned from these unsuccessful incidents*** *by reflecting on the possible reasons for this. The scaling up of the previous dual-commitment research approach to include more learners and more staff in the instructional design process via a tri-commitment action research approach that included professional development was problematic. This magnified* ***the multi-faceted context*** *of my research setting. It became a more demanding job to plan, act and improve in such a context than in the previous research cycles where the need for commitment was more predictable. In the next chapter, I construct a model to accommodate such complexity for future research in my context and wider.*

Part V

Future Prospects

(Chapter 12)

Chapter 12: Establishing a Model – Multimodal Learning System Design

Chapter abstract

This chapter describes a model as an outcome of three action research cycles: ***multimodal learning system design (MLSD)****. It demonstrates how MLSD* ***contributes to knowledge*** *in my situation and in a wider context from three major aspects: MLSD as* ***a paradigm****,* ***a process*** *and a* ***product****. Finally, it analyzes the* ***strengths and limitations*** *of MLSD using its paradigmatic framework.*

12.1 Planning a Model

Many changes had taken place at personal, institutional, national and global levels alongside my three research cycles. These changes will be reviewed in the following sections in this chapter, justifying the contribution of multimodal learning system design, a model that integrates the paradigm, the process and the product of the design and development work in online education, to my Institute and to online education in China.

12.1.1 From instructional system design to learning system design

My research was initiated by a need for a framework for course design and development in 2004. This framework gradually took shape via my three research cycles. In research cycle 1, I replaced "course design and development" with "instructional system design" (argued in 6.1.1). At this stage, I have decided to replace "instructional system design" with "**learning system design**". The following

section will mainly explain its contextual definition and then I will indicate how this term is a useful one.

As my research shifted from a mono-perspective of an instructional designer to a multi-perspective of all stakeholders, the word "instructional" (from a teaching perspective) has become inappropriate. "LEARNING system design" emerged as an alternative. Though the term came into being naturally as a result of my research, I have surprisingly found echoing opinions in the current literature.

Some still use the old term, yet emphasizing a role shift. For example, Hoyle (2005:26) argues that instructional design at its emergence expressed itself well as military training basically needed detailed instruction to rules and regulations, whereas in e-learning, an instructional designer's job is to create an environment in which learning can take place. There should be a focus shift from the instruction to the learners. Miller (2007) proposes instructional designers as new education professionals with emergent specialties. He points out that instructional designers conventionally have a rich set of concepts to work on the individual components of an online course. They need to obtain a good understanding of the learning process, thus, the ability to assemble different course components into a framework (Miller, 2007:491).

Some propose the new term "learning design". Stating that learning design emerged from instructional design, Beetham and Sharpe (2007:8) assume that the former focuses more on learning activities as the central concern of the design process. I am impressed by their proposal that learning design has become a "paradigmatic

discipline" that is concerned with "the design process and its outcomes" (Beetham and Sharpe, 2007:8). Their remark can be interpreted in two ways. One is that learning design claims to be pragmatically different from instructional design; the other is that it is viewed both as a process and a product.

There are also opposing voices. Some scholars argue that people can only design instruction. They cannot design learning (Wikipedia). For example, "automotive engineers can design a car that, under specific conditions, will achieve 50 miles per gallon. These engineers cannot guarantee that drivers of the cars they design will (or have the capability to) operate these vehicles according to the specific conditions prescribed. The former (automotive engineers' design) is the metaphor for instructional design. The latter (drivers' capability) is the metaphor for learning design" (Wikipedia).

The above examples show an academic concern about the misleading message the term "instructional system design" can convey in the current learning- and learner-centred educational era. I will describe my view about this in 12.2.2.

12.1.2 From online to multimodal

Up to now, I have been using "online" to describe the teaching and learning context in which I work. At the start of research cycle 1, my research team and I held a "the-more-online-the-better" belief in our instructional design. However, this belief was challenged by our research findings. Learners' choice of media in both their study of resources and their use of support services was a pragmatic decision rather than a pedagogical consideration. The data showed that a variety of circumstances

(e.g. place of study, time of study, computer and Internet accessibility, financial considerations, conventional learning habits, courseware design, etc.) contributed to learners' media choice (argued in 8.3.3.2). It revealed the importance of a provision of a variety of media for resource and support access. The findings in research cycle 2 further confirmed this.

Based on the above discussion, I propose that the term "multimodal" is more appropriate to describe my context than "online". It is different from "multimedia". According to Mayer (2005:3), multimedia focuses on the presentation of words and pictures as the instruction to promote learners construction of knowledge. It is also different from "multimodal" as defined in the current literature. For example, Low and Swell (2005) and Gu (2007) use this term to describe the mode of presentation (e.g. text, audio, video, graph, flash, etc.) of an online product.

The concept of "multimodal" can be traced in "blended learning" (learning through the combination of online and face-to-face modes) to enhance learning effectiveness (Graham, 2004), and "five media learning" (face-to-face, print, audio, video, digital multimedia) to accommodate learners' diversity (Bates, 2005:222).

My definition of "multimodal" is twofold. At the conceptual level, it represents an ecological paradigm guiding media decisions (to be argued in 12.2.2). At the operational level, it refers to the provision of a variety of media for resources and support services for learners that accommodates their diverse media preference, and optimizing the pedagogical, organizational and technological value of different media.

With the above contextual definition of MLSD (multimodal learning system design), I will attempt a model that reflects my improved understanding and practice of the three major themes I have been pursuing (instructional design, action research and professional development).

Zuber-Skerritt (2002:143) considers model building to be "a process of establishing patterns and relationships; it is a simple representation of a theory or message in the form of a concept map or diagram; thus, it is 'miniessence', that is the essence of a message or theory in minimum form – whether in language and/or graphics". Such a model should build on data and present a concept or system in a multi-dimensional way that reveals patterns and relationships.

I will elaborate the meaning of MLSD by presenting the following discussion. I have included the role of each in brackets.

1) MLSD as a paradigm (theory to research and practice)

2) MLSD as a process (means for research and practice)

3) MLSD as a product (ends of research and practice)

4) MLSD as an integration of the paradigm, the process and the product

Each discussion will address only one aspect of the final model and a complete model will take shape by the end. I intentionally adopt this approach to reflect the procedural improvements in my understanding and practice of MLSD through my reflections on the three research cycles.

12.2 MLSD as a Paradigm

12.2.1 Reviewing my paradigm

My three research cycles have witnessed my improvements in the understanding and practice of both the subject and research areas: from course design and development (cycle 0), to instructional design (cycles 1 & 2), and finally to MLSD; from method-focused (cycle 0), to dual- (cycle 1) and tri-commitment (cycle 2) action research cycles.

They have also witnessed my struggles: a struggle within a multi-faceted context of academic, organizational and technological issues; a struggle between the instructional intentions and the learners' reality.

These improvements or struggles were either initiated or interpreted by my paradigmatic beliefs. Initially, the subject and research paradigms were considered separately (as presented in Chapter 6). However, as my research progressed, I started to realize that an understanding of learning was the fundamental issue. Table 12.1 provides a summary of my paradigmatic changes throughout the three research cycles.

Table 12.1 My paradigmatic changes in research cycles 0-2.

Cycles	My paradigmatic beliefs
Cycle 0	No paradigmatic considerations.
Cycle 1	Claimed "learning- and learner-focused" paradigm in instructional design. Confused paradigm between interpretive paradigm and paradigm of praxis (argued in 6.2.3) in research.
Cycle 2	An awareness of the tension between "learning-focus" (from instructional designers' perspective) and "learner-focus" (from the learners' reality). An awareness of action research as professional development in both the subject matter and research methodology, guided by an understanding of learning.

The three cycles constantly brought me back to the fundamental inquiry of what learning was. I responded by locating myself in an existing theoretical framework. However, I have not yet established a consistent view of learning that can address both the harmonies and tensions of my tri-commitment research.

12.2.2 Establishing my paradigm

As my tri-commitment research is a combination of the subject matter, the research methodology, and professional development, it seems that no single existing theory can encompass this complexity. I will approach the issue by defining my paradigmatic view of MLSD in the following four aspects: a design view, a learning view, a multimodal view and an ecological view.

1. A design view

At the centre of MLSD is design. But the word "design" goes beyond its literary meaning of "making a plan" (Cambridge Advanced Learner's Dictionary). It stands for a paradigm shift from a conventional view of learning and research.

Reigeluth (1999:13) defines learning theories as descriptive theories that offer little help to education practitioners applying them to their practice. He later (2003) proposes a distinction between descriptive theories and design theories, and argues that building knowledge of using the Internet in education falls into the design theory category and that this raises three questions. For ease of comparison, the discussion of the first two questions is summarized in Table 12.2.

Table 12.2 Distinction between descriptive theories and design theories (Reigeluth, 2003:341-343)

	Descriptive theories	**Design theories**
Q1: What kind of knowledge is needed?		
Field:	Natural science	Social science
Focus:	Identification of cause-effect relationships or natural processes	Identification of the best means to accomplish the goal
Result of:	Conclusion-oriented inquiry	Decision-oriented inquiry
Q2: What kind of research methods is needed (to generate the knowledge)?		
Purpose:	To compare to prove	To compare first for the purpose to improve
Focus:	What's best among what we already know how to do	How we can improve on what we know how to do
Concerns:	Validity or truthfulness of the description	Preferability or usefulness
Methods:	Comparison methods	Developmental research methods, grounded theory development methods, design experiments, formative research methods

The third question, "what is the role of technology in knowledge building?" is not just about integration, but transformation, as history shows that new technology is always initially used in a traditional context, but finally leads to fundamental changes in that context because it can greatly improve in the ability to meet the needs of educators (Reigeluth, 2003:344). Design theories are responsive to my situation in two ways. One is their comprehensiveness in addressing a similar context with mine that includes learning, teaching, technology, and research; the other is that many of their descriptions match the circumstances of my tri-commitment research.

Inspired by Reigeluth' notion of design theories, and based on my research findings, I outline a design view of my research with the following features.

1) It concerns both "what" and "how".

My professionalism in MLSD is not just about what it is, but also about how it is achieved and improved.

2) It concerns both research and practice.

MLSD is a process and a product to deal with real-situation tasks through research-based practice.

3) It concerns improvements.

It aims not at proving how correct an existing practice is, but rather at learning from both the "successes" and "failures" in the current practice for future improvements.

4) It concerns responsiveness.

It seeks the most responsive by taking into consideration context-bound intentions and constraints of the instructors and learners. The validity and reliability is determined by its preferability or usefulness to the stakeholders involved at that time and in that context.

5) It concerns technology.

My institutional context determines that all MLSD decisions have to consider technology factors. However, those decisions should not be based only on technological enhancement to meet the academic needs. They should also take into consideration the organizational and technological circumstances of the instructors and the learners' reality (to be further argued in 3).

2. A learning view

A design view can interpret a single cycle of my research, yet it does not address the

changing nature through a cyclical process of learning in groups via inquiries and reflections, as practiced in my research. "Change", "cyclical", "group/team approach" and "inquiry and reflection" are four key components of the learning view.

Firstly, change has proved to be the major initiative and intended outcome of instructional design, action research (argued in 6.2.3 and 6.2.4) and professional development (argued in 9.3.2) in my research.

Secondly, the cyclical nature links an understanding of change with the practice of change. "Cyclical" is especially appreciated in a context where there lacks an established theoretical and practical framework and where researcher-practitioners are novices in both the subject matter and research methodology, as in my situation. "Cyclical" is also a necessary mechanism to support the design view of improvements.

Thirdly, group/team approach reflects the social feature of learning. It has proved to be a crucial factor in the instructional design, action research and professional development processes in research cycle 1 (argued in 8.3.3 and 8.4.1). This view has been further strengthened in the "successes" (discussed in 11.2.2) and "failures" (discussed in 11.3.1) of research cycle 2. I used "group" to describe the peripheral groups of learners and tutors, and "team" to describe the core groups of tutor- and learner-researchers. The current literature has a tendency to favour "community" instead of "group". Community is "more complex than merely the collection of individuals that compose that group" (DuCharme-Hansen and Dupin-Bryant,

2004:50). It has been defined in many different ways. In the online learning context, Barab et al. (2004) argue that by keying in a user name and a password does not equal entering a virtual community. They define a community with these characteristics: a common practice and/or mutual enterprise; opportunities for interactions and participations; meaningful relationships; and respect for diverse perspectives and minority views. In action research, Stringer (2007:187-204) proposes community-based action research as the next generation. This approach features a purpose to "build collaboratively constructed descriptions and interpretations of events that enable groups of people to formulate mutually acceptable solutions to their problems." In professional development, Wenger's (1998) "community of practice" has a sustaining influence in the field, and it has been advanced to a "learning community" idea in educational settings that provide both learners and staff a "renewed sense of meaning and purpose to their work" (Norris, et al., 2002). It is my intention in my future research to go beyond a single case of the orientation module and the single group of tutors and learners associated with this. I plan to develop my group and team concept to that of a community with the contextualized meaning based on the findings of my previous research. This community would involve all the major stakeholders, particularly MLSD designers and its end-users, with those in the core playing the role of practitioners as researchers. It would be intentionally organized for the purpose of learning for improvements and changes by members' commitment to a shared mission through individual and collective inquiries and reflections.

Fourthly, inquiry and reflection are widely recognized methods for action research (discussed in 6.2.4), and proved to be effective in research cycles 1 and 2 for promoting improvements in my own and the teams' understanding and practice.

3. A multimodal view

There has been a long standing debate about having technologized human or humanized technology in education (Snelbecker, 1999b:671). Technology is valued in its enhancement of "the interaction and the representations of the subject matter that is inaccessible to those learners if without technology" (Mayes and Freitas, 2007:13). It should bridge the social and digital divides instead of building them (Gourley, 2005:182). In my situation, technology decisions should not disadvantage learners who seek interaction via different media at different times, in different places, and for different needs.

The technology needs to be subordinate to learning. "Technology is not the issue … The issue is how and what we as teachers want our learners to learn, namely the design of the learning experience not the testing of the technology" (Bates, 2005:223). "From all the media comparison research, we have learned that it's not the delivery medium, but rather the instructional methods that cause learning. When the instructional methods remain essentially the same, so does the learning, no matter how the instruction is delivered." (Clark and Mayer, 2008:21). Wang (2007:49) argues that the choice of resource presentation and delivery should not be evaluated on its advancement in technology-employment, rather on its appropriateness.

The technology is subject to a multi-faceted instructional context (defined as

"instructional ecology" in 4). As revealed in my research, it is not a mere academic decision, rather, a decision that must address the organizational and technological environment as well (discussed in 8.3.2 and 11.2.6).

The technology is subject to the learners' reality (defined as "learning ecology" in 4). As found in my research, learners' choice of media for resources and support services is determined by a variety of conceptual, physical, and financial circumstances (discussed in 8.3.3.2).

I started my research by proudly labeling myself as one who was engaging in an innovative field characterized by the utilization of modern technology in education, and firmly believed that it was this innovation that made my situation unique and maybe privileged. My three-cycle research gradually led me to realize that technology, or media, has been a focus of attention only because my research through the focus on the technology usefully exposed the assumptions I was making about learning and the learners, and brings about intentional effort to improve my understanding and practice of learning. In addition, I have become aware that the effectiveness of learning is not determined by the number or advancement of the technologies being employed.

Therefore, I have decided to use multimodal instead of online -- I want to signal my paradigm shift in relation to the way I view technology. Multimodal is not just a term to describe a variety of the physical means for learning. Neither is it just a pedagogical consideration. It is a paradigm that views media as a means to learning that accommodates a multi-faceted instructional context and learners' diversities.

4. An ecological view

The three views discussed above are not totally new paradigms as they started to take shape from research cycle 1. They can be described as reinforced contextualized paradigms. However, the ecological view is a completely new concept – it came into being as a result of my struggle with my existing beliefs.

The three research cycles constantly confronted me with a multi-faceted context in which academic, organizational and technological circumstances interplayed in the instructional design and action research processes. They also persistently presented tensions between the instructional intentions and the learners' reality. MLSD is not a mere academic issue from a mono-perspective of an instructor.

The literature echoes similar observations. Some observations are made from an instructional design perspective. McKenney et al. (2006:67) identify a "three-perspective influence". They are a social-political perspective (people and organization), a technical-professional perspective (methods and process) and a substantive perspective (learning aims and content). Instructional decisions thus should have three major orientations as to learners, society and knowledge. Gu (2007:38-39) introduces "pedagogical dimension" and "policy dimension" to distinguish academic considerations from non-academic ones in courseware design.

Some observations are viewed from a learners' reality perspective. Watts (2000:15) argues that a growing market philosophy of higher education that prioritizes learners' needs in line with the most acclaimed learner-centredness paradigm arouses two challenges. One deals with the learners: who are the clients and do they know

what they need? The other deals with the designers: what are their responsibility and obligations to respond to the needs of the wider society as well as to the individual clients? Ding (2008:336-337) states that the four advantages of online education in contrast to campus-based education (an increase in interaction between learners and tutors and among learners, in flexibility of learning, in accessibility of resources and learner-centredness) are totally off-set by the reality of the Chinese learners' dependence on their tutors, and their instrumental motivation for obtaining a degree. This situation turns the advantages into disadvantages and affects the competiveness of online in relation to campus-based education.

Is there an overarching concept that recognizes the above tensions and guides practice? Gu (2006) proposes an ecological model (Figure 12.1) of e-learning in the Chinese context ("online education" in my term).

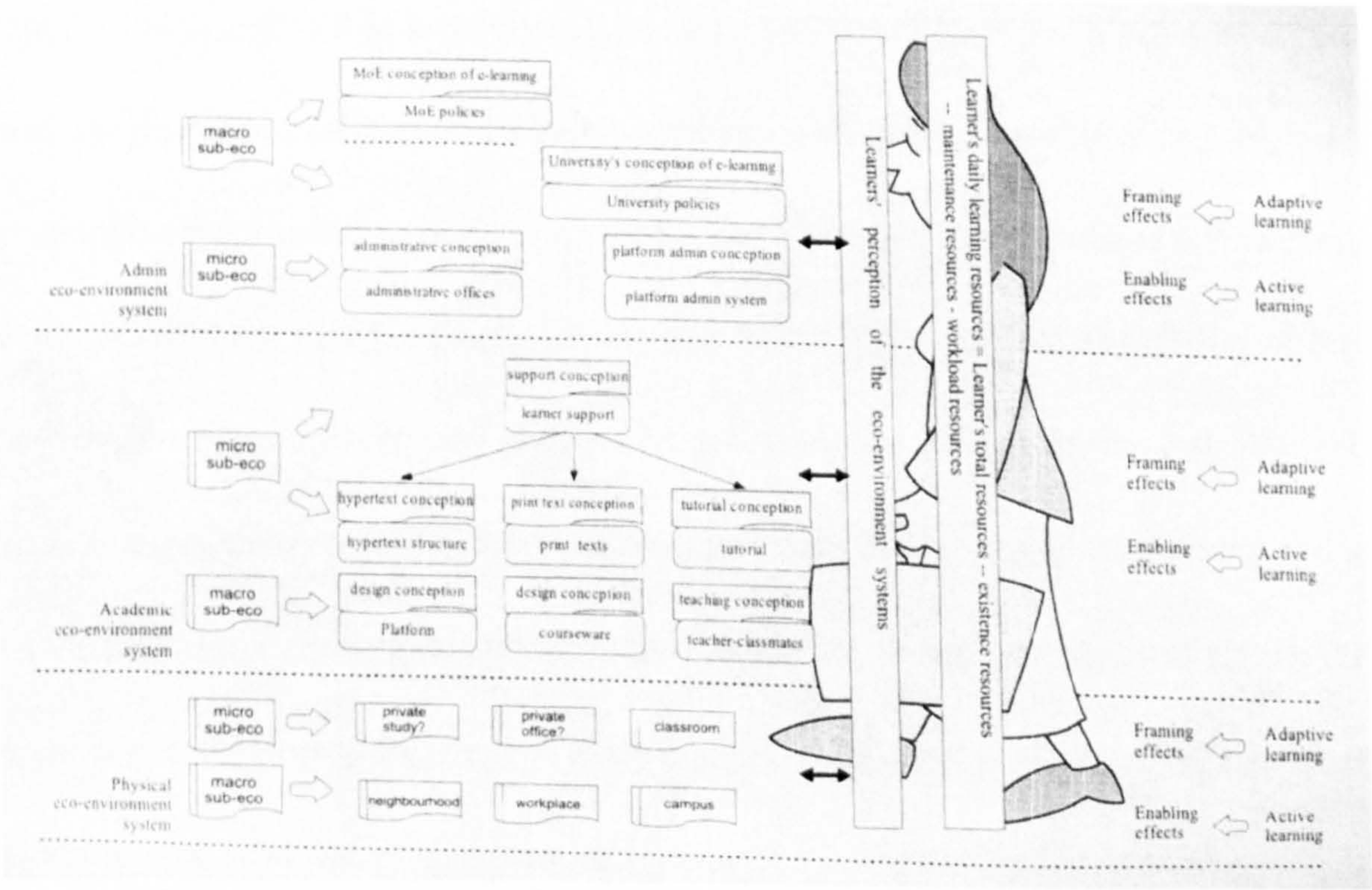

Figure 12.1 An ecological model of e-learning (Gu, 2006:116)

This model presents two key concepts. One is that the e-learners' learning environment constitutes three eco-environment systems (administrative, academic and physical) which e-learning design must holistically consider. The other is the framing and enabling functions of the eco-environment that demands learners' adaptive and active learning abilities.

Gu (2006:116-117) argues that tensions rise when the three eco-environment systems are not viewed under one general framework. This model attempts a holistic view towards "a harmonious and well-balanced e-learning eco-environment" that promotes effective learning (Gu, 2006:118). When I associated this argument with my situation, I realized that the tension between the instructional intentions and the learners' reality could be usefully interpreted by this ecological model.

The ecological view is a recently emergent concept in the relevant fields. Clover (2002:170) describes it in an adult education context (environmental adult education) with an integration of human-earth relationship with cultural, political, social, and economic aspects of education. Gravemeijer and Cobb (2006:48) defines a "learning ecology" with the following components: the belief of the teacher, the ability of the teacher, the classroom culture, and social practices, the design of the instructional sequence, the characteristics of the instructional tasks, the pedagogical-didactic skills of the teaching in making this whole system work, etc. When McNiff et al. (2003: 22) state that action research is not just about "finding a way through" dilemmas, but also "to live with them", they are displaying a similar ecological attitude towards tensions.

The concept of ecology is both historic and timely in the Chinese context. An eco-awareness tradition can be traced back to Confucius time (551-479 BC) up to the present (Ye and Zhu, 2008:34) when "build a harmonious society" has become a key mission of the Chinese government for 2020 (Xinhua News Report, 2006).

While an ecological view is appreciated, I have identified one inadequacy of Gu's model to represent my situation. As my research cycles included both instructors' and learners' perspectives in an MLSD process, they actually dealt with two types of ecology: instructors' instructional ecology and learners' learning ecology. Shearer recognizes this in his remark though he does not pinpoint it.

> *"...we have, in many ways, several critical factors that need to be reviewed prior to even considering how the course will be presented and function. These include 1) the audience characteristics, 2) geographic dispersion of the audience, 3) the technologies available to the audience, 4) the goals of the learners, 5) the goals and missions of the learning organization, 6) the costs that must be recovered, the costs of delivery, 7) the political environment at the time for the learning organization, 8) the faculty compensation, and 9) the market competition. All of these factors come into play in designing a course at a distance before we even look at the learning goals and objectives of the actual course.* (Shearer, 2003:275 cited in Gu, 2007:38, numbering as my reference)

In the above remark, 1) to 4) are factors of learners' learning ecology, whereas 5) to 9) are factors of instructors' instructional ecology.

Based on my research findings, the two ecologies and their relationship are

interpreted in the following headings.

1) Instructional ecology

The instructional ecology can be illustrated in three domains (academic, organizational and technological) each at three levels (macro, meso, and micro) of two aspects (conceptual and practical) as illustrated in Figure 12.2.

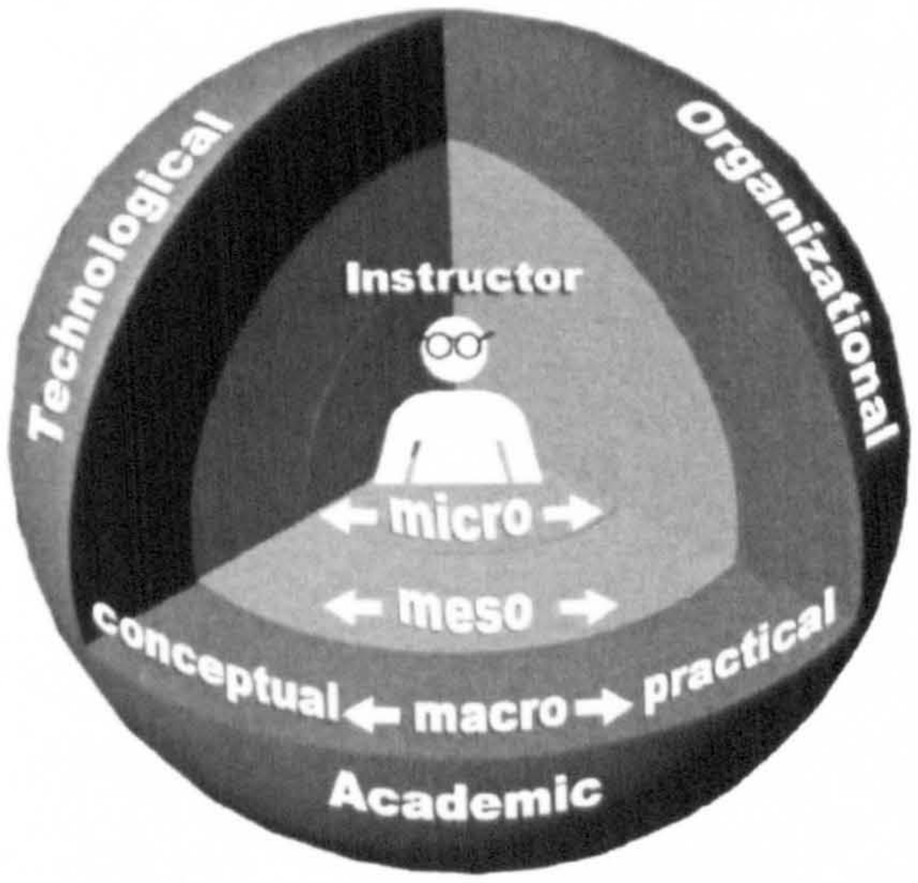

Figure 12.2 An instructors' instructional ecology

The meanings of the terms in Figure 12.2 are defined in Table 12.3.

Table 12.3 Definitions of the terms in instructional ecology

Categories		Descriptions
Domains	Academic	Pedagogical understanding and practice
	Organizational	Policy, market, administration, management, finance, etc. at different levels
	Technological	Physical means through which instruction is delivered, including innovative vehicles such as the Internet, MP3, or CD-ROM (usually termed as "technology" in the literature) and conventional channels such as textbook and face-to-face contacts
Levels	Macro	Global or national
	Meso	University or institute
	Micro	Immediate stakeholders
Aspects	Conceptual	Theoretical understanding of the target issues
	Practical	Practice of the target issues

2) Learning ecology

The learners' learning ecology contains five domains (academic, affect, technology, system and demography) each of two types of effects (framing and enabling) corresponding to two types of learning abilities (adaptive and active) as illustrated in Figure 12.3.

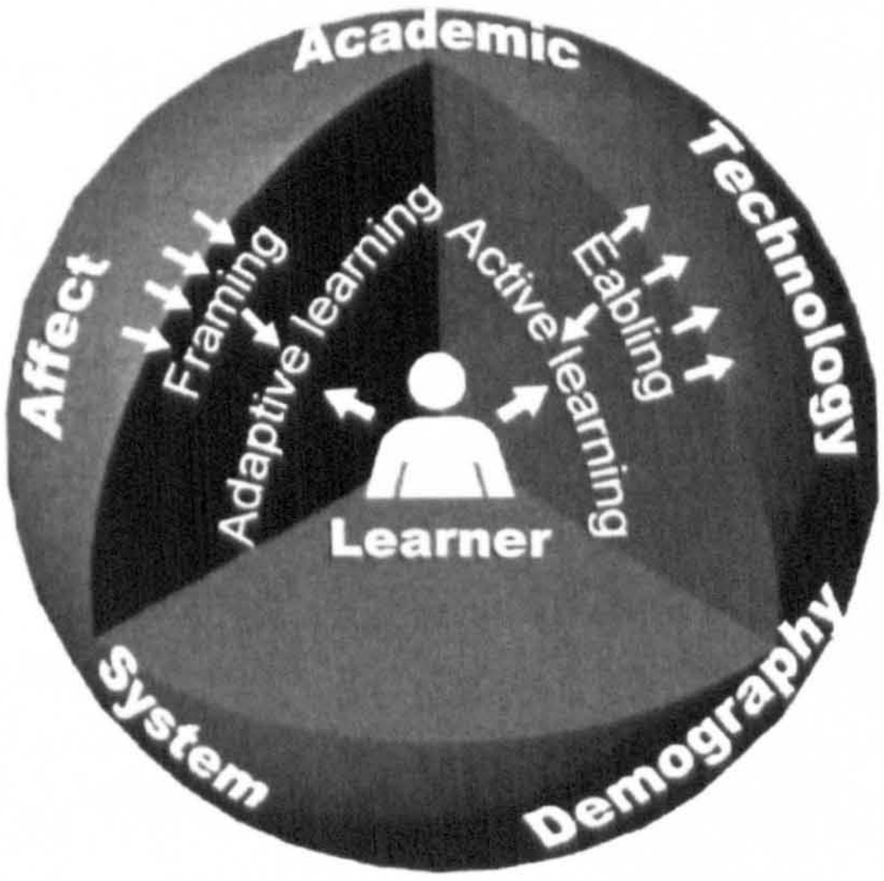

Figure 12.3 A learners' learning ecology

The meanings of the terms in Figure 12.3 are defined in Table 12.4.

Table 12.4 Definitions of the terms in learning ecology

Categories		Descriptions
Domains	Academic	Learners' perception and practice of learner autonomy and language learning.
	Affect	Learners' possession and development of motivational, emotional and social affect.
	Technology	Learners' perception and mastery of technology for their study.
	System	National, university and institutional administrative policies and learners' knowledge of them.
	Demography	Learners' age, gender, family, education, occupation, study place, distance from the learning centres, time availability, etc.

Effects	Framing[12]	Constraints or limits the environment imposes on the learner's behaviour (Gu, 2006:113).
	Enabling	Opportunities the environment offers to the learner, who can seize them to achieve what she/he wants (Gu, 2006:113).
Learning ability	Adaptive	Learners' learning strategies responding to framing effects.
	Active	Learners' learning strategies responding to enabling effects.

3) An ecology of MLSD

An ecological view of MLSD is to achieve a good balance between the instructional ecology and the learning ecology.

From "instructional system design" to "MLSD" implies a fundamental paradigm shift. But this does not mean a shift to the learners' perspective wholly dominating the design, rather a redefined relationship of teaching and learning from "learning embedded in teaching" to "teaching embedded in learning" (Gu, 2005b:70).

Section 12.2 has outlined four key paradigmatic beliefs as an outcome of my three research cycles. These are a design view, a learning view, a multimodal view and an ecological view. These views arise from reflecting on the previous research described in this thesis and inspired by the literature. Section 12.6 will elaborate the practical value of these views.

12.3 MLSD as a Process

Guided by the paradigmatic beliefs, I will first examine the practice of learning system design as a process, then as a product. This section presents a procedural establishment of my process model of MLSD.

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[12] The literature uses "affordances" and "constraints" to convey similar message. "Affordances" refers to "a potential or perceived capacity of an object to enable the assertive will of the actor" (Ryder and Wilson 1996 cited in Murphy and Coffin, 2003:237).

12.3.1 Process models of my three research cycles

My learning system design model as a process has evolved with my three research cycles. In the following, I shape this model in accordance with the improvements of my understanding and practice of the processes it represents.

1. Research cycle 0 – an assembly-line model

In research cycle 0, the orientation module went through an "assembly-line" model as shown in Figure 12.4.

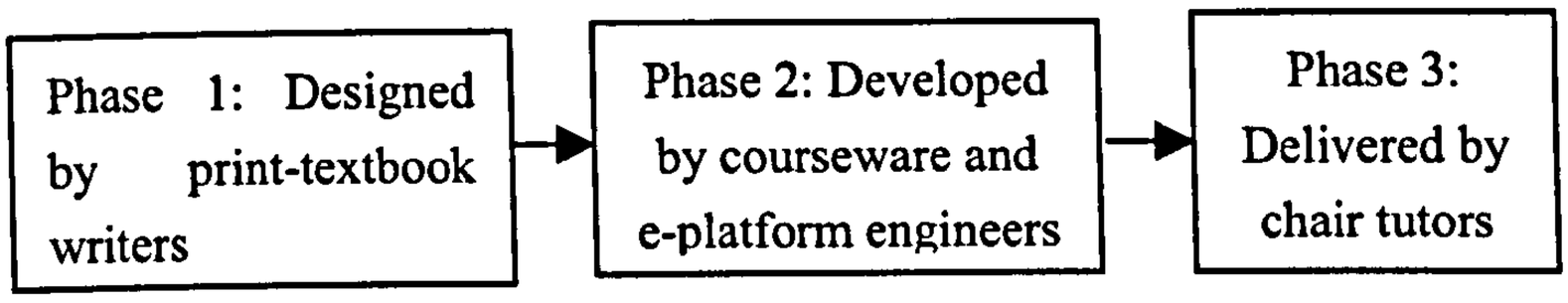

Figure 12.4 An assembly-line model of research cycle 0

This model is characterized by a linear process conducted fragmentally by different groups of staff. The research concluded in a dual-concern of this process, and an extension of this process to a cyclical pattern.

2. Research cycle 1 – a dual-commitment model

In research cycle 1, I experimented with a dual-commitment model as shown in Figure 12.5.

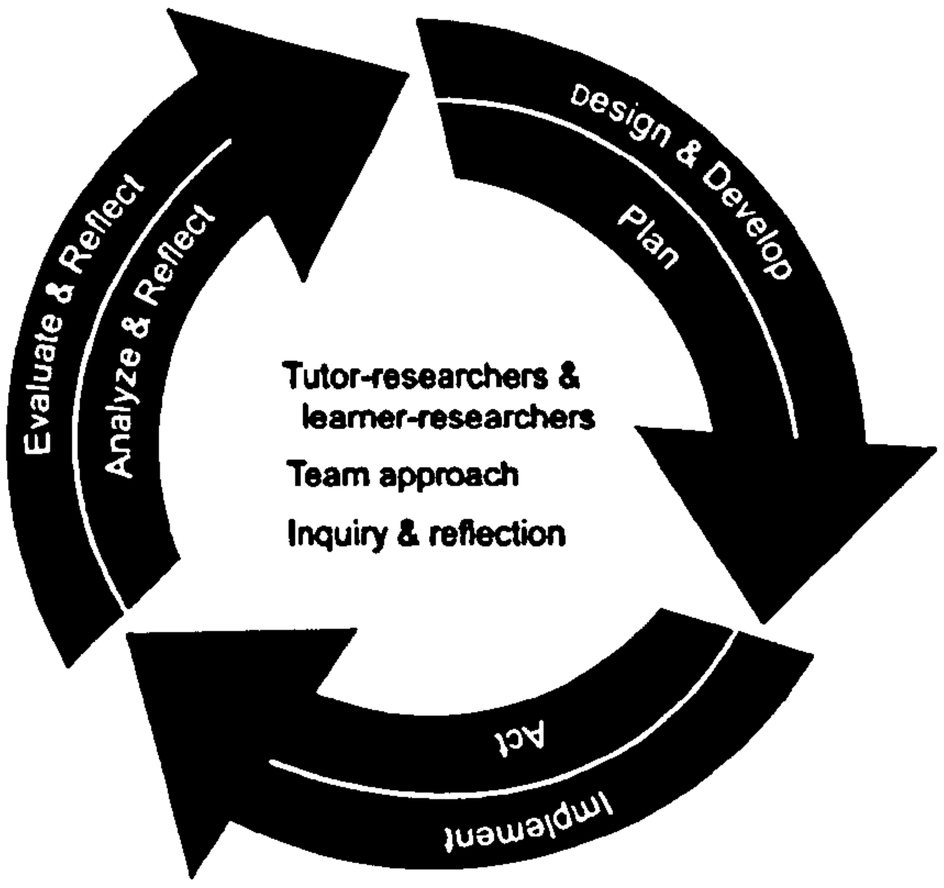

Figure 12.5 A dual-commitment model of research cycle 1

This model incorporates the dual-process of instructional design and action research undertaken by a core tutor-researcher and learner-research team. Key principles such as cycle, team approach and inquiry and reflection in such a process were confirmed. Professional development emerged as a natural outcome.

3. Research cycle 2 – a tri-commitment model

In research cycle 2, I consciously applied a tri-commitment model as shown in Figure 12.6.

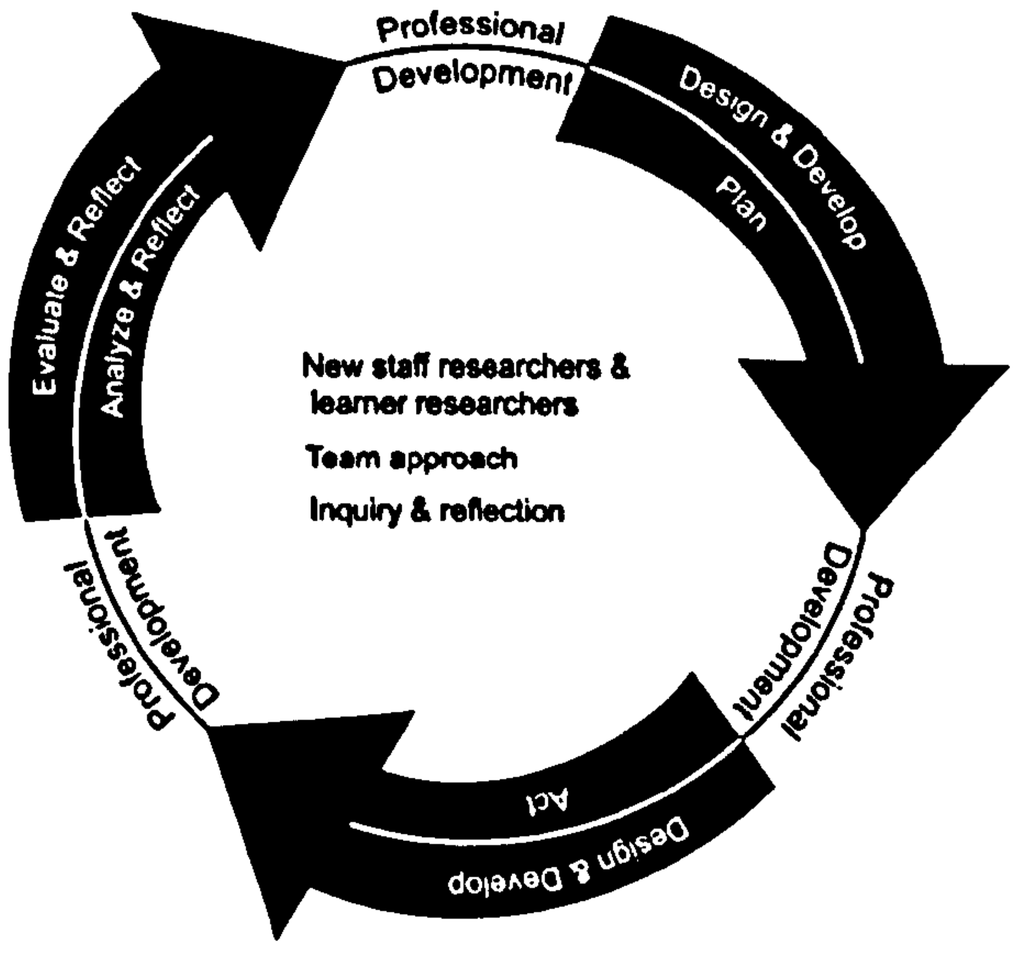

Figure 12.6 A tri-commitment model of research cycle 2

This model integrated the cyclical processes of instructional design, action research and professional development. This research reconfirmed cycles, team approach, inquiry and reflection as key principles of the process through the analysis of both the 'successes' and 'failures'.

12.3.2 Process model of MLSD

MLSD aims to **integrate the three processes** towards the accomplishment of the tri-commitments.

This integration is imperative in two senses. One is that the process is not only the practice of action research, but also an action research about action research practice. Kemmis & McTaggart (1992:24) mention "two parallel sets of learning" to be recorded in a personal journal as "our learnings about the practices we are studying (how our practices are developing) and our learnings about the process (the practice) of studying them (how our action research project is going)". In my case, I have been using an action research approach to examine my action research approach.

The other is that action research cannot stand alone. It must be embedded in the research of some subject matter. McKay and Marshall (2001:57) propose the dual imperatives of action research, arguing that action research should be conceptualized at the very least as "two separate but interconnected and interacting cycles: one cycle representing and focused on the problem solving interest in action research, and the other cycle representing and focused upon the research interest in action research" as illustrated in Figure 12.7.

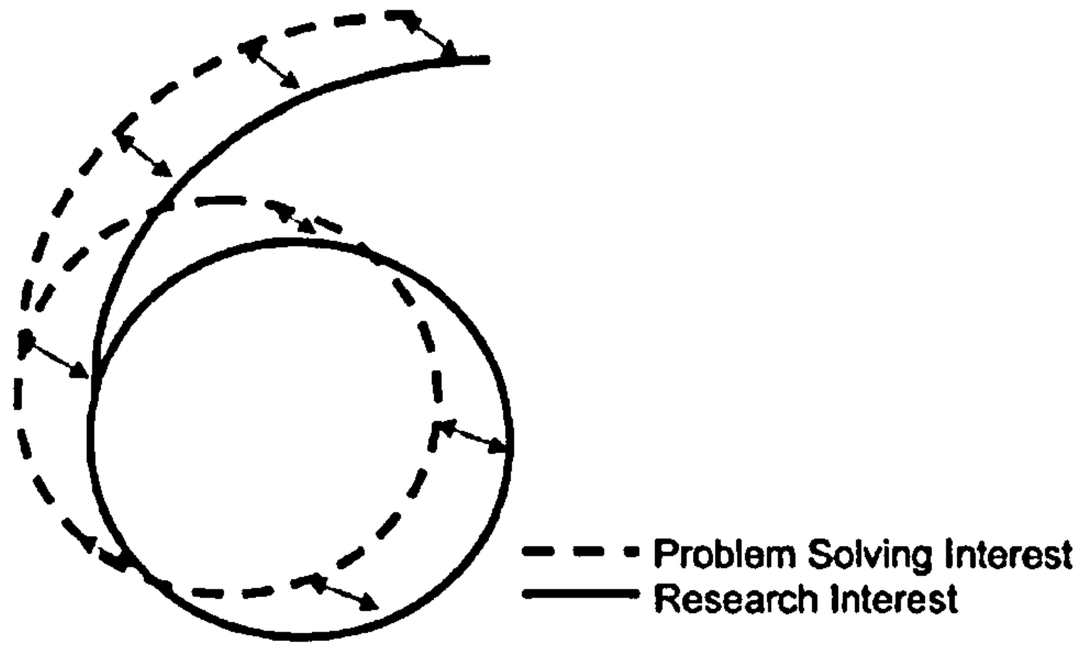

Figure 12.7 A dual-cycle process of action research (McKay & Marshall, 2001:52)

In my case, the "problem-solving interest" refers to my subject matter, and the "research interest" refers to action research.

The role of professionalism in the dual imperative process is well demonstrated by my research findings that it became a natural part of the process and a natural outcome of the process.

This process involves **the participation of all the major stakeholders** as **a community of practice** – designers, learners, tutors and administrators. They work in the core or/and peripheral groups as practitioner-researchers who pursue improvements via collective inquiry and reflection. My previous research has confirmed the need of including all these four groups in MLSD. How does my future research assemble all of them with diverse backgrounds, needs, and administrative identities? How does my research prevent the kind of "failure" in research cycle 2? Wenger's (1998) "communities of practice" offers useful strategies. According to Wenger, these communities define themselves in three dimensions: "*joint enterprise* as understood and continually renegotiated by its members; the relationships of *mutual engagement* that bind members together into a social entity; the *shared*

repertoire of communal resources that members have developed over time" (italics original). They are within an organization but can "span institutional structures and hierarchies". They have their own identities and exist because they produce "a shared practice as members engage in a collective process of learning."

This process takes place in the **instructional and learning ecologies** where a variety of non-academic issues need to be holistically considered.

Based on the above four arguments, I have visualized a process model for MLSD as illustrated in Figure 12.8.

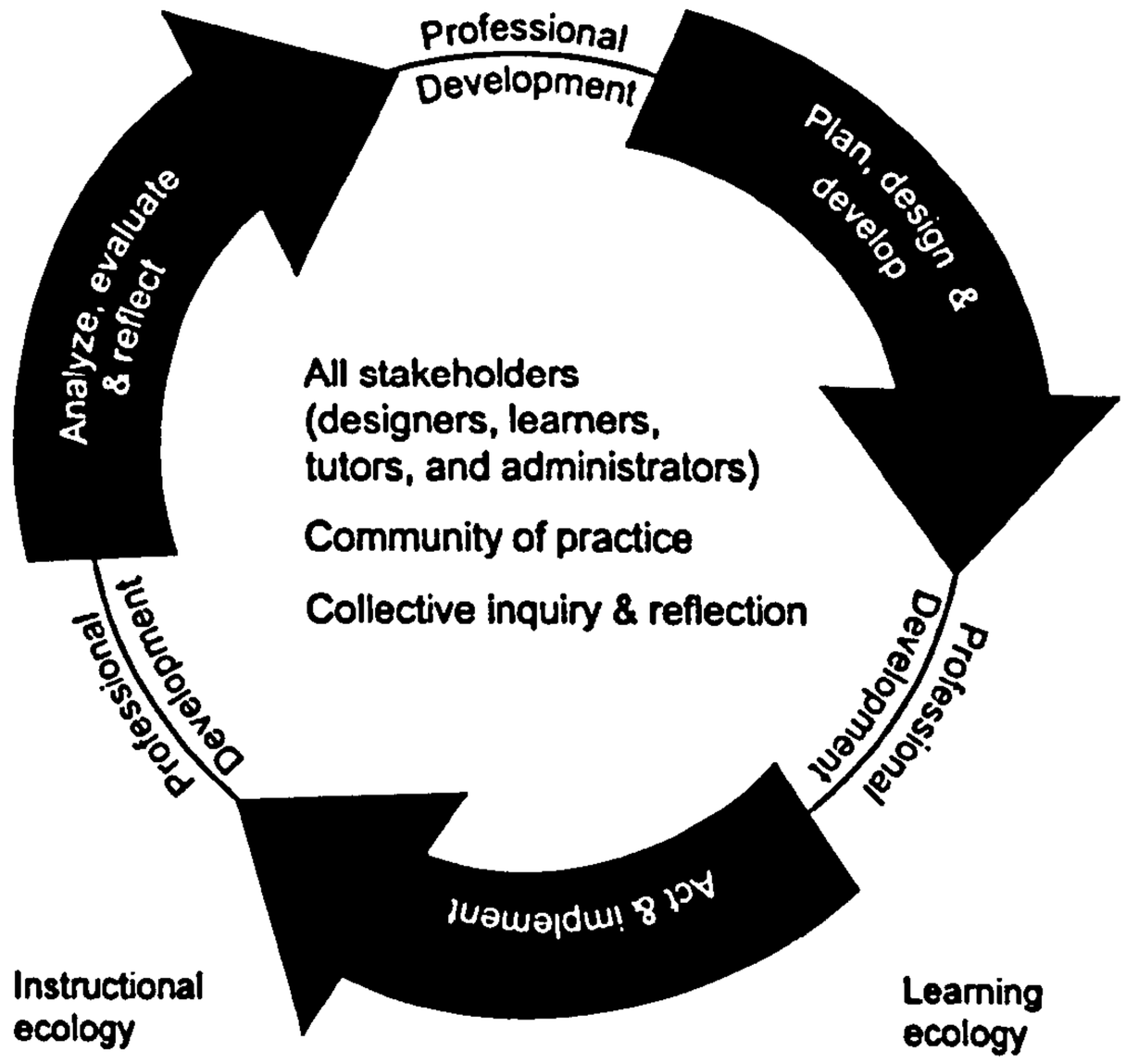

Figure 12.8 Process model of MLSD

Section 12.3 has described the development of MLSD process through the three research cycles. It emphasizes that the process model of MLSD is an imperative integration of the three processes of the tri-commitment research (the subject matter, action research and professionalism) with the participation of all the major stakeholders in the instructional and learning ecologies.

12.4 MLSD as a Product

I started my research thinking that course design and development was all about the production of content and courseware. By now, my perspective has changed into one that involves the creation of a learning system with the process being modeled by MLSD. This section will describe a procedural structure of my product model through three research cycles. Again, I use bold letters to indicate key ideas.

12.4.1 Product models of my three research cycles

This section will demonstrate how the "product" concept developed from "courseware" to "system" through three research cycles.

1. Research cycle 0 – an e-book product

The research was initiated by the real work-based task of upgrading the orientation module to include online learning components in its content. It was therefore an "e-book transference model" that considered only the content of courseware.

2. Research cycle 1 – a learning environment

This model was guided by the instructional design literature in which the means (learning activities), the ends (learning objectives) and the assessment were considered within a framework of a learning environment. When contextualized, the model distinguished resource (static activity) and support (dynamic activity) as two sub-designs of the learning activities, and included media decisions about the learning activities and assessment (argued 7.1.2). Figure 12.9 shows the model.

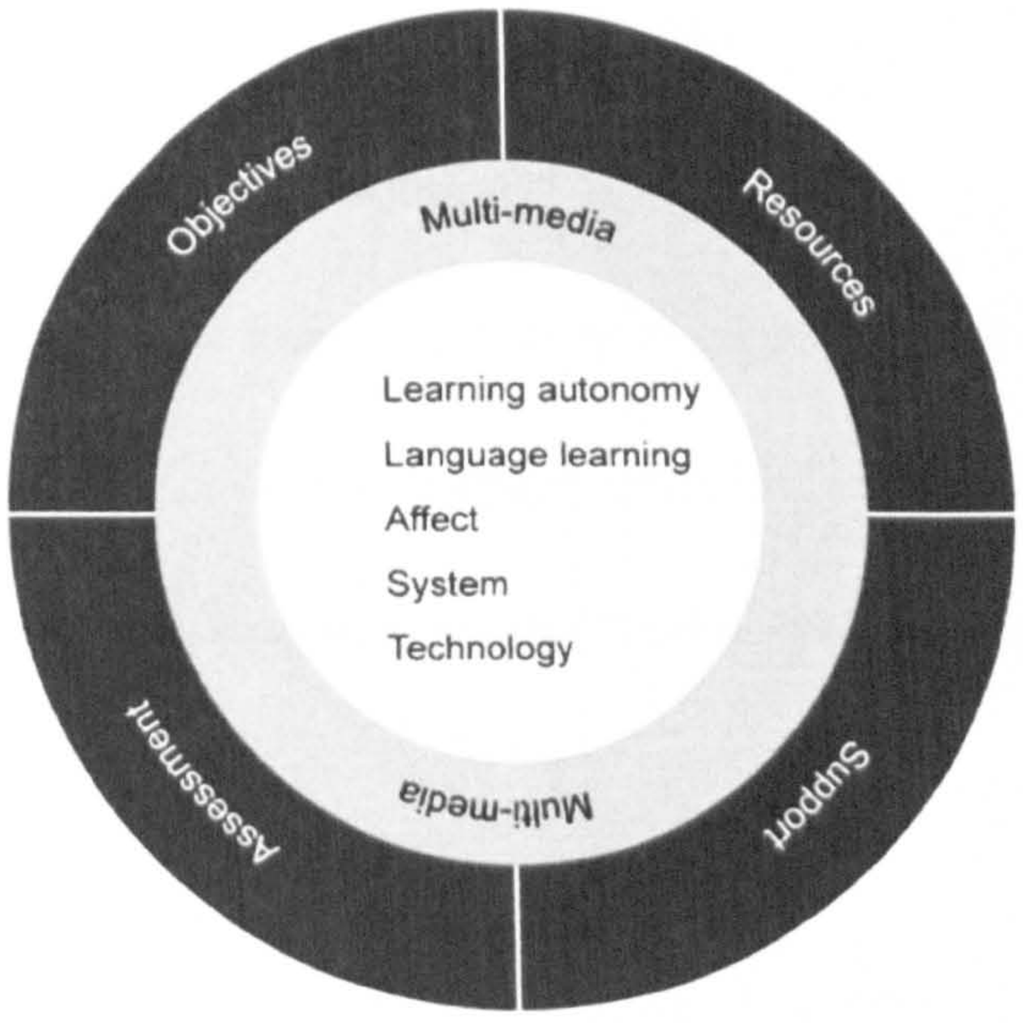

Figure 12.9 Product model of research cycle 1

3. Research cycle 2 – an improved learning environment

Research cycle 2 continued with the learning environment model, yet with interventions to address time, media, assessment and interaction issues. It sought to relieve the tensions between instructional intentions and the learners' reality. The model also gained a more comprehensive coverage of the sub-components. For example, support can be further divided into learner support, tutor support and administrator support.

12.4.2 Product model of MLSD

MLSD aims to establish a product model that features the following concepts/components.

1) It is a **system**.

The word "system" has several implications. Firstly, the product is the result of a standardized and rigorous design and development process. Secondly, it consists of multi-dimensional components. Thirdly, these components interact with each other.

Fourthly, it works and improves in a dynamical way.

2) It is informed by the **learning process.**

The design is the creation of a system that is compatible with the realities of the learning process, from the point the learners enter the course through to the point they complete it. Objectives, resource, support and assessment are embedded in such a process, instead of dominating it.

3) It is **multimodal.**

The design employs a variety of media for learners to access resources, support services and assessment.

4) It is composed of **generic, objective, resource, support and assessment designs.**

These components are related in two ways. One is that they are dependent on each other. The other is that they are bound to each other throughout the whole learning process. For example, assessment, though it is always the last in my list, does not appear just at the end of the learning process. The concept of "assessment as learning" (argued in 9.2.4) means making the learning process an assessment process.

5) It involves all the major **stakeholders.**

The major stakeholders are **designers, learners, tutors and administrators.** They interact with the components of the system and among themselves.

6) It addresses **five-layers of skills.**

The design can aim at the development of learners' skills in these five layers:

learner autonomy, language learning, affect, system and technology utilization.

7) It is set in the **instructional and learning ecologies**.

Like the process, product decisions have to consider the two ecologies. On the one hand, it must recognize the tension between the instructional intention and the learners' reality. On the other hand, it must consider academic, organizational and technological environment.

Figure 12.10 visualizes the above ideas.

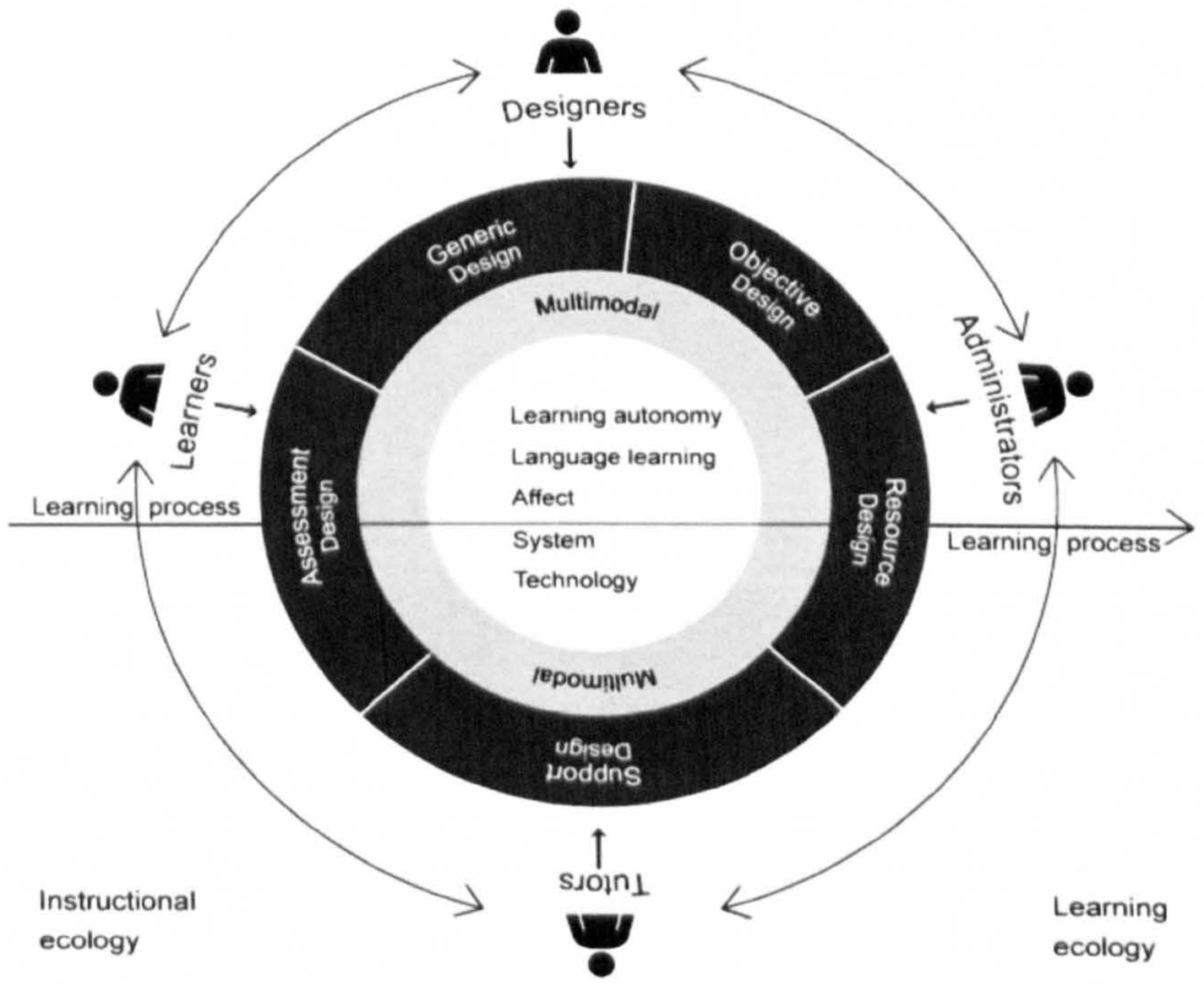

Figure 12.10 Product model of MLSD

Section 12.4 reviewed the evolution of the product models through my three research cycles. It finally proposed a product model of MLSD that features seven key concepts/components that built up through my research.

12.5 An Integration Model of MLSD

In 6.1.2, I proposed a possibility of the combination of the three worlds of

instructional design in my context by using the design methods (World of Work) with a learner's perspective of the process (World of Learning) to achieve the outcomes (World of Knowledge). Sections 12.2-12.5 outlined a process and a product model for MLSD that was shaped by my paradigmatic beliefs. In the following I seek to combine these to establish a complete model for my new research cycle.

I use "establish" instead of "shape" in the heading for this section to indicate that the integration model had not been formulated until this stage of research. Therefore, I do not present a cycle-based review of this model as I did with the previous two sections. Instead, I will base this model on all of the preceding discussions of MLSD as a paradigm, a process and a product. This model serves to fulfill the function of integration in the following aspects.

1) An integration of **theory and practice.**

The model integrates my paradigmatic beliefs (a design view, a learning view, a multimodal view and an ecological view) with my real-situation activities.

2) An integration of **research and action.**

The model integrates my research process with my routine work process. My research improves and is improved by my work, and vice versa.

3) An integration of **researchers and practitioners.**

The model includes all the major stakeholders and integrates the role of researchers and that of practitioners as one.

4) An integration of **learning and teaching.**

The model integrates the instructional ecology and the learning ecology to establish what is the most responsive.

5) An integration of **process and product**.

The model integrates the means to the ends and the ends. It believes that the process deals with the "how" issue, whereas the product tackles the "what" issue.

6) An integration of **three commitments**.

The model integrates MLSD through a focus on the subject matter, a research approach and professional development.

Figure 12.11 displays the integration model.

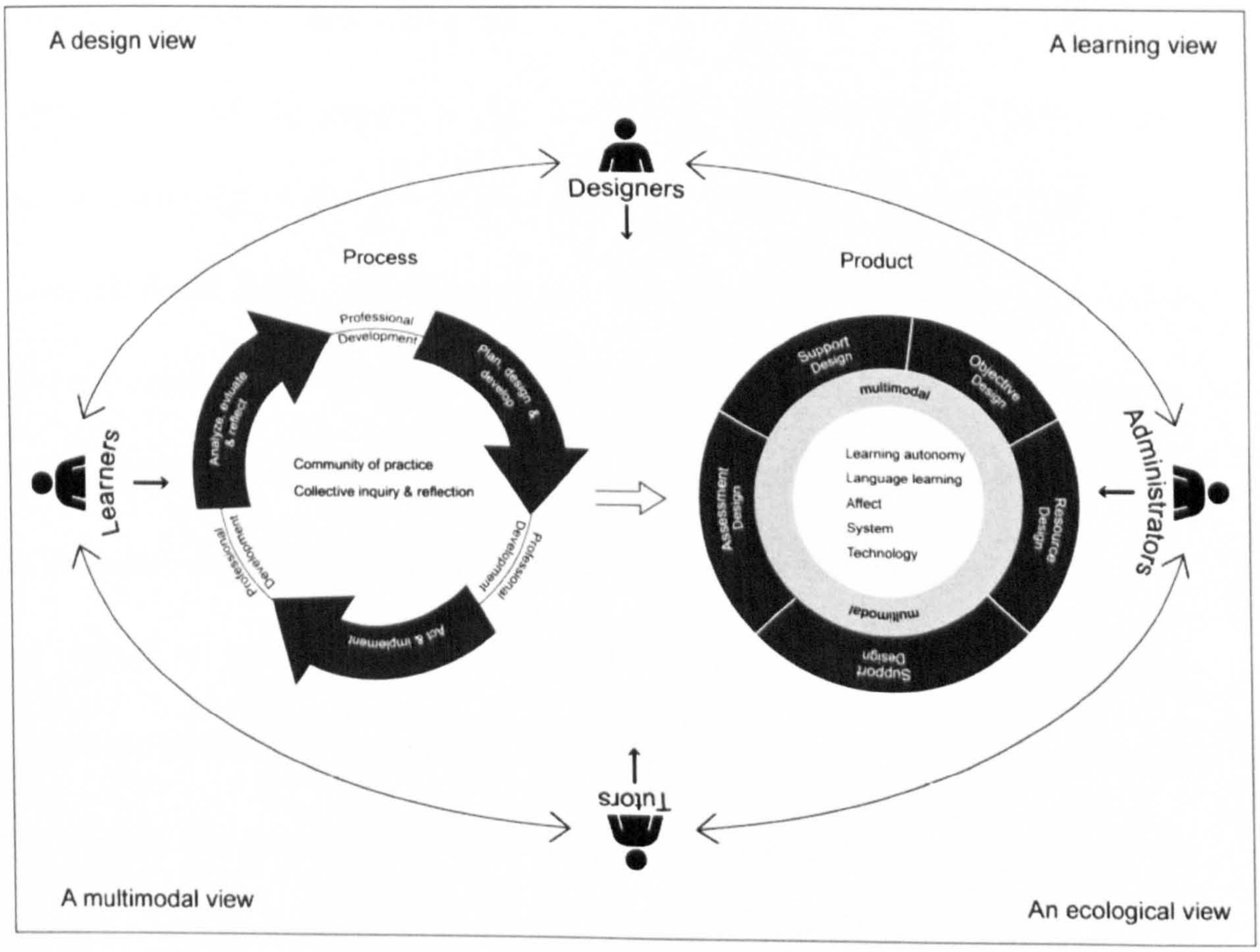

Figure 12.11 An integration Model of MLSD

Section 12.5 has established a complete model of MLSD. This model is an integration of the three models concerning paradigm, process and product shaped in the previous sections.

12.6 A Paradigmatic Analysis of the Model: Innovations and Limitations

MLSD is responsive to my situation as it was constructed as a result of reflections on the gains and pains of my three research cycles. This section will use the paradigmatic framework of MLSD to analyze its innovations and limitations, namely, a design view for its responsiveness, a learning view for its desired improvements, a multimodal view for its technology enhancements and an ecological view for its potential constraints.

12.6.1 A design view: responsiveness

A descriptive view is concerned with the validity and truthfulness of the model, whereas a design view cares about preferability or usefulness (Table 12.2). MLSD is a contextualized model responsive to my situation of an English language online education institute of a Chinese university. Its responsiveness is valued in three aspects: the subject matter, the research methodology and professional development.

1. Responsive to subject advances in the online education context

The idea of MLSD has helped my Institute to standardize its instructional design process since 2006. I headed the Resource Sector to set up an intranet-based instructional design process management system (ID system) according to the generic process framework of MLSD. The system is used to support and monitor all the design and development projects of my Institute by requiring designers to report

their project progress to the system following the design-develop-implement-evaluate-reflect process. It demonstrated the practical value of MLSD to my routine work.

In 2007, I obtained University research funding to undertake a project that aimed at examining the instructional design process of web-based courses. Five full-time staff joined the project with their real-situation instructional design tasks as cases. The report was published in Distance Education in China (Cao, 2008).

In 2008, my team and I received funding for a multi-language e-learning system design project. This is one of the projects within my University package for "211 Project (Phase III)"[13]. The idea is to design a learning system that can support Chinese learners to learn a target foreign language and a person from a target foreign language country to learn Chinese via the Internet or mobile phone.

In a wider context, online course development, design and delivery has expanded rapidly in China, even since I started my research in 2004, yet the area is still not adequately informed by theory (discussed in 1.4). Inadequate research in theory, a separation of theory from practice, practice without theory is still a prevailing phenomenon (Ding, 2008:334). MLSD has the potential to become a responsive approach to improving this situation with its three strengths. Firstly, it is a model not just for practice, but also for **paradigm shift**. Secondly, it closely **joins research with practice**. Thirdly, it is a **rigorous research guided** activity.

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[13] "211 Project" was launched in 1993 by the China State Department. The aim then was to develop 100 key universities in China that possess international competiveness. It has been carried on until present to become a high status state-sponsored project scheme for key universities.

Furthermore, MLSD can contribute to a greater mission. Distance education has been viewed as inferior to campus-based education in China (Ding, 2005:231) for a variety of reasons. Among them, distance education has not formed its own schools of theory. There is a move in Chinese academia to establish it as an independent discipline (Chen, 2008). MSLD, with its comprehensive coverage of a paradigm, a process and a product for a major activity in the field, can upgrade the profile of online education at both theoretical and practical levels.

The model itself may not be readily responsive to a context other than my situation. However, the process of building such a model and the integration idea of the paradigm, the process and the product may bear value to not only online education in China, but also other types of education (e.g. campus-based) in a wider context.

2. Responsive to research advances in the online education context

Action research as a research methodology continues to be neglected in the online education context. From 2004 until 2008, no research papers in the two core distance and adult education journals in China reported the use of action research. In Dick "Action research literature 2004-2006: themes and trends" (Dick, 2006), among some 140 books, journals and papers he reviewed; only one publication is set against the context of modern-technology-mediated education. From 2004 to 2008, only one paper (Lamaster and Knop, 2004) in the Journal of Educational Action Research proposes a strong case for using action research in the online education context. McPherson and Nunes' "Developing Innovation in Online Learning: An Action Research Framework" (2004) is the only book I could locate that makes an attempt

to provide a framework and model for action research in a similar context.

Meanwhile, a need for appropriate research approaches in the field is increasing. Latchem (2007) proposes that planning and practice in open and distance learning in Asia is not sufficiently informed by rigorous and sustained research and evaluation. Even where it exists, it is undertaken within the theoretical framework of western scholars, is dominated by descriptive and quantitative research approaches and lacking empirical qualitative research approaches.

In their report in the Forum of Research Methodology in China Modern Distance Education, Hao and Zhang (2008) summarize Chinese scholars' views as follows: this field lacks research; it lacks attention to research process and methodology; it lacks research in close relation to practice (Hao and Zhang, 2008:8). I would like to argue that this field does not lack research. In fact, it lacks quality research with responsive research methodology. Research in online education in China is mainly built upon document analysis and researchers' own reflection rather than empirical research evidence (Zhang, 2005a:300). Only 5% of research papers in relevant journals are reports of case-based research (Zhang, 2008:316-318).

Chinese scholars propose three principles to the establishment of the research methodologies for modern distance education with Chinese characteristics (Hao and Zhang, 2008:6). It should be based on the research methodology of social science; it should address the uniqueness of modern distance education; it should be based on the research of modern distance education. Below is a summary of the "uniqueness" (Hao and Zhang, 2008). I will examine how MLSD addresses these issues (key

responsive components are emboldened in the text).

1) Distance education has only 20 years of history in China, and less than 8 years for online education (Hao and Zhang, 2008:6).

   This implies that the research should adopt an **exploratory nature** (a design view) that allows **cyclical experiments** (a learning view) with the existing models in **real situations** to build up its own **improvements.**

2) Online education lacks researchers (Hao and Zhang, 2008:6).

   This implies a desire for a research approach that enables **practitioners** to turn into **researchers.**

3) Online education lacks financial resources to support research.

   This indicates that the desired research approach should **not demand a huge amount of budget.** An approach that **embeds the research process in the routine work process** can meet such a demand.

4) Online education is viewed as a peripheral form of education in contrast to campus-based education as "mainstream education" (Hao and Zhang, 2008:6).

   Online education needs to establish itself as a **theoretically sound** discipline. A **systematic and rigorous** research approach can contribute to this.

5) Online education must have different techniques for subject sampling, places of the research and data collection methods, etc. as it takes place in a virtual environment.

It needs a research approach that emphasizes **qualitative methods,** makes full use of the **naturally-occurring data,** covers methods for data **planning,** data

collection, data **analysis and reflection.**

6) Online education continually presents new and unexpected challenges.

It needs a research approach that does not aim to prove but rather to **improve** (a design view) through **cyclical processes;** and an approach that perceives **problem posing** as equally desirable as problem solving.

If I compare the current situation with that of four years ago when I started my research, I am amazed by the emerging concern of the research methodology issue in online education in China. MLSD is timely.

3. Responsive to professional development in the online education context

9.3.2 has examined the responsiveness of the action research approach to professional development at the Institute. The argument can also apply to MLSD since it can support my staff to undertake an **intentional work-based learning of and through real-situation** tasks at a **low cost.**

In a wider context, **a systematic research approach** to teacher education and development has only started in higher education ELT in China (Wu, 2008:xii). This approach questions the dominant lecture-type training programmes as the only professional development strategy and explores a **work-based type** as an alternative. Models such as RICH (research-based learning, integrated curriculum, collaborative learning and humanistic outcomes) that combines the improvement of classroom-based teaching and professional development have emerged (Wu, 2008:182). However, as Hu, a renowned ELT scholar in China, points out in the preface of Wu's works, there is **a neglect** in the examination of **the role of modern**

technology in the professional development of this group of professionals (Wu, 2008:iii).

Despite the recognition of the need for a work-based type research approach to professional development, there exists a **conceptual fallacy of research and practice.** Recent research covering ELT staff from 49 universities in China (Wu, 2008:74-75) reveals that this group of staff is de-motivated in research for several reasons: a low recognition of the promotional effect of research compared to teaching practice; heavy teaching load and insufficient research resource support; low research need in teaching practice. The authors argue that the first reason even leads to a stereotyped view that research and practice are conflicting rather than complimenting (those who are active in research cannot teach well, and vice versa).

In the online education context, the need for professional development was largely ignored, let alone the establishment of responsive strategies (Chen, 2008:366). Two sub-projects of the eChina-UK eLearning programme (eELT training in Phase 1 2003-2005 and eEducator in Phase 2 2005-2007) explored this area. However, this high profile cooperation (between MoE and HEFCE[14]), million pounds funding, research-based initiative, and intercultural focus meant that lessons learnt about course design, development and delivery seem remote from daily practice.

In summary, professional development following a systematic non-conventional approach is gaining attention, but it lacks a conceptual establishment and a link with practice. It also needs financial support. MLSD can accommodate these by

[14] HEFCE: the Higher Education Funding Council for England

introducing a work-based research model with a limited budget requirement.

Furthermore, MLSD can contribute to the establishment of a new professional identity in the field: multimodal learning system designers. The emergence of such a new profession has been discussed in Louw and Sonnekus (2005:200), who use the term learning designer, and Miller (2007), who uses the old term "instructional designer" but emphasizes new specialties. Professional identity is a key benchmark for the establishment of online education as a discipline (Chen, 2008:361).

12.6.2 A learning view: desired improvements

A learning view emphasizes continuous improvements in understanding and practice of MLSD. My three research cycles worked on a single module (the orientation module) to a single group of learners (post-diploma BA course) of a single subject (English language education) in an online-based mode with a limited number of the Institute staff.

Since 2007, the Institute has been undertaking projects designing, developing and delivering courses in the following new circumstances.

1) A variety of learner groups (e.g. adult learners, young learners, corporate trainees, ministers and provincial leaders of the government);

2) A variety of subjects (e.g. English language education, English for specific purpose, French, German, Japanese and other foreign languages, Chinese);

3) A variety of study modes (e.g. face-to-face tutorials supported by online study, online study supported by face-to-face tutorials, completely online study, completely face-to-face learning; telephone tutorials, mobile phone delivery);

4) A variety of courses (e.g. degree-bearing courses, short training courses, one-to-one courses)

5) An involvement of more staff in these projects, and the employment of new staff to support the projects.

6) The University has invested 28 million RMB to hold 100% share of the Institute's partner IT company[15].

All these changes and trends have provided opportunities to examine the responsiveness of MLSD in a wider and more diverse context and seek improvements. The multi-faceted nature of this context, academically, organizationally and technologically, has become more complex than it was before. I will discuss my desired improvements according to the three commitments of the subject matter, action research and professionalism. But among all the issues, it is the paradigm shift that will receive the most attention.

1. Desired improvements in the subject matter

MLSD is a generic framework to guide design activities, but its weakness is its inability to address the sub-categories. For example, MLSD addresses only the main categories of the design as a product. However, in the resource design (a main category) alone, learners' data (see Table 11.4) has addressed the following sub-categories: content, media, administration, quality, language and courseware design. Each sub-category can be further categorized. For example, media can be categorized into print, cassette, CD-ROM, and e-platform resources. The future

[15] This means that the University owns its authority over both my Institute and the IT company, making it possible that these two organizations can work more closely with each other than they were before.

improvements should aim to explore in-depth the sub-categories within each main category.

2. Desired improvements in the research activity

Research cycle 2 experienced "failures" in achieving new staff professional development using the action research approach. Five reasons were thought to be responsible for this (ownership, process support and monitoring, community, scale, organizational culture – discussed in 11.3.1). The future improvement should aim to establish a favourable Institutional mechanism to support this kind of research in relation to policy, resources, time, and budget.

3. Desired improvements in professional development

Professional development in MLSD is no longer a general term. It refers to the professional development of the core stakeholders as multimodal learning system designers. There is a need for a clear definition of the qualities and responsibilities of the designers and an Institutional recognition of this post with corresponding appraisal system and salary scheme. This post will be responsible for the whole MLSD process. It is project-based rather than centre-based. This means that the designer can make decisions and manage staff (who participate the project) across centres.

Future research should adopt multi-focuses based on the needs and circumstances of different stakeholders. For novices (for example, staff who lack either the work or research experience), the focus will be on the awareness raising of MLSD in relation to their current jobs. For the experienced (for example, myself), the focus will be on

a further exploration of the strengths and limitations of MLSD when applied to a wider context.

12.6.3 A multimodal view: technology enhancements

Nationally and globally, recent years have witnessed the emergent of terms such as m-learning (mobile learning) and u-learning (ubiquitous-learning) in addition to e-learning. M-learning "has much in common with other types of e-learning on desktop computers, but with the advantages and drawbacks of more varied and changing locations, more immediate interaction, and smaller, often wireless devices" (Kukulska-Hulme, 2005:2). Within Chinese modern distance education academia, some argue that m-learning [16] should become a trend because it is "environmental feasible, individualized, collaborative and sustainable" (Yu, 2008). Zhang, R. (2008:3) states that u-learning is a most appropriate mode for online education in the Chinese context. U-learning in his definition is that learners can have a choice of their time, place, media and resources for their learning.

The multimodal concept needs to expand to an exploration the appropriateness of the above practices, introducing new educational tools (e.g. web 2.0) and wireless devices (e.g. mobile phone, MP5, PDA) to the learners' contexts, and upgrading the e-platform to support new learning designs.

Furthermore, technology can join the learning, design and research processes. Dulaney (2008) reports a case of a "collaborative syllabus" in which students help determine the specifics of a course using "Moodle". By actively participating in the

[16]His definition is learning via those wireless equipments whose size is small enough to be held by a single hand.

creation of the syllabus, students are able to signal what they want to learn and how they want to learn it and then set the standard by which they will be accountable. By combining the design, research and learning in one process with technology, this approach can overcome the drawbacks in my research: delayed application of research findings to course improvements; restricted number of people; information exchange among a small number of people.

12.6.4 An ecological view: potential constraints

An ecological view has enabled me to examine both the instructional and learning ecologies at the macro, meso, and micro levels in the academic, organization and technological aspects. The more ambitious my research becomes, the more dependent it is on the two ecologies.

1. Learning ecology

According to the report of China Internet Information Centre (CNNIC) (CNNIC, 2008), the whole population of Internet users has become younger (68.6% below 30 years old), spent more time on the Internet (an average 19 hours a week), and mainly use broad-band (84.7%). Online learners (those who use the Internet for education purposes) has reached a record of 46.69 million people, an increase of 10 million within a short period of six months. This information indicates that the number and speed of the increase of online learners will bring more diversity to their learning ecology.

2. Instructional ecology

Many of my desired improvements are no longer personal issues. I have realized that

changes must take place above the personal level if my future research aims are to have a more impact. As a Deputy Dean, I am confident in bringing about immediate changes to the Institutional level. However, I am aware of the challenges beyond the Institutional context. I focus my discussion on those at the national level in the academic category, for they have a more direct impact on MLSD than that at other levels and in other categories.

1) Concerning the subject matter: Campus-based education has long been perceived as "THE model" for distance education in China (Gu, 2006:104). This means that the quality of distance education is always measured against that of campus-based education. Online course design is of no exception. The criteria for CNPEC (for online education) is built completely upon that of CNPEC (for campus-based education), with a moderate consideration of online elements. If winning a CNPEC (for online education) prize becomes a high-ranking academic honour of all the online institutes (including mine), MLSD will become useless, as online course design will be geared to one set of static criteria. This is real and current concern and indicates a need to "educate" those who have political control over the system.

2) Concerning the research methodology: The academia of online education in China still holds a strong belief in conventional research methodologies. When commenting on the poor quality of research in online education research in China, scholars propose that the following issues are to blame: small sampling size, lack of control over external variables, the small number of researchers

involved, research validity undermined by researchers' and researchees' affect factors (Hao and Zhang, 2008:6). All these issues seem in direct conflict with the essential principles of MLSD.

3) Concerning professional development: The appraisal and promotion system for academics at my University, which reflects the practice at many other universities in China, does not give credit to e-learning designers (not to say multimodal learning system designers, an even more alien term). This will discourage my staff to spare time and effort on their professional development of and through MLSD.

The above analysis outlines and prepares me with the challenges and threats I have to face in my future research.

This chapter has explored MLSD as a paradigm, a process and a product. MLSD is a paradigm with a design, learning, multimodal and ecological view. It is a cyclical process engaging all the major stakeholders as a learning community who pursue improvements via collective inquiries and reflections. It is a product of a learning-process-based system with objective, resource, support and assessment designs to fulfill learners' development in their learner autonomy, language learning, affect, and system and technology utilization.

It has also examined the innovations and limitations of MLSD. It adopts a design view to emphasize the responsiveness of MLSD to the development of the subject matter, methodology and professionalism in my situation and beyond; a learning view to pursue improvements of MLSD in the future research; a multimodal view to

seek technology enhancements of MLSD; and an ecological view to consider organizational and technological constraints of MLSD.

Chapter analysis

*This chapter has established **multimodal learning system design** as a paradigm, a process and a product, and explored its contribution of knowledge to my situation and to online education in general. It has analyzed the innovations and limitations of MLSD.. The next chapter, entitled "Epilogue" which corresponds to the beginning chapter "Prologue", will end the thesis with my ambition of continuing my research at a fresh level of understanding and practice within my chosen profession.*

Epilogue: How Will the "Story" Continue?

This chapter will bring my thesis to an end, but not my research. I believe that my future research, like this one, will reward me with further improvements, and confront me with new challenges. I also believe that it will be different in many ways.

My transformation from an online course designer to a multimodal learning system designer will lead the story to further develop with improved understanding and practice in the following aspects.

1. **From "online course design and development" to "multimodal learning system design"**

My research started with the concept of online course design and development (cycle 0), and developed to instructional design (cycles 1 and 2) and finally multimodal learning system design. As argued in Chapter 12, this transformation is by no means literary. It symbolizes the establishment of a paradigm responsive to my situation; a cyclic process integrating three commitments, and a product of a learning system.

2. **From "practice" to "research-based theory-practice dynamics"**

My research was initiated by a real-situation task. It grew from a mere practical purpose with a cluster of research methods (cycle 0) to a literature-guided practice in an intentional action research approach (cycle 1), then a practice-informed research (cycle 2). Many of my earlier design decisions were driven by my understanding of the literature and my projected understanding of learning as I had not effectively established the role of theory or practice in design. With the establishment of MLSD,

my practice will be informed by sound theoretical arguments responsive to my situation, and later, will inform and contribute to the theory through reflection and future publication.

3. From "one commitment" to "tri-commitments"

My research began with a sole focus of course design and development (cycle 0), then shifted to a dual-commitment process (cycle 1), then to a tri-commitment process (cycle 2). MLSD emphasizes the concept that emerged from the above development: that subject matter, research methodology and professional development are bound to each other in an integrated tri-commitment process.

4. From "one-go" to "cyclic process"

My original approach to course review used to aim for a solutional design of the orientation module as a result of a one-go process, only to find that the search for such a solution turned into a cyclic process when issues became more complex and needed a more holistic perspective so as to consider the alternatives. This cyclic process is defined by a learning perspective that enables changes and improvements to be able to meet learners' needs and be institutionally sustainable. My experience confirmed that this "cyclic process" was crucial.

5. From "content" to "system"

My starting point within the research originally perceived course content and courseware as being the whole course (cycle 0). I then moved on to understand the course as a product of the means, ends and assessment (cycles 1 and 2). My current understanding through the action research approach reveals it as a learning system,

with the means, ends and assessment contextualized in the instructional and learning ecologies. The system idea implies that such a product is process-based, multi-dimensional, interactive, and dynamic (argued in 12.4.2).

6. From "online" to "multimodal"

I once held the fallacy that successful online education was characterized quantitatively, i.e. by providing as many resources and services as possible to support as many learners as possible on the Internet. My research showed that the designers' selection of media and learners' choice of media was going to be affected by a diverse set of circumstances. MLSD introduces a multimodal approach to represent an ecological view of media provision and utilization in that there is no best media, only the most appropriate and the approach to determining these needs to be flexible and agile as it is likely to change with new cohorts.

7. From " best" to "most responsive"

My research made me abandon my pursuit of a ONE best theory approach or method to suit my situation. The context-bound ecology determines that the best is going to be the most responsive. "Responsiveness" has already been used to analyze the value of MLSD (argued in 12.6.1), and it will be major criteria to judge the reliability and validity of the new research cycle.

8. From "individual" to "community"

My research started as a sole individual effort (cycle 0), and benefited from a team approach (cycle 1), then experienced a setback (cycle 2). It has identified a group approach to learning as a crucial factor. MLSD develops the "group" and "team"

idea into the notion of a "community of practice" (argued in 12.2.2). This community involves all the major stakeholders of MLSD, with those in the core playing the role of practitioners as researchers. It is intentionally organized; it aims at learning for improvements and changes; and it is constructed by members' commitment to a shared mission through individual and collective inquiry and reflection.

9. From "personal" to "beyond personal"

In the previous research cycles, I aimed at the improvements of the individuals. Even when I included several staff, I intended the process to be a personal rather than an Institutional one. Though Institutional changes did take place as a result of my effort, they were not a deliberate intention of my research. In fact, I was trying to escape such an intention for two reasons. One was that I had modest intentions of my research and I did not think that it would have the potential for change at a higher level within the Institute. The other was that I did not want to "invade" other Deputy Deans' responsibilities.

Kemmis (1993) points out that action research is inevitably connected with social changes. It is not a methodological term in any way. I came to understand the truthfulness of his remark in my planning of the desired improvements for future research (presented in 12.6.2) which targets Institutional changes in addition to personal improvements. However, the Institutional level may be the furthest context I can have impact on, though changes at university and national levels are equally desired. During my research period, I have published 9 papers and had 9 paper

presentations on relevant themes of my research at national or international symposiums. I will continue the activity so that the research outcomes can be shared and reflected by the academic circle in online education in China.

When I reflected upon my experience, I must say that it was action research that chose me, not I who chose action research. My situation made it the most appropriate research methodology. Zuber-Skerrit & Fletcher (2007:414) state that many people may assume that action research is easier than conventional research, but actually it is more "complex and problematic", because:

> *"Action researchers need to meet traditional research requirements of high standards, quality and an original contribution to knowledge in the field. But as well, they need to demonstrate the requirements of AR (action research), such as explaining and justifying the action research paradigm (plural ways of knowing), appropriate methodologies, their choice and use of qualitative research methods, different standards of ethics and values, and evidence of learning, reflection and a contribution to knowledge in both theory and practice."*

I have been through all the challenges, but the rewards made them worthwhile. My story has now come to a new beginning from an old ending. A story from the orientation module, a module that loyally accompanied my research, must be a most appropriate choice to signal this transition.

> *"John and Jack did not know how to ride a bicycle and both wanted to learn. John got on a bike and started peddling it, with plenty of falls of course. Jack, believing that he could outwit John, bought a manual and memorized all the details, without a fall or bruise, of course. In the end, John went everywhere on his bike, whereas Jack knew all the theory about how to ride a bike: he knew why a bicycle is as it is,*

and why it is easier to keep balance at speed than at a standstill, although he could hardly keep balance on his bike. (Gu, 1999:58. The story is used in the module to describe two language learning strategies)

Am I John or Jack? I am a combination of both as a practitioner and a researcher.

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Appendix 1 Collections of Profiles

Appendix 1.1 Learners' profile of 2004-2006 (via pre-module questionnaire)

Category		2004 (N=686/n=686)	2005 (N=407/n=206)	2006 (N=359/n=307)
I. Demographic information				
1. Age				
1)	Maximum	53	49	48
2)	Minimum	19	19	19
3)	Mean	28.91	29.1	28.86
4)	SD	6.09	5.647	5.246
2. Gender				
1)	Male	29.15%	30.10%	23.50%
2)	Female	70.85%	69.90%	76.50%
3. Education				
1)	diploma	71.43%	69.40%	70.70%
2)	BA	22.74%	21.40%	26.40%
3)	MA and above	4.23%	6.30%	2.90%
4)	Full-time university student	1.60%	2.90%	0%
4. Marital status				
1)	Single	58.16%	50.90%	56.60%
2)	Married	41.84%	49.10%	43.40%
5. Occupation				

1)	Full-time employed	78.28%	86.90%	85%
2)	Part-time employed		4.90%	5.90%
3)	Full-time university students	1.60%	2.90%	6.20%
4)	Unemployed	--	5.30%	2.90%
5)	Blank[1]	20.13%	--	--
II. Previous learning experience				
1. Years since formal education				
1)	Max.	--	24	24
2)	Min.	--	0	0
3)	Mean	--	5.53	5.15
4)	SD	--	4.854	4.5
2. Years of English study in formal education				
1)	Max.	--	20	22
2)	Min.	--	0	0
3)	Mean	--	7.13	8.65
4)	SD	--	4.273	4.378
3. Years of self-directed[2] English study				
1)	Max.	--	16	15
2)	Min.	--	0	0
3)	Mean	--	1.93	1.97
4)	SD	--	2.837	2.762
4. Experience of online learning				
1)	None	--	87.9%	80.8%

[1] 2004 data is based on the e-platform database. 20.13% registered learners did not specify their occupations in their registration form.
[2] "Self-directed" is described in the questionnaire as "You followed a self-made study plan in obtaining a self-established learning goal without the presence of a teacher."

2)	Yes	--	12.1%	19.2%
5. Major media for English study outside school				
1)	I don't learn English outside school.	--	12.6%	0%
2)	Print materials (eg. books, newspapers, magazines).	--	65.5%	76.5%
3)	English video materials on tapes, VCDs and DVDs.	--	43.2%	30.9%
4)	English audio materials on cassettes, CDs, etc.	--	39.8%	56%
5)	English programmes on TV.	--	39.8%	45.6%
6)	the Internet.	--	37.9%	36.5%
7)	English programmes on radio.	--	31%	34.2%
8)	CD-ROMs.	--	11.1%	11.4%
9)	Face-to-face.	--	--	33.6%
10)	MP3/MP4.	--	--	22.5%
11)	Others.	--	3.9%	3.9%
III. Computer and Internet skills				
1. Equipment availability				
1)	Having computer with a CD-ROM player and access to the Internet.	--	77.2%	83.4%
2)	Having computer with a CD-ROM player , yet no access to the Internet.	--	7.8%	3.9%
3)	Having computer with access to the Internet, yet no CD-ROM player.	--	12.1%	5.5%
2. Years of using computer				
1)	Max.	--	20	20
2)	Min.	--	0	0
3)	Mean	--	7.58	8.12
4)	SD	--	3.621	3.486
3. Years of using the Internet				
1)	Max.	--	15	12

2)	Min.	--	0	0
3)	Mean	--	5.18	5.9
4)	SD	--	2.365	2.252
4. Means of Internet access				
1)	via broad-band	--	80.1%	95.4%
2)	via narrow-band	--	11.7%	3.3%
3)	I have access to the Internet, but I don't know the means.	--	7.8%	1.3%
4)	I have never accessed the Internet.	--	0.5%	0%
5. Weekly frequency of Internet access				
1)	Every day of the week	--	42.2%	48.9%
2)	Two to four days of the week	--	24.8%	19.9%
3)	Five to six days of the week	--	19.4%	18.9%
4)	Less than once per week	--	8.7%	8.1%
5)	One day of the week	--	4.4%	4.2%
6)	I have never accessed the Internet.	--	0.5%	0%
6. Average weekly hours on the Internet				
1)	Max.	--	100	84
2)	Min.	--	0	0
3)	Mean	--	16.08	18.02
4)	SD	--	18.615	18.074
7. Attitude toward learning new technology skills				
1)	I learn and use it with ease. I am fully confident.	--	69.9%	--
2)	I am not very skillful, but I am willing to learn.	--	25.7%	--
3)	I am not very confident in learning it well, but I will learn anyway.	--	2.4%	--
4)	I have phobia. I won't learn it if I can help.	--	0%	0.7%

5)	Other descriptions.	--	1.9%	2.6%
6)	I love to learn and master new skills.	--	--	90.2%
7)	I only learn what I have to learn.	--	--	6.5%
IV. Attitude towards online learning				
1. Reasons to choose this online course				
1)	Online education offers flexibility in time.	--	84.4%	81.8%
	Online education offers flexibility in study place	--	--	72%
2)	I can work while studying.	--	72.8%	75%
3)	I have convenient access to the Internet.	--	32.5%	29%
4)	I want to try this new form of education.	--	27.1%	27%
5)	Online education has a low entrance policy.	--	8.7%	8.8%
6)	I have had online learning experience, finding myself quite adapted to this form of education.	--	8.2%	5.5%
7)	Online education demands comparatively lower cost than other forms of education.	--	2.9%	3.3%
8)	I do it for no particular reasons.	--	2.9%	3.9%
9)	I am denied of other forms of education due to physical, geographical or qualification reasons.	--	2.4%	2.9%
10)	Other reasons	--	3.3%	4.6%
2. Attitude towards online learning				
1)	I won't choose otherwise even if I have other choices.	--	68.4%	76.5%
2)	I made this choice because I can't choose otherwise.	--	31.6%	23.5%

Appendix 1.2 2005 tutor-researchers' profile (via the Institute archive)

	Name	Gender and marital status	Age	Education and major	Years at the Institute	Work experience before the Institute
1	I	Female (married)	39	MA in ELT	4	Campus-based instructor of English (13 years)
2	Tutor C	Female (single)	30	BA in English; part-time MA in process in applied linguistics	3	Campus-based instructor of English (4 years) Project manager at a training company (1 year)
3	Tutor B	Female (married)	28	MA in TESOL	2	Campus-based instructor of English (4 years)
4	Tutor A	Female (single)	28	BA in English; part-time MA in process in international trade	3	Campus-based instructor of English (3 years)

Appendix 1.3 2005 learner-researchers' profile (via e-platform database)

Name	Age	Gender	Marital Status	Occupation	Education
S1	26	Female	Single	Statistician	Diploma
S2	23	Female	Single	Middle school teacher	Diploma
S3	30	Male	Married	Accountant	Bachelor
S4	25	Female	Single	Manager assistant	Bachelor
S5	42	Male	Married	Bank finance officer	Bachelor
S6	35	Female	Married	Engineer	Bachelor
S7	29	Female	Married	Human resource manager	Bachelor
S8	24	Female	Single	Unemployed	Diploma
S9	24	Female	Single	Sales person	Diploma
S10	23	Male	Single	Public health officer	Diploma
S11	31	Female	Single	Human resource assistant	Diploma

S12	25	Female	Single	Sound engineer	Bachelor
S13	35	Female	Married	Bank finance officer	Bachelor
S14	41	Male	Married	Manager	Master
S15	26	Female	Single	Business counselor	Diploma

Appendix 1.4 2005 peripheral tutors' profile (via the Institute archive)

Name	Centre	Age	Gender	Title	Years in higher education	Years at the Institute
Tutor 1	Beijing	30	Female	Lecturer	5	5
Tutor 2	Beijing	28	Female	Lecturer	3	2
Tutor 3	Beijing	25	Male	Assistant lecturer	0	0
Tutor 4	Shanghai	40	Female	Associate professor	13	1
Tutor 5	Shenzhen	39	Male	Lecturer	6	3
Tutor 6	Xiamen	35	Female	Lecturer	8	2
Tutor 7	Nanjing	50	Female	Associate professor	25	5
Tutor 8	Suzhou	38	Female	Associate professor	12	1

Appendix 1.5 2006 new staff profile (via the Institute archive)

Name	Gender and marital status	Age	Education and major	Departments
Staff 1	Female and single	26	BA in English applied linguistics	Tutor support
Staff 2	Female and single	24	BA in English applied linguistics	Course design and development
Staff 3	Female and single	26	MA in English translation	Course design and development (Chair tutor of English Translation course series)
Staff 4	Female and single	25	BA in English applied linguistics	Learner support

Staff 5	Female and single	28	BA in English applied linguistics	Course design and development
Staff 6	Female and single	27	BA in multi-media production	Multimedia resource design and development
Staff 7	Female and single	27	BA in English applied linguistics	International cooperation
Staff 8	Female and single	28	MA in English applied linguistics	Assessment
Staff 9	Female and single	27	BA in business management	Domestic cooperation
Staff 10	Male and single	26	BA in English applied linguistics	Learner support
Staff 11	Female and single	27	BA in English applied linguistics	Assessment
Staff 12	Female and single	26	BA in English applied linguistics	Learner support

Appendix 1.6 2006 peripheral tutors' profile (via the Institute archive)

Name	Centre	Age	Gender	Title	Years in higher education	Years at the Institute
Tutor 9	Beijing	28	Female	Lecturer	2	0
Tutor 10	Beijing	29	Female	Lecturer	4	3
Tutor 11	Shanghai	40	Male	Associate professor	15	1.5
Tutor 12	Shenzhen	35	Female	Lecturer	10	3
Tutor 13	Nanjing	51	Female	Associate professor	26	6
Tutor 14	Dalian	34	Female	Associate professor	10	4

Appendix 2: Collections of Research Instruments

Note: All the research instruments are originally written and presented to the users in Chinese.

Appendix 2.1 Pre-module questionnaire for peripheral learners (*Note: If questions are different between 2005 and 2006, the differences are indicated in emboldened words with the year in brackets.)*

Pre-module Questionnaire

Dear learners,

The following questionnaire aims to collect information to help us develop and improve the orientation module. Please entre your choices **(In spring 2006, this sentence was changed to "please click your choices".)** as instructed. The information collected will be kept confidential, also free from any types of assessment. Thank you for your support. Please send your completed word-document questionnaire as an attachment to BAguide@beiwaionline.com before February 20 **(As spring 2006 questionnaires were administered online, this sentence was omitted)**. If you have any questions about the questionnaire, please call 010-88817912/13, or send e-mails to support@beiwaionline.com. We will be there to help you.

Yours, Professor Guide and her colleagues

Part I: Personal information

1.	Your age:	_____
2.	Your gender: A. Male B. Female	(single choice)
3.	Your marital status: A. Married B. Single	(single choice)
4.	You currently: A. are a college student. B. left college, but have no job. C. left college, work full-time. D. left college, work part-time.	(single choice)

Part II: Your learning experience

5	Your highest degree so far is: A. high school graduate or equivalent B. diploma or equivalent C. bachelor or equivalent D. master and above or equivalent E. college study in process	(single choice)
6	Your most recent state-accredited degree/diploma/certificate (not necessarily English-language related) was obtained (If you are a college student, please fill in 0.):	_____ years ago
7	Have you attended any online learning programmes (not necessarily English-related)? A. Yes B. No	(single choice)
8	How many years did you spend on English study at schools or institutes? (English courses were part of the curriculum.)	_____ years
9	How many years did you self-teach English? (You followed a self-made study plan in obtaining a self-established learning goal without the presence of a teacher.) (Please entre the total time.)	_____ years
10	Apart from English study at school, you mainly learn English via: A. I don't learn English outside school. B. print materials (e.g. books, newspapers, magazines, etc.). C. radio. D. TV. E. audio cassettes, CDs, etc. F. video tapes, VCDs and DVDs. G. CD-ROMs H. the Internet. I. **MP3/4 (spring 2006)** **J. Face-to-face (spring 2006)** K. other media (Please specify).	(multiple choices, but no more than four. If K, please specify.) _____

Part III: Your computer and Internet skills

11	You have convenient access to: A. a computer that can play CD-ROMs. B. a computer with Internet connection. C. Both A and B. D. Neither A nor B.	(single choice)
12	How many years has it been since you started to use a computer? (If you have never used a computer, please fill in 0.)	_____ years
13	How many years has it been since you first experienced the Internet? (If you have never accessed the Internet, please fill in 0.)	_____ years

14	You access the Internet: A. I have never accessed the Internet. B. I have access to the Internet, but I don't know the means. C. via narrow band (e.g. modem/ISDN). D. via broad band (e.g. ADSL/LAN)	(single choice)
15	How frequent on a weekly basis do you visit the Internet? A. I have never accessed the Internet. B. Every day of the week C. Five to six days of the week D. Two to four days of the week E. One day of the week F. Less than once per week	(single choice)
16	What are the average hours per week you spend on the Internet (If you have never accessed the Internet, please fill in 0.)?	hours
17	Which of the following best describes your attitude towards the computer and the Internet? A. I learn and use it with ease. I am fully confident. B. I am not very skillful, but I am willing to learn. C. I am not very confident in learning it well, but I will learn anyway. D. I have phobia. I won't learn it if I can help. E. Other descriptions (Please specify on the line given.) **(In spring 2006, questions where changed to A: I love to learn and master new skills; B. I only learn what I have to learn; I have phobia. C. I won't learn it if I can help; D. other descriptions)**	(single choice. If E, please specify.)

Part IV: Your motivation and attitude

18	You choose to learn via online mode rather than other forms of education (on-site, correspondence, etc.) because: A. online education has a low entrance policy. B. I am denied of other forms of education due to physical, geographical or qualification reasons. C. online education demands comparatively lower cost than other forms of education. D. online education offers flexibility in time. E. I have convenient access to the Internet. F. I can work while studying. G. I have had online learning experience, finding myself quite adapted to this form of education. H. I want to try this new form of education. I. I do it for no particular reasons. J. Other reasons. (Please specify on the line given.) **K. online education offers flexibility in study place. (spring 2006)**	(multiple choices, but no more than four. If J, please specify.) _____

19	Which of the following best describes your attitude towards your choosing to learn English via online mode rather than other modes: A. I won't choose otherwise even if I have other choices. B. I made this choice because I can't choose otherwise. C. I am not willing to learn online.	(single choice)

Appendix 2.2 Post-module questionnaire for peripheral learners

Note: If questions are different between 2005 and 2006, the differences are indicated in emboldened words with the year in brackets.

Post-module Questionnaire

Dear Learners,

Congratulations on your successful completion of the orientation module. We would like you to join us evaluation this module by filling out this post-orientation questionnaire. All the information you provide in this questionnaire will be used for a research aiming at improving the orientation module. Your information will be kept confidential and will not be used in any form of assessment. Please complete this questionnaire before 31st of March and send it as an attachment to BAguide@beiwaionline.com. **(As spring 2006 questionnaires were administered online, this sentence was changed to "Please complete this questionnaire after you submit your assignment.)**. If you have any questions about the questionnaire, please call 010-88817912/13, or send e-mail to support@beiwaionline.com. We will be there to help you. Thank you for your time and support.

Yours, Professor Guide and her colleagues

Part I: Evaluation of the orientation module

1.	Which of the following best describes your situation? A. I don't know what the orientation module is. B. I know about the orientation module, but I didn't do any of its activities. C. I participated in the activities of the orientation module.	(single choice)
2	Do you think that the orientation module is helpful to you? A. Very helpful. B. Quite helpful. C. Average. D. Not very helpful. E. Not helpful at all. F. I don't have opinions.	(single choice)

3	Which of the following goals do you think the orientation module has achieved? A. None of the following goals. B. It helped me familiarize with the Institute's course resources, assessment and support schemes and make full use of them. C. It helped me master computer and Internet skills. D. It helped me build up community with fellow learners and tutors. E. It helped me build up my confidence in English learning. F. It helped me develop a positive attitude towards online education. G. It helped me develop learner autonomy. H. It helped me develop learning strategies for English language studies. I. It achieved all the above goals.	(Multiple choice)
4	Which of the following best describes your attitude towards your choosing to learn English via online mode: A. I think I made a right choice. B. I think I made an inappropriate choice.	(single choice)_____

Part II: Your learning routines

5	How many average hours per week did you spent studying the orientation module? (If you did not learn the module, please entre 0)	hours
6	When you study the orientation module, you mainly (more than half of the study time) study it: A. I did not study the module B. via print C. via CD-ROM D. via e-platform	(single choice) _____
7	Your most-frequently-used place to study the Institute courses is: A. a room of my own at home B. a room shared with my family members at home C. office shared with others D. office of my own E. on my way to/fro work or business F. public places such as net bars, dorms, or libraries. G. at breakfast, lunch or dinner table H. other places (Please specify on the given line.)	(multiple choices, but no more than two.)_____
8	**(Spring 2006)** You often study: A. for a continuous one hour or more. B. for a continuous half-an-hour to one hour. C. for a continuous a few minutes to half-an-hour. D. all of the three situations above.	(single choice) _____

9	**(Spring 2006)** You often study: A. from Monday to Friday B. on Saturday and Sunday C. on both weekdays and weekends.	(single choice) _____
10	**(Spring 2006)** You often study: A. in the early morning (i.e. 6:00-8:00 a.m.) B. in the morning (i.e. 8：00～12：00 a.m.) C. at noon (i.e. 12：00～14：00 p.m.) D. in the afternoon (i.e. 14：00～18：00 p.m.) E. in the evening (i.e. 18：00～22：00 p.m.) F. at night (i.e. 22：00～24：00 p.m.) G. in the wee hours of the morning (i.e. 24：00～6：00 a.m. next day)	(multiple choices, but no more than two.) _____
11	The orientation module is delivered via print, CD-ROM and e-platform. When you studied this module, you mainly (for more than half of your study time) used: A. I did not learn the module. B. Print. C. CD-ROM. D. E-platform.	(single choice) _____
12	**(Spring 2006)** When you came across difficulties and problems when studying the Institute courses, you: A. never came across any difficulties or problems. B. just let them be, taking no actions. C. tried to solve them on my own. D. seek help during face-to-face ttutorials. E. seek help by visiting the learning centre at non-tutorial time. F. seek help by calling my learning centre. G. seek help by sending emails to my learning centre. H. seek help by calling learner support hotline 88817912/13. I. seek help by sending emails via support@beiwaionline.com to the headquarters. J. seek help by sending posts to the forum. K. seek help by attending VOB or VOC programmes. L. seek help by asking my fellow learners via MSN, QQ, or other means.	(multiple choices, but no more than four.) _____

Note: The following questions were originally designed in the questionnaire. The research team moved them to the assignment of the orientation module in order to have high return rate.

1. Do you think you have made achievements by studying the orientation module? If yes, what are your major achievements?
2. Do you think you have concerns, problems or difficulties while studying the orientation module? If yes, what are your major concerns, problems and difficulties?
3. Please use the space below to write down your comment on the orientation module.

Thank you for your participation. Please review the questions to make sure that you have answered all of them.

Appendix 2.3 Invitation letter for 2005 tutor-researchers

Dear tutor,

Welcome to the research team. My name is Cao Wen, the general secretary of the Orientation Research Project. This team is planned to be made of a tutor-researcher group and a learner-research group (15 learners randomly selected from our admission list). The tutor-researcher group consists of an module designer, a chair tutor of the module, a local administrator, local tutor and me.

The orientation module is one of the key modules of the Institute curriculum. This semester, I would like to explore a new approach to this module development – to include learners and tutors in the design, delivery and evaluation process.

I wonder if you would like to participate in this project. Please read the project briefing and tell me your decision by contacting either of the following: Tel: 13651231854 （Cao Wen）; E-mail: caowen@tutor.beiwaionline.com.

Orientation module Research Project Briefing

Note: All the information under each question is omitted to avoid repetition of what has been introduced in the thesis body.

Q1: What is the aim of the project? Q2: How long is this project? Q3: What am I expected to do?

Q4: Does the project require special equipment? Q5: What is the language used in the project? Q6: How will my data be protected?

Q7: What are the disciplines? Q8: What do I gain from this project? Q9: Additional information

Participant only:

I have read in full detail the above Project Briefing and have removed all the possible confusions and doubts I have in a face-to-face research orientation with the general secretary. I am fully aware of my commitment to and benefits of the research project. I hereby confirm my participation.

Signature: _____ Date: _____

Appendix 2.4 Pre-module interview of 2005 tutor-researchers

Pre-module Interview Question Sheet

Part I: Interview administration

Date:	Place and Medium:	Recording equipment:
Interviewer:	Interviewee:	Document file:
Announcement of the interviewer: All data collected at this interview will be used solely for academic research purposes. It will not be used for any form of assessment. Signature of the interviewer: _____ Date: _____		
Announcement of the interviewee: I attend this interview out of my own will. I have been informed of the purpose and process of the interview. I agreed that data for this interview be used in Orientation Research Project. Signature of the interviewee: _____ Date: _____		
Summary of the interview:		

Part II: About research (Hints in brackets can only be used when the interviewer indicates that he/she does not quite understand what the question aims at.)

1. Do you have any research interest? If yes, what is it?
2. Have you undertaken any kind of research project? If yes, can you briefly describe it (context, goals, methods, product, roles, team or individual work, publications, etc.)
3. How familiar are you with action research approach? If you know about it, can you briefly describe what you know about?
4. Have you actually used this approach to do any research? If yes, can you briefly describe what the experience was?
5. How do you feel about participating in this research project? (motivation, attitude, confidence, group work, etc.)

Part III: About the orientation module (Hints in brackets can only be used when the interviewer indicates that he/she does not quite understand what the question aims at.)

1. How do you define the importance of applying an orientation module your learners at the Institute?
2. What do you think the module should be designed? (objectives, content, support, assessment, media, length, etc.)

Part VI: Free discussion

1. Do you have anything more to add to the previously asked questions?
2. Do you have any inquiries to make?

Appendix 2.5 During-module seminar agendas for 2005 tutor-researchers

Themes	No.	Discussion questions	Perspectives
Concerning learners' learning experience	1	What do you identify as critical incidents? Why? (learners' achievements, problems, difficulties and anxieties)	as a learner
Concerning the orientation module	2	In what way is the orientation module useful and helpful?	as a designer and a learner
	3	In what way should the orientation module be improved or changed?	
Concerning tutoring experience	5	What do you identify as critical incidents supporting the learners? (activities, difficulties, problems, reasons)	as a tutor
	6	What support do you suggest tutors need?	
Concerning the research	7	What are the data obtained so far and their implications?	as a researcher
	8	In what way should the research design be improved or changed?	

Appendix 2.6 Post-module interview of 2005 tutor-researchers

Post-module Interview Question Sheet (Tutors)

Part I: Interview administration (See Appendix 2.4)

Part II: Interview questions

1. Do you think you have benefited from this research project? If yes, what are the major benefits?
2. Do you think you have had difficulties in this research project? If yes, what are the major difficulties?
3. Among all the research activities, which ones do you prefer? Why?
4. If there is another action research project, would you like to join in?

Appendix 2.7 Journal template of 2005 tutor-researchers

Date	Activities	Reflections	People involved*

* This column was added to the template later in the "development" stage of the orientation module when more people were involved.

Appendix 2.8 Invitation letter for 2005 learner-researchers

Dear learner,

Congratulations on your admission to the Institute!.

My name is Cao Wen, the team leader of the research project. This team is made of a tutor-researcher group and a learner-research group. The tutor-researcher group consists of a designer, Tutor A; Tutor B, Tutor C and me. You might ask, what does an orientation module research project to do with me? Well, we would like to invite you to become a member of our learner-researcher group to do research together with us. The orientation module is one of the key modules of the Institute curriculum. This semester, we would like to explore a new approach to module development – to include learners in the design, delivery and evaluation process.

We randomly selected 15 learners from our admission list (1 every 15) and you happened to be on our list. We wonder if you would like to participate in the project. Please read the attached project briefing and then tell us your decision by contacting either of the following:

Tel: 13651231854 (Cao Wen) E-mail: caowen@tutor.beiwaionline.com

Orientation Research Project Briefing

Note: All the information under each question is omitted to avoid repetition of what has been introduced in the thesis body.

Q1: What is the aim of the project? Q2: How long is this project? Q3: What am I expected to do?

Q4: Does the project require special equipment? Q5: What is the language used in the project? Q6: How will my data be protected?

Q7: What are the disciplines? Q8: What do I gain from this project? Q9: Additional information

Participant only:

I have read in full detail the above Project Briefing and have removed all the possible confusions and doubts I have in a face-to-face research orientation with the team leader. I am fully aware of my commitment to and benefits of the research project. I hereby confirm my participation.

Signature: _____ Date: _____

Appendix 2.9 Pre-module interview of 2005 learner-researchers

Pre-module Interview Question Sheet (Learner-researchers)

Part I: Interview administration (See Appendix 2.4)

Part II: About research (Hints in brackets can only be used when the interviewer indicates that he/she does not quite understand what the question aims at.)

1. Have you ever had any research experience? If yes, can you briefly describe it?
2. What do you feel about participating in this research project? (motivation, attitude, confidence, etc.)
3. Do you know exactly what you are expected to do in this research project?

Part III: Free discussion

3. Do you have anything more to add to the previously asked questions?
4. Do you have any inquiries to make?

Appendix 2.10 During-module seminar agendas of 2005 learner-researchers

Themes	No.	Discussion questions	Perspectives
Concerning your learning experience	1	What are your achievements? (critical incidents)	As a learner
	2	What are your problems, difficulties and anxieties? (critical incidents)	
	3	What is the support you need?	
Concerning the orientation module	4	In what way is the orientation module useful and helpful?	As a learner and a designer
	5	In what way should the orientation module be improved, or changed?	
Concerning the research	6	What have you observed so far and their implications?	As a researcher
	7	In what way should the research design be improved or changed?	

Appendix 2.11 Post-module interview of 2005 learner-researchers

Post-module Interview Question Sheet (Learner-researchers)

Part I: Interview administration (See Appendix 2.4)

Part II: Interview questions

1. What impressed you most in this research project?
2. Do you think you have benefited from this research project? If yes, what are the major benefits?
3. Did you experience anxieties or difficulties in this research project? If yes, what were they?
4. You were required to write diaries, attend the discussions every weekend, and take interviews. When you were completing these tasks, which of those activities you preferred to attend? Why? Which of those activities you did not prefer to do? Why not?
5. Do you think that it made a difference whether or not you participated in this research project?
6. Do you have any else to say about the research project? Do you have any questions to ask?

Appendix 2.12 Journal template of 2005 learner-researchers

Date	Activity	Time	Media	Place	My Reflections		
					About my study	About the orientation module	About the research

Appendix 2.13 During-module interview of 2005 peripheral tutors

During-module Interview Question Sheet (Local tutors)

Part I: Interview administration (See Appendix 2.4)

Part II: Interview questions

1. How do you define the importance of applying an orientation module your learners at the Institute?
2. What do you think the module should be designed? (objectives, content, support, assessment, media, length, etc.)
3. What are the difficulties you think your learners experience during their study of the orientation module?

Appendix 2.14 During-module seminar agendas of 2006 new staff See Appendix 2.5

Appendix 2.15 Journal template of 2006 new staff

Date	Activities	Reflections

Appendix 2.16 Group work report (as a part of 2006 assignment)

Part IV: My study group's reflection

56) My group members			
	Name	Registration. No.	Learning centre
a)	(Group leader)		
b)			
c)			
d)			
e)			
f)			
57) Group identity:			
58) Record of group activities			
Date:		Place/media:	
Summary of group discussion			
59) Designs/activities of the orientation module that prove to be effective are:			
60) Designs/activities of the orientation module that need improvement are:			

Appendix 2.17 Post-module interview of 2006 sampled group members on group activities

1. How do you define the importance of group work in an online learning situation?
2. Do you think you have benefited from group work? If yes, what are your major benefits?
3. Have you experienced anxieties or difficulties in group activities? If yes, what are they?
4. What is the most appropriate way to set up groups?
5. What is the appropriate size of a group?
6. If group learning is not required in the assignment, do you think you will still set up groups and join group activities?

Appendix 2.18 Post-module interview of 2006 peripheral tutors on group approach

1. How do you define the importance of group work in an online learning situation?
2. Who administered group set-up at your centre?
3. Did you play any roles in learners' group activities? If yes, what is it?
4. Did group work benefit the learners? If yes, what are the major benefits?
5. Did learners encounter anxieties and difficulties in group work? If yes, what are they?
6. If group work is not required in the assignment, do you think learners will still set up groups and join group activities?

Appendix 2.19 Journal template of 2006 Beijing learner group

Date	Activity	Time	Media	Place	My Reflections	
					About my study	About the orientation module

Appendix 3 Collections of Codes

Appendix 3.1 Code of learners' achievements (All examples are my translation from Chinese to English unless specified.)

Sub-categories		Examples (bold words as signifiers)
Main category 1: Learner autonomy layer		
●	Help-seeking	*1) I got to know **how to seek help** via the Internet.* *2) I know **where to get help** if I run into difficulties. (original message in English)*
●	Resource-seeking and selecting abilities	1) *Yes. I know how to **make use of the rich online resources** to acquire knowledge.* 2) *Understanding how to **arrange my study with all resources.** (original message in English)*
●	Time-managing abilities	*1) I learned how to **arrange my learning time.*** *2) I know how to **flexibly arrange time** for study.*
●	Plan-making and implementing abilities	*1) I know how to **make study plans** to monitor my learning pace.* *2) I start to realize the **importance of making a study plan and following the plan.***
●	Adapting abilities	*1) I got to know **the differences** between online learning and on-campus learning. I know how to be **a good online learner.*** *2) For more than ten years, I have been studying English by sitting in a classroom and listening to a teacher. Now I have **a full new understanding** of what online learning is. The more I learn about it, the more I like it.*
●	Goal-setting abilities	*1) I know how to study **with a goal** and a plan.* *2) I have **gained directions**. I know what to do, when to do it and how to do it.*
●	Self-discipline, self-monitoring & self-evaluation abilities	*1) I have **no choice but to pick up the book and start learning.*** *2) I can't fall behind of others. I must **keep up with them.***
●	Learning strategy development abilities	*1) I know **how to learn online.*** *2) I know how to use **different methods** to learn the courses.*

Main category 2: Language learning layer		
●	English learning strategies	*1) I have mastered **helpful English learning methods.*** *2) English is skill, not knowledge. I should **learn by doing.***
●	English skills	*1) Yes, I do. Before I didn't know **how to learn vocabulary** well, try to learn every word. I found that the four different levels to learn four kind of vocabulary from. Therefore, I wasn't scared of learning vocabulary anymore. I will treat it as a piece of cake. (original message in English)* *2) I have chances to **practice my oral English** with my classmates.*
Main category 3: Affect layer		
●	Motivational	*1) My biggest achievement is to have **re-established my confidence.*** *2) It **reduced many worries** about the distance learning, and realize that I will over come all the difficulties and get a good result in this university through the hard working and my tutors' help. (original message in English)*
●	Emotional	*1) I began to **like** this way of learning.* *2) I know hard work is waiting for me. But I **don't feel lonely.** I know I have classmates and tutors to support me.*
●	Social	*1) I got to know **friends** who can study together for the same goal.* *2) Yes, I have many gains. I know many classmates in our class. Especially our **team members** through the activities, I know their names, hobbies, jobs, which will help me both in English Lessons and my current jobs. (original message in English)*
Main category 4: Technology layer		
●	Technical skills	*1) I have known the **e-platform** well.* 2) *I have mastered some **computer skills.** This made my learning online easier.*
Main category 4: System layer		
●	System in general	*1) I got to know **the Institute** better.* 2) *I got to know that the Institute has **a strong and comprehensive system** to make me succeed in my learning.*
●	Learning process	*1) Orientation module helps me get familiar with the features of on-line learning. It helps me have the detailed picture on **all the stages for a course,** from the beginning period to the final examination. It's a must for me in order to achieve the final goal.* 2) *I got to know that the learning process is not as complicated as I imagined.*

●	Resource system	*1) I got to know the three-year curriculum.* *2) I got to know the online resources of each course.*
●	Support system	*1) I got to know both the online and offline support services.* *2) The online support.*
●	Assessment system	*1) I got to know how I will be assessed in my course.* *2) I got to know how formative assessment is administered.*
●	Rules and regulations	*1) I knew more clearly about rules and regulations. This saved me a lot of time. I can now focus on my study.* *2) I got to know the details of the rules and regulations. This prepared me well for my future study.*

Appendix 3.2 Code of learners' difficulties / problems / concerns / inquiries

Sub-categories	Examples (bold words as signifiers)
Main category 1: Learner autonomy Layer	
Help-seeking	*1) I live far away from the centre. If I have questions, I don't know who to ask.* *2) I cannot get timely feedback from the teachers.*
Resource-seeking and selecting abilities	*1) The biggest-difficulty I probably have is that I don't know how to make use of the resources online.* *2) I am afraid that I miss the important information online.*
Time-managing abilities	*1) Since I have not yet married, during my three-year study, I will get married and have baby. The biggest problem I will face is how to solve the conflict between my study and family.* *2) I am on business trips all the time. I don't have fixed time for study.*
Plan-making & implementing abilities	*1) I don't know how to make study plans.* *2) I can't keep up to the study plan because I am not familiar with online study.*
Adapting abilities	*1) I don't know how to start my online study. Are there learning methods that can help me adapt to it within a short period of time, in order to learn effectively?* *2) It's been a long time I haven't attended formal educational programmes. I am not used to this any more.*

Goal-setting abilities	*1) I don't know **what I am expected to achieve** in three-year time.* *2) I have **no definite goals.***
Self-discipline, -monitoring & -evaluation abilities	*1) The difficulty may be that I don't know **if I meet the study requirement, or if I study appropriate amount.*** *2) **No one supervises** me whether I study or not.*
Learning strategy development abilities	*1) The difficulty may be that I **can't remember well** what I have learned.* *2) The biggest difficulty is how to **find an appropriate learning method**, and have time for study.*
Main category 2: Language learning layer	
English skills	*1) Through three-year study, can my English **reach a high level?*** *2) My current **English is poor**. Many new words, unfamiliar grammar rules, poor listening and speaking skills. Though I will work hard, this situation has been like this for a long time. I don't know if I can overcome it time.*
Course study	*1) Yes, don't understand **what the text says.*** *2) Have no idea **of the key points** of the unit.*
Course assessment	*1) I am worried that **I can't submit my assignment on time.*** *2) I am worried that **the exams are difficult.** I won't pass them.*
Main category 3: Affect layer	
Motivational	*1) I am concerned that when the initial enthusiasm fades away, **I can't persist.*** *2) Yes. My biggest concern is that I am **not confident enough.** I might quit in the middle.*
Emotional	*1) I am **worried** that I can get help from my tutor.* *2) I am **not sure** if I can pass the exam.*
Social	*1) Lack of **chances for communication** with tutors and learners.* *2) I don't have **a fixed partner** to study with.*
Main category 4: Technology layer	
Technical skills	*1) I don't know how to use the **many functions of the e-platform.*** *2) I am **not familiar with the Internet.***

Equipment availability and accessibility	*1) I only **have access to the computer** at office.* *2) I **can't use mic** when I do my study at office.*
Technology stability	*1) **The courseware won't play**. Once I got ineligible codes all over the screen when I click open the courseware.* *2) **I can't access VOB** because it is too crowded.*
Main category 5: System layer	
Rules and regulations	*1) What should I submit if I want to apply for **course exemption?*** *2) **What are the six degree courses?***
Administrative arrangements	*1) **Where can I get my textbooks?*** *2) **Who is our tutor? Where is the tutorial?***

Appendix 3.3 Code of instructional design process

Note: This code was developed mainly at the research cycles 1 and 2 so that they reflected my then concept of instructional design rather than my current multimodal learning system design concept.

Categories		Descriptions	Examples
Concerning phases			
●	Analyze and design	Formulating the instructional design for the objectives, resource, support and assessment based on the analysis of previous research findings, literature review, current situation, instructors' expectations and learners' needs.	*1) Discussed the course objectives.* *2) I have to give up the idea of updating the print textbook.*
●	Develop	Developing the course (a learning environment) for learners according to the design.	*1) Finalize the orientation module plan.* *2) Negotiate with the courseware design about the script template.*
●	Implement	Delivering the course as designed.	*1) I have to apply for an extra budget to dispatch the CD-ROMs to learning centres.*

			2) *I never considered volume capacity an issue or my responsibility as a chair tutor to remind the platform person of this.*
●	Evaluate and reflect	Evaluating the course and reflecting on the findings to inform the improvements desired in a new cycle of instructional design.	1) *We should have put the course objectives in writing instead of embedded the ideas in the activities.* 2) *It seemed that learners completed the course without committing to the required amount of the study time.*
Concerning activity type			
●	Academic	Work that deals with pedagogical considerations and decisions	1) *Complete the **outlines of four VOB programmes**.* 2) *Tell Zhong that Professor Guide should be **a female image instead of a male image**.*
●	Organizational	Work that controls or organizes the actions and work that carries out academic decisions.	1) ***Complete** the courseware development **agenda** and sent it to Zhong* 2) *Contact the press for the **price of printing** the Orientation module Plan.*
●	Technological	Work that deals with technology-related considerations and decisions	1) *Confirm with the Courseware Centre and the Multi-media Centre an appropriate **voice format**.* 2) *Ask the technician to **reset the maximum volume** of VOB.*

Concerning people		
●	Managerial staff	*project managers, centre directors*
●	Academic staff	*chair tutors, academic committee staff, English editors*
●	Computer and Internet technicians	*programmers, e-platform engineers*
●	Audio and video technicians	*audio and video directors, cameraman, sound engineers*
●	Art designers	*art designers who design courseware interface, CD-ROM covers, etc.*
●	Legal counselors	*lawyers who give advice to authorship issues and publication contract.*
●	Administrators	*staff of office work (typing, package mailing, archive administration)*
●	Financial staff	*accountants and tellers*

Appendix 3.4 Code of instructional design product

Sub-categories	Examples (bold words as signifiers)
Main category 1: Generic design	
General comment	*1) The team thought the orientation module **well targeted at new learners**. It was well organized with clear procedures. It is very **helpful** for new learners to know the Institute and to develop online learning skills.* *2) The course has **no focus, no highlights. It cannot cater for learners of different needs.** In other words, it is not OK to present all the information. The best way is to consider the different needs of the learners.*
Time-related	*1) It was inspiring to learn this course **before the study actually started.** Hope you can persist.* *2) I would like to make the following suggestion: you should provide access to the course to all potential learners; you **should not wait until they pay the tuition to deliver the course.***
Sequence- related	*1) Guide to the e-platform and rules and regulations should be introduced **before everything else.*** *2) You should offer me freedom to follow **my own sequence of activities.***
Main category 2: Objective design	
General comment	*1) The group thought that the course should keep to these designs: **clear goals,** detailed learning activities, accessible learning resources, considerable reminders of Professor Guide.* *2) I am confused by all the information. What are they **getting at?***
Learner autonomy	*1) The first week schedule set up a model. This helped the learners **make their own plans** for their future study.* *2) The course provided us with a clear learning rout, helping us quickly **adapt to online learning.***
Language learning	*1) It is very necessary for us. We can **study English** in many ways, and avoid many mistakes.* *2) I did **not find my listening improved.***
Affect	*1) Collaborative learning is very **encouraging.** Learners no longer feel **lonely.*** *2) Through procedural activities, the course helped learners understand online learning, develop online learning skills, and **relieve their anxieties.***
Technology	*1) I feel good. The course helped learn a lot, including **Internet skills**, online learning skills, and other information. Very good, very good.*

	*2) I learned to **download and install software**.*
System	*1) The course is good in that it helped us understand **the rules and regulations of the institute**, the appropriate learning methods, and resource-utilization skills.* *2) The course helped me to know **the learning process** in detail.*
Main category 3: Resource design	
General comment	*1) The course has **rich resources**, easy for study and comprehension.* *2) There is **too much information**.*
Content- related	*1) **Assessment Day** helped me ways to deal with different types of assessment of the courses. I think the assessment well reflects the idea of "learning by doing".* *2) I hope that course should provide **more learning methods**. Since online learning depends much on learners' autonomy, adopting appropriate learning methods become important to us.*
Media-related	*1) We were convinced by **a variety of media** for resource delivery: the print version helped us understand important arrangements; the CD-ROM version was provided upon registration, so that learners could make good decisions before they paid the tuition; the platform was access-friendly, helping us know the course resources, learning methods and rules and regulations.* *2) The **courseware** has a combination of **text, audio and video** which will lead to good learning results.*
Administration-related	*1) You should keep to the **free delivery of the materials** for the orientation module.* *2) I like the idea that materials were **provided before the semester started**.*
Language- related	*1) I think that orientation module plan should be written **in both Chinese and English**.*
Main category 4: Support design	
General comment	*1) I was impressed by **a variety of ways** to get help.*
Media-related	*1) **Face-to-face** communication is very good. It will promote understanding of each other and provide support.* *2) There should be provision of VOB programmes in **MP3** files.*
Content- related	*1) VOB programmes did a lot of exercises in **speaking, reading, writing**, etc.* *2) There should be a learners' **address book** to promote learners' contacts, and to relieve their sense of loneliness.*
People- related	*1) Lectures on learning methods. Invited **senior learners** to share their experiences.*

	2) *More activities should be organized to foster oral practice. It would be better if we can have **native speakers**.*
Time-related	1) *Time arrangement for VOB programmes was **too late**. Can they be half-an-hour earlier?* 2) *It would be better if you provide **24-hour help line service**.*
Administration-related	1) *The **tutorial schedule and announcements**. Sometimes the announcements used simplified terms that were hard to understand. The tutorial schedule should state clearly the time, place, and the name of the tutor..* 2) *The centre should **inform us in advance** that the tutor would not be available for the tutorial. We were informed only when we arrived at the classroom. This is poor service.*
Interaction- related	1) *If we can have **one-to-one** tutorial, I believe it can relieve the anxiety of most of our learners.* 2) *We think **collaborative group work** takes effort. Since we are all new to each other, and we don't have much time to spare, group work should have a very clear discussion focus that can be managed within limited time.*
Region-related	1) *We think **our learning centre** didn't do much work in supporting us.* 2) *We hope to have live broadcast of the opening ceremony of **Beijing learning centre** to experience the atmosphere.*
Main category 5: Assessment design	
Goal-related	1) *The assessment did **reinforce what has been learned**.*
Content-related	1) *The assignment is very **specific and clear to understand**.* 2) *I have my own opinion towards the assignment. As a BA holder, I found **questions 11, 12 and 13 irrelevant**.*
Type-related	1) *Not all activities have self-assessment. It should **cover all the activities**.* 2) *I think the **score of the self--assessment** should be included in the final score.*
Media-related	1) *The process of submitting the assignment should be **streamlined**.* 2) *You should make sure that the **e-platform** is in good condition on the last day of assignment submission.*
Time-related	1) *I suggest assessment should be arranged **on a daily basis** so that I can timely know my strengths and weaknesses, so as to achieve better learning results.* 2) *Assignment should be released **at the beginning** of the course, not at the end!*

Appendix 3.5 Code of action research process

Categories	Descriptions	Examples
Concerning phases		
Plan	To decide research focuses informed by previous research cycles, literature review, and group interaction, and to translate them into a research plan.	*1) I have finalized the research plan.* *2) I drafted an invitation letter to LRs.*
Act	To implement the plan and collect data.	*1) I interviewed four LRs via phone today.* *2) Only 118 post-questionnaires were collected.*
Analyze and reflect	To analyze and reflect on the data to surface issues that demand attention in a new cycle research.	*1) We neglected the administration aspect of the questionnaire delivery.* *2) It zooms everything, whether it is something I have never noticed, or something I have noticed, but never given it a thought.*
Concerning activity type		
Academic	Work that deals with methodological considerations and decisions.	*1) There existed three types of cycles.* *2) There lacks methods for data analysis.*
Organizational	Work that controls or organizes the actions and work that carries out methodological decisions.	*1) Only then did I realize that I had no budget for this project.* *2) There lacks a mechanism to encourage and reward us for doing so..*
Technological	Work that deals with technology-related considerations and decisions	*1) Each e-questionnaire took 6-10 minutes to download.* *2) I used SPSS to analyze quantitative data.*

Concerning dimensions[3]			
Initiative	Why do you want to do action research?	Participant	Who are the stakeholders?
Focus	What is your vision, focus, research question or problem?	Process	When will you start and finish your research?
Context	Where do you find a group or an organization?	Method	How will you achieve your goal?

[3] This is based on my research and confirmed in Zuber-Skerrit & Fletcher (2007:42).

Appendix 4 Data of Learners' Study Routines

Appendix 4.1 Weekend and weekday study hours of 2005 learner-researchers and 2006 Beijing learning group (via journals)

Category	Year	Designed (hr.)	Min.(hr.)	Max. (hr.)	Mean (hr.)	SD
Average weekday (5 days) hours per week	2005	10	1.39	18.19	7.96	4.9001
	2006	10	1.50	21.92	7.70	4.0646
Average weekend (2 days) hours per week	2005	6	0	8	2.69	1.9368
	2006	6	0	9.42	3.74	1.8694
Average weekly study hours	2005	16	2.00	21.36	10.65	6.0600
	2006	16	1.71	26.00	11.36	4.6607

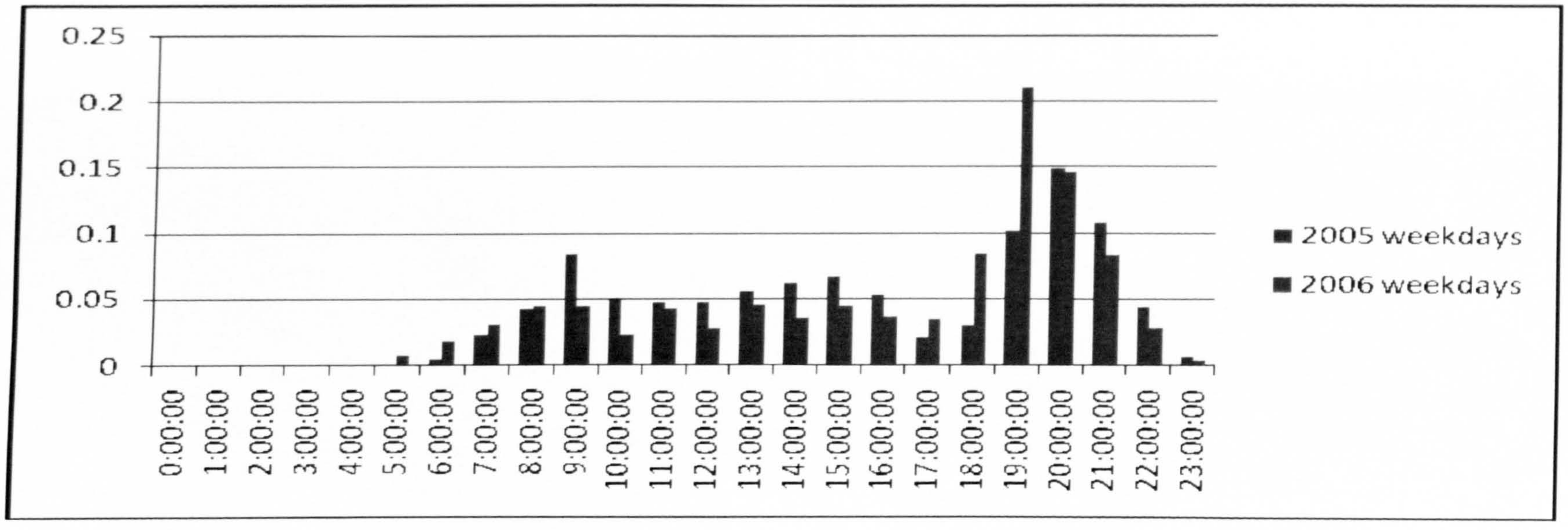
Appendix 4.2 Weekly study hours of 2005 learner-researchers and 2006 Beijing learning group (via journals) and peripheral learners (via post-module questionnaire)

Groups	Year	Designed (hr.)	Min. (hr.)	Max. (hr.)	Mean (hr.)	SD
2005 Learner-researchers	2005	15-17	2	21.36	10.65	6.0600
2006 Beijing learner group	2006		1.71	26.00	11.36	4.6607
Peripheral learners	2005		2	115	12.16	12.076
	2006		1	60	12.86	7.836

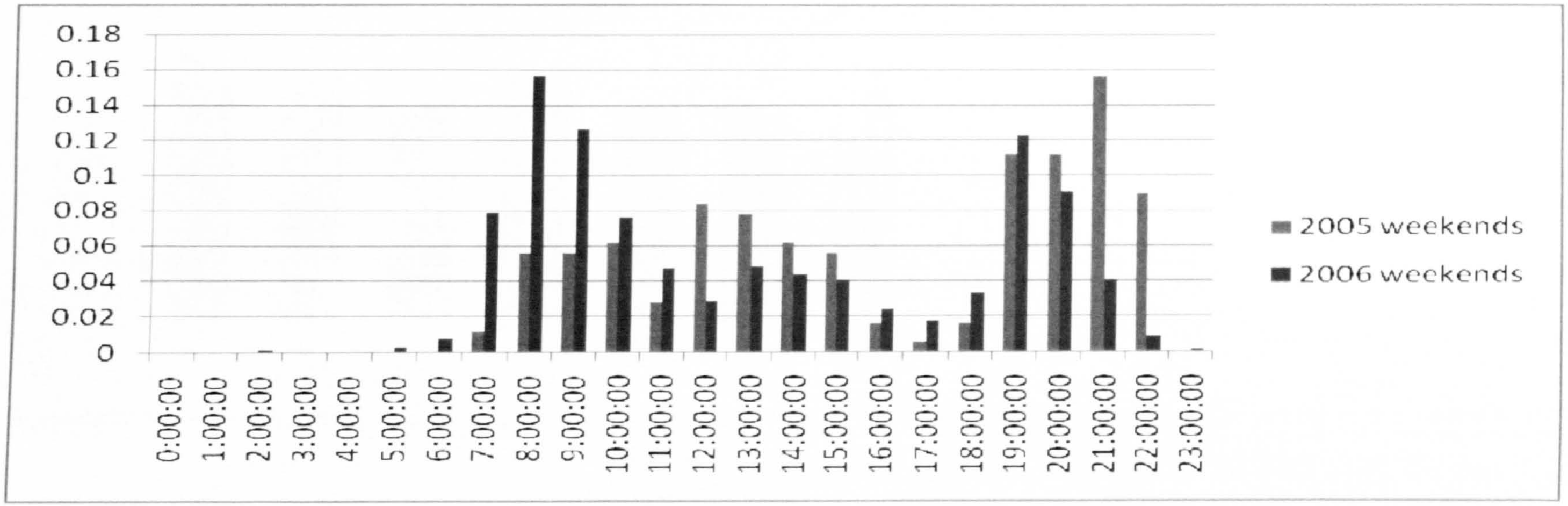
Appendix 4.3 2005 learner-researchers' and 2006 Beijing learner group's average daily time distribution on resource, support and assessment activities

	Year	Mean (hr.)	% of the total study hours	Increase (hr)
Resource	2005	0.66	49.00%	+0.13
	2006	0.78	41.98%	
Support	2005	0.64	47.9%	+0.39
	2006	1.04	55.46%	
Assessment	2005	0.04	3.10%	+0.01
	2006	0.05	2.56%	

Appendix 4.4 Weekday time distribution patterns of 2005 learning-researchers and 2006 Beijing learner group (via journals)



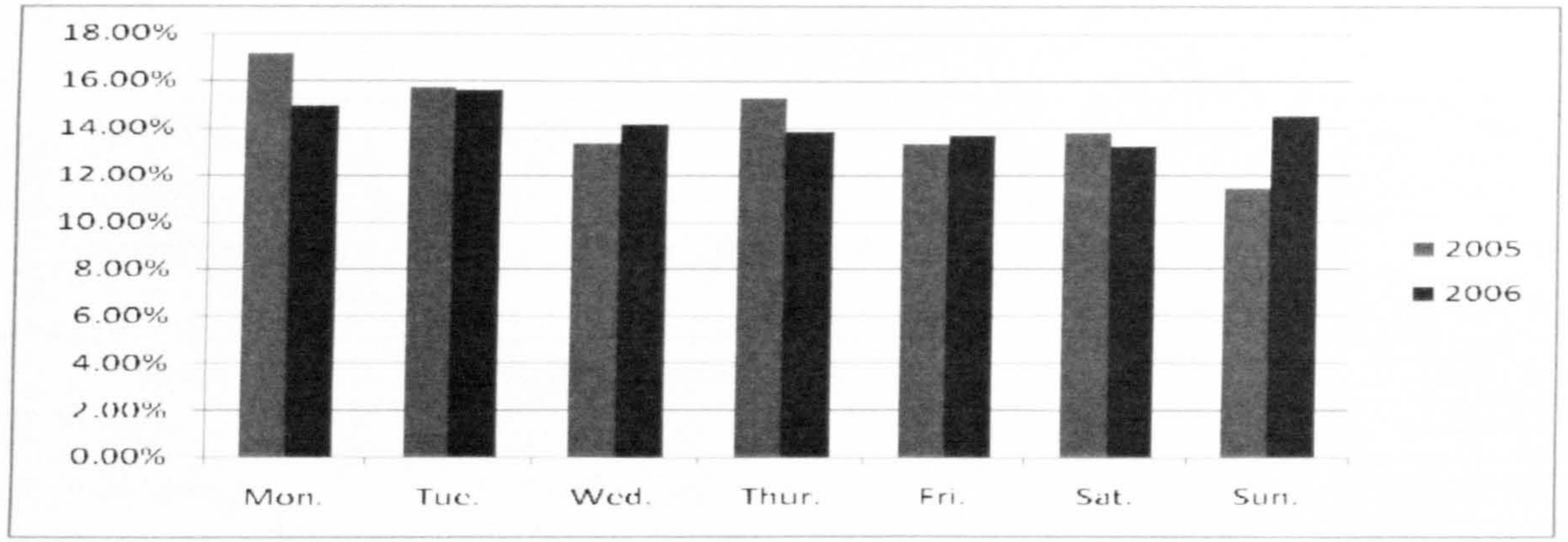
Appendix 4.5 Weekend time distribution patterns of 2005 learner-researchers and 2006 Beijing learner group (via journals)



Appendix 4.6 Top three time distribution patterns of 2005 learner-researchers and 2006 Beijing learner group (via journals)

Week	Rank	2005		2006	
		Patterns	**%**	**Patterns**	**%**
Weekdays	Top 1	20:00-21:00	14.87%	19:00-20:00	21.03%
	Top 2	21:00-22:00	10.80%	20:00-21:00	14.57%
	Top 3	19:00-20:00	10.09%	18:00-19:00	8.47%
Weekends	Top 1	21:00-22:00	15.64%	8:00-9:00	15.63%
	Top 2	19:00-20:00 and 20:00-21:00	11.17%	9:00-10:00	12.59%
	Top 3	22:00-23:00	8.94%	19:00-20:00	12.29%

Appendix 4.7 Day distribution patterns of 2005 learner-researchers and 2006 Beijing learner group (via journals)



Appendix 4.8 Reasons for non-study days of 2005 learner-researchers and 2006 Beijing learner group (via journals)

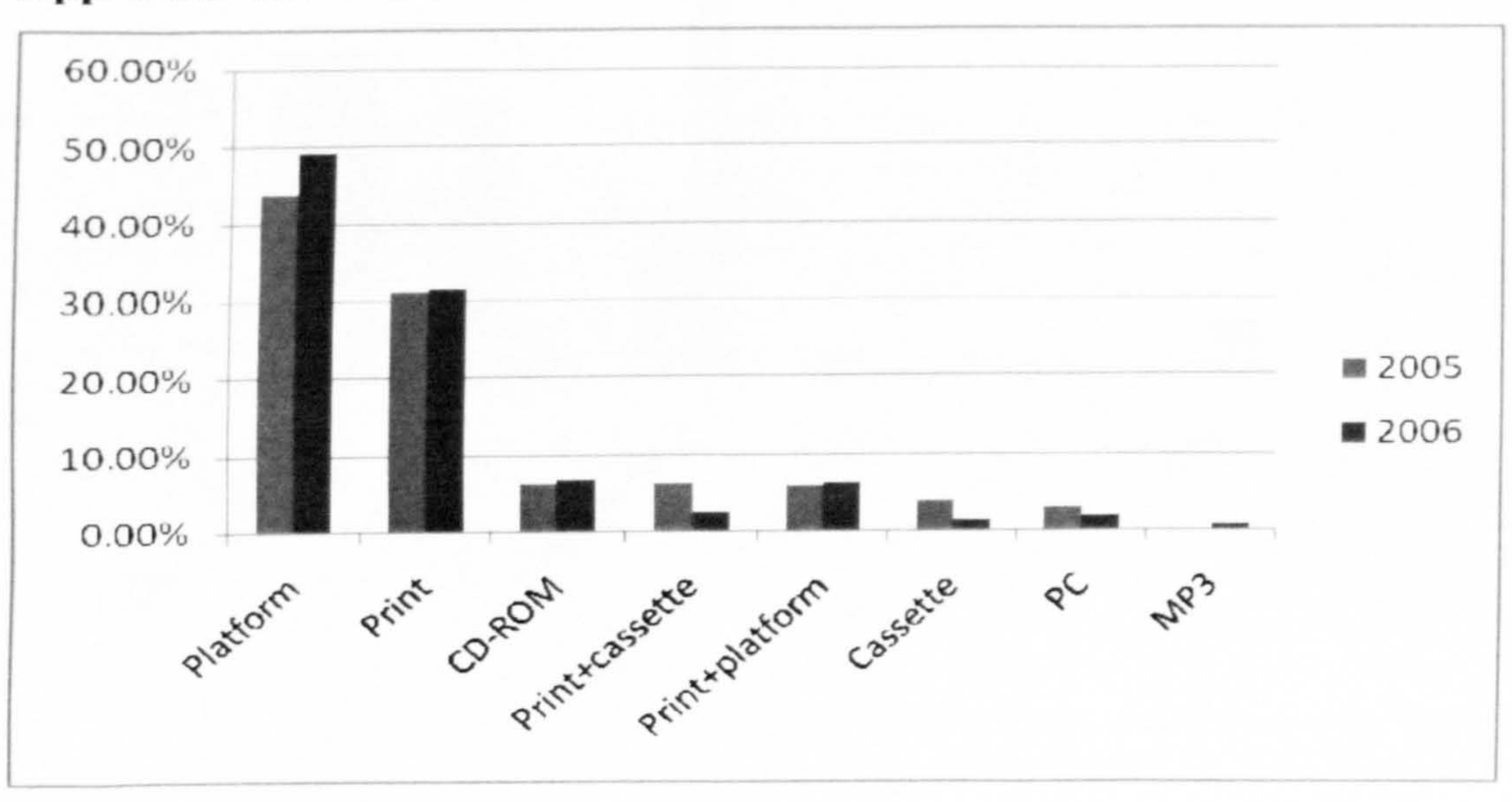
Category		2005 learner-researchers		2006 Beijing learner group	
		No. of journal entries	**%**	**No. of journal entries**	**%**
1)	Work-related reasons	20	19.05%	93	38.11%
2)	Health-related reasons	6	5.71%	22	9.02%
3)	Family-related reasons	3	2.86%	16	6.56%
4)	Leisure-related reasons	2	1.90%	14	5.74%
5)	Study-related reasons*	1	0.95%	12	4.92%
6)	Affect-related reasons	1	0.95%	0	0%
7)	Technology-related reasons	1	3.33%	0	0%
8)	No record	71	62.62%	67	27.46%
9)	No explanation	0	0%	20	8.20%
	Total	105	--	244	--

* "Study" refers to other non-Institute study commitments

Appendix 4.9 Top three time segment patterns of three types of activities of 2005 learner-researchers and 2006 Beijing learner group (via journals)

Activity type	Designed time	Year	Top 1	Top 2	Top 3
Resource	A dominance of 120 in 2005 and 45-60 in 2006	2005	45-60 (26.13%)	15-30 (21.29%)	below 15 (13.55%)
		2006	45-60 (32.35%)	90-120 (16.95%)	60-90 (16.33%)
Support	Forum, telephone and email: open VOB: 90	2005	15-30 (32.65%)	45-60 (18.37%)	150-180 (14.29%)
		2006	60-90 (21.58%)	90-120 (16.55%)	45-60 (12.95%)
Assessment	Self-assessment: 15 Assignment: 120 in 2005 and 180 in 2006	2005	15-30 (50.00%)	below 15 (16.67%)	45-60 (11.90%)
		2006	45-60/60-90 (24.14%)	90-120 (17.24%)	15-30 (13.79%)

Appendix 4.10 Utilization of resource media of 2005 learner-researchers and 2006 Beijing learner group (via journals)

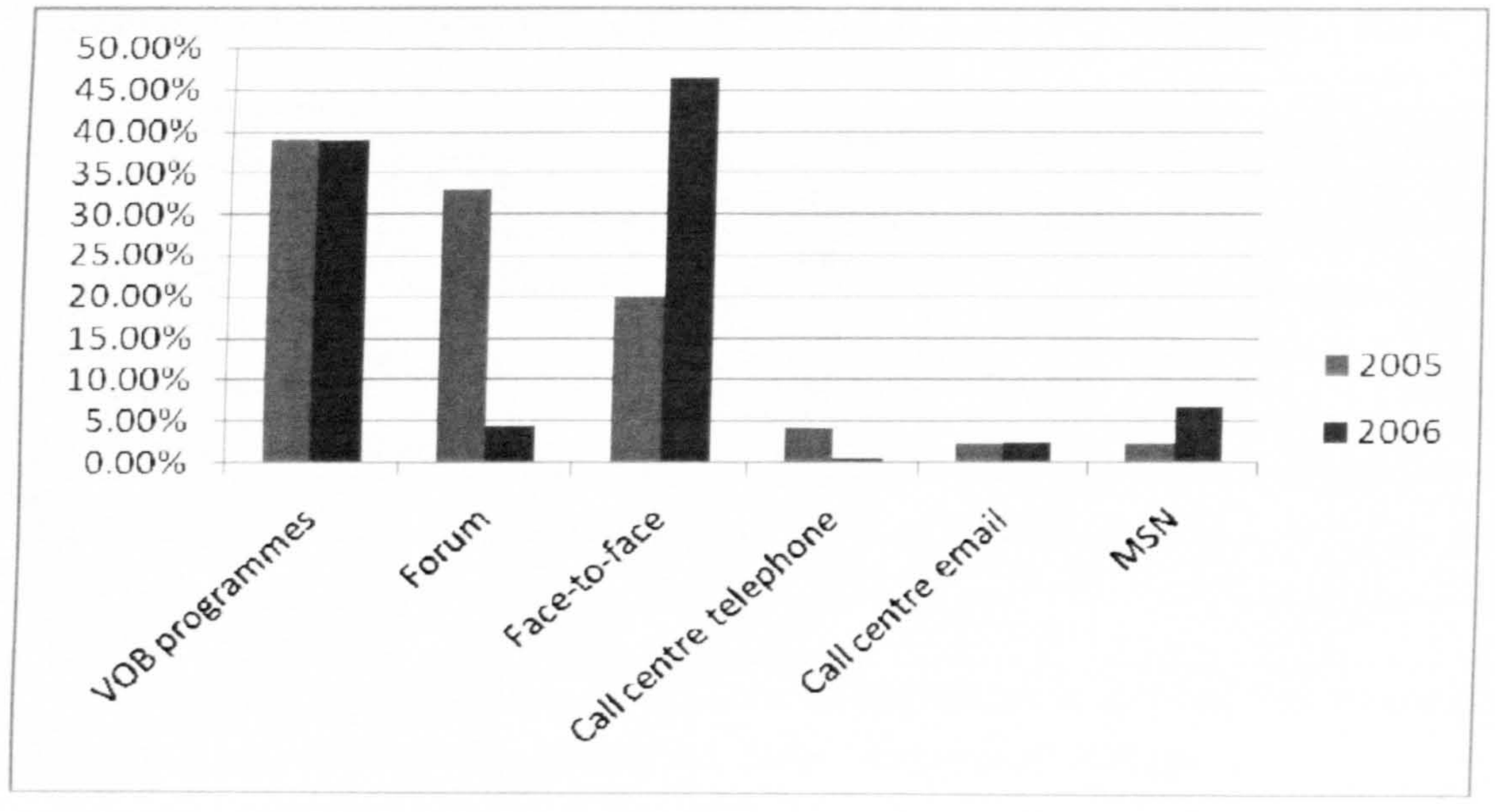


Appendix 4.11 Utilization of resource media of 2005 peripheral learners and 2006 Beijing learner group (via post-module questionnaire)

Media	2005 (N=118)	2006 (N=191)
I didn't learn the course	2. 5%	0%
Print-based*	10. 2%	5. 21%
CD-ROM-based*	30. 80%	41. 15%
Online-based*	56. 50%	53. 65%

*The meaning "-based" was explained in the questionnaire as the medium used for more than half of the study time.

Appendix 4.12 Utilization of support media of 2005 learner-researchers' and 2006 Beijing learner group's (via journals)



Appendix 4.13 Support media 2005 learner-researchers had no record of utilization (via journals)

Support provision media	Learner-researchers who had no record of utilization
VOB	S7 and S14
forum*	S1, S3, ***S5***, S7, S8, ***S11***, S14, ***S15***
Face-to-face tutorials*	S1, S5, ***S9***, S13, S14
Telephone	All except S3 and S10
Email	All except S10

*: Our forum data base showed that S5, S11 and S15 actually had forum posts. Beijing Centre tutorial attendance record showed that S9 actually attended face-to-face tutorials.

Appendix 4.14 Utilization of support media of 2004-2006 peripheral learners (via e-platform database)

Support services	2004 (N=686)		2005 (N=407)		2006 (N=359)	
	No.	%	No.	%	No.	%
Forum posts	588	85.71%	751	185.52%	572	159.33%
Call centre telephones	38	5.54%	20	4.91%	31	8.64%
Call centre emails	47	6.85%	39	9.58%	103	28.69%
Beijing learning centre support					**2006 (N=212)**	
Telephones	--	--	--	--	275	129.72%
Emails	--	--	--	--	153	72.17%
Face-to-face contacts*	--	--	--	--	84	39.62%

*: Administrator of Beijing learning centre reported that this record was far below received inquiries, but she was too busy attending to learners' questions (especially during the breaks of face-to-face tutorials) to make a record of all of them.

Appendix 4.15 VOB programme attendance (peak record) of 2005 and 2006 peripheral learners (via e-platform database)

Week	2005		2006	
	No. of attendance	% (N=407)	No. of attendance	% (N=359)
Week 0	210	51.60%	117	32.60%
Week 1	128	31.45%	64	17.83%
Week 2	98	24.08%	50	13.93%
Week 3	85	20.88%	--	
Average	128	31.45%	77	21.45%

*: Week 0 refers to the programme arranged at the first day of the orientation module.

Appendix 4.16 Tutorial attendance of 2005 peripheral learners (via tutorial attendance records from learning centres)

Centre	Total No. of learners	Orientation (Opening Ceremony)	1st tutorial	2nd tutorial	3rd tutorial
Beijing	222	91%	81%	64%	59%
Shenzhen	63	94%	68%	--	--
Shanghai	38	95%	79%	66%	63%
Xiamen	30	--*	--	--	--
Ningbo	20	--	--	--	--
Nanjing	12	100%	92%	--	--
Suzhou	11	100%	--	--	--
Dalian	11	100%	82%	82%	82%
Average		96.67%	80.4%	70.67%	68%

* "—" means that no record was made.

Appendix 4.17 Assignment submission rate of 2005 and 2006 peripheral learners (via e-platform database)

Year	Total intakes (N)	No. submitted	Submission rate
2005	407	390	95.82%
2006	359	340	94.71%

Appendix 4.18 Assignment scores of 2005 and 2006 peripheral learners (via e-platform database)

Year	Min.	Max.	Mean	Mode	SD
2005	85	100	92. 82	90	3. 8145
2006	84	100	93. 61	90	3. 1262

Appendix 5 Learners' achievements

Appendix 5.1 Peripheral learners' report of their top gains of each layer (via assignment)

	2005			2006		
Main category	**Top sub-category**	**No.**	**% (N=390)**	**Top sub-category**	**No.**	**% (N=340)**
Learner autonomy layer	Adapted to online learning	136	34.87%	Adapted to online learning	136	40%
Language learning layer	Improvement in English learning strategies	18	4.62%	Improvement in English learning strategies	64	18.82%
Affect layer	Emotional affect	101	25.90%	Motivational affect	195	57.35%
Technology layer	Technical skills	23	5.90%	Technical skills	41	12.06%
System layer	Familiarization with the system	54	13.85%	Familiarization with the system	122	35.88%

Appendix 5.2 Achievements of 2005 learner-researchers and 2006 Beijing learning group (via journals and seminars)

Main Categories	2005 learner-researchers				2006 Beijing learner group	
	Journals		Seminars		Journals	
	No. of entries	% (N=183)	No. of entries	% (N=25)	No. of entries	% (N=606)
Learner autonomy layer	37	20.22%	6	24.00%	205	33.83%
Language learning layer	55	30.05%	17	68.00%	82	13.53%
Affect layer	71	38.80%	2	8.00%	251	41.42%
Technology layer	6	3.28%	0	0%	46	7.59%
System layer	14	7.65%	0	0%	22	3.63%
Total	183	--	25	--	606	--

Appendix 5.3 Top achievements of each layer of 2005 learner-researchers and 2006 Beijing learning group (via journals and seminars)

	2005 learner-researchers			2006 Beijing learning group		
Methods	**Top sub-category**	**No. of entries**	**%**	**Top sub-category**	**No. of entries**	**%**
Learner autonomy layer						
Journals	Plan-making and implementing	15	8.20%	Plan-making and implementing	84	13.86%
Seminars	Plan-making and implementing	3	12.00%	--	--	--
Language learning layer						
Journals	English skills	30	16.39%	English learning strategies	57	9.41%
Seminars	No entries	0	0%	--	--	--
Affect layer						
Journals	Motivational factors	34	18.58%	Motivational factors	149	24.59%

Seminars	Motivational factors	2	8%	--	--	--
Technology layer						
Journals	Computer and Internet skills	6	3.28%	Computer and Internet skills	46	7.59%
Seminars	Computer and Internet skills	12	48%	--	--	--
System layer						
Journals	Knowledge of learning process	10	5.46%	Knowledge of the learning process	9	1.49%
Seminars	No entries	0	0%	--	--	--

Appendix 6 Learners' difficulties/problems/concerns/inquiries

Appendix 6.1 Concerns of 2006 peripheral learners (via e-platform database)

Categories	Forum* (N=151) (142 inquiry posts, 151 entries)		VOB* (N=87)		Telephones (N=31)		Emails (N=119) (103 messages, 119 entries)	
	No	%	No	%	No	%	No	%
Learner autonomy layer	21	13.91%	4	4.60%	0	0%	10	8.40%
Language learning layer	10	6.62%	1	1.15%	0	0%	3	2.52%
Affect layer	0	0%	1	1.15%	0	0%	0	0%
Technology layer	40	26.49%	40	45.98%	10	32.26%	24	20.17%
System layer	65	43.05%	37	42.53%	19	61.29%	68	57.14%
Others	15	9.93%	4	4.60%	2	6.45%	14	11.76%

*: Data from these two sources are not all inquiries. N refers only to the number of entries of the inquiry posts.

Appendix 6.2 Peripheral learners' top concerns of each layer (via e-platform database)

	2004			2005			2006		
Venues	**Top sub-category**	**No**	**%**	**Top sub-category**	**No**	**%**	**Top sub-category**	**No**	**%**
Learner autonomy layer									
Forum	Concerns of time-management skills	3	1.01%	Concerns of online learning skills	5	1.42%	Concerns of resource-seeking and selecting skills	13	8.61%
VOB	--	--	--	Concerns of time-management skills	12	5.29%	Concerns of resource-seeking and selecting skills	2	2.30%
Telephone	No entries	0	0%	No entries	0	0%	No entries	0	0%
Email	Concerns of resource-seeking and selecting skills	4	7.27%	No entries	0	0%	Concerns of resource-seeking and selecting skills	7	5.88%
Language learning layer									
Forum	Concerns of English skills	59	19.93%	Concerns of English skills	7	1.99%	Concerns of English skills	7	4.64%
VOB	--	--	--	Concerns of English learning strategies	25	11.01%	Concerns of English skills	1	1.15%
Telephone	No entries	0	0%	No entries	0	0%	No entries	0	0%
Email	Concerns of English skills	1	1.82%	No entries	0	0%	Concerns of English skills	3	2.52%
Affect layer									
Forum	No entries	0	0%	No entries	0	0%	No entries	0	0%
VOB	--	--	--	Motivational factors	8	3.5%	Emotional factors	1	1.15%
Telephone	No entries	0	0%	No entries	0	0%	No entries	0	0%
Email	No entries	0	0%	No entries	0	0%	No entries	0	0%
Technology layer									

Forum	Concerns of computer and Internet skills	53	17.91%	Concerns of computer and Internet skills	107	30.48%	Concerns of computer and Internet skills	37	24.50%
VOB	--	--	--	Concerns of computer and Internet skills	92	34.97%	Concerns of Computer and Internet skills	30	34.48%
Telephone	Concerns of computer and Internet skills	20	51.28%	Concerns of computer and Internet skills	11	55%	Concerns of computer and Internet skills	10	32.26%
Email	Concerns of computer and Internet skills	19	34.55%	Concerns of computer and Internet skills	22	56.41%	Concerns of computer and Internet skills	23	19.33%
System layer									
Forum	Concerns of assessment system	83	28.04%	Concerns of rules and regulations	37	10.54%	Concerns of assessment system	31	20.53%
VOB	--	--	--	Concerns of administrative arrangements	27	11.89%	Concerns of assessment system	29	33.33%
Telephone	Concerns of rules and regulations	9	23.08%	Concerns of rules and regulations	3	15%	Concerns of rules and regulations	9	29.03%
Email	Concerns of rules and regulations	22	40%	Concerns of rules and regulations	15	38.46%	Concerns of administrative arrangements	32	26.89%

Appendix 6.3 Peripheral learners' top concerns of each layer (via assignment)

Main category	2005			2006		
	Top sub-category	No.	% (N=390)	Top sub-category	No.	% (N=340)
Learner autonomy layer	Concerns of time-management skills	92	23.59%	Concerns of time-management skills	128	37.65%
Language learning layer	Concerns of English proficiency	114	29.23%	Concerns of English proficiency	44	12.94%
Affect layer	Emotional factors	156	40%	Emotional factors	114	33.53%
Technology layer	Concerns of computer and Internet skills	11	2.82%	Concerns of computer and Internet skills	13	3.82%
System layer	Concerns of rules and regulations	5	1.28%	Concerns of rules and regulations	3	0.88%
Others	No concerns	40	10.26%	No concerns	40	11.76%

Appendix 6.4 Concerns of 2005 learner-researchers and 2006 Beijing learner group (via journals and seminars)

Main Categories	2005 learner-researchers				2006 Beijing learner group	
	Journals		Seminars		Journals	
	No. of entries	% (N=87)	No. of entries	% (N=40)	No. of entries	% (N=691)
Learner autonomy layer	39	44.83%	23	57.5%	394	57.02%
Language learning layer	26	29.89%	6	15%	97	14.04%
Affect layer	32	36.78%	7	17.5%	152	22.00%
Technology layer	10	11.49%	4	10%	34	4.92%
System layer	3	3.45%	0	0%	14	2.03%
Total	87	--	40	--	791	--

Appendix 6.5 Top concern of each layer of 2005 learner-researchers and 2006 Beijing learner group (via journals and seminars)

	2005 learner-researchers			2006 Beijing learning group		
Methods	**Top sub-category**	**No.**	**%**	**Top sub-category**	**No.**	**%**
Learner autonomy layer						
Journals	Concerns of time-management	23	26.44%	Concerns of time-management	203	29.38%
Seminars	Concerns of time management	20	50%	--	--	--
Language learning layer						
Journals	Concerns of English skills	25	28.74%	Concerns of English skills	73	10.56%
Seminars	Concerns of English skills	6	15%	--	--	--
Affect layer						
Journals	Emotional factors	24	27.59%	Emotional factors	98	14.18%
Seminars	Emotional factors	7	17.5%	--		
Technology layer						
Journals	Concerns of equipment and Internet accessibility	9	10.34%	Concerns of computer and Internet skills	25	3.62%
Seminars	Concerns of equipment and Internet accessibility	2	5%	--	--	--
System layer						
Journals	Concerns of resource-system	3	3.45%	Concerns of assessment system	7	1.01%
Seminars	0	0	0	--	--	--

Appendix 6.6 Learning difficulties of learners proposed by 2005 peripheral tutors (via during-course interview)

	Peripheral tutors	
Category	**No of entries**	**% (N=47)**
Learner autonomy layer	21	44.68%
Language learning layer	12	25.53%
Affect layer	13	27.66%
Technology layer	1	2.13%
System layer	0	0%
Total	47	--

Appendix 6.7 Top difficulties of learners proposed by 2005 peripheral tutors (via during-course interview)

Main category	**Top sub-category**	**No. of entries**	**% (N=47)**
Learner autonomy layer	Concerns of time-management skills	7	14.89%
Language learning layer	Concerns of English proficiency	6	12.77%
Affect layer	Emotional factors	7	14.89%

Appendix 6.8 Learners' concerns collected from 2006 Beijing learning centre (N=212) (via administrators' paper-based record)

1. Telephone messages: **275 (129.727%)**			
●	System layer	236	111.32%
●	Technology layer	37	17.45%
●	Learner autonomy layer	2	0.94%
●	Language learning layer	0	0%
●	Affect layer	0	0%
●	Others layer	0	0%
2. Email messages: **153 (72.17%)**			
●	System layer	121	57.08%
●	Technology layer	24	11.32%
●	Learner autonomy layer	4	1.89%
●	Language learning layer	0	0%
●	Affect layer	0	0%
●	Others layer	4	1.89%
3. Face-to-face messages: **84 (39.62%)***			
●	System layer	62	29.25%
●	Technology layer	13	6.13%
●	Learner autonomy layer	5	2.36%
●	Language learning layer	3	1.42%
●	Affect layer	0	0%
●	Others layer	1	0.47%

*: Face-to-face messages are incomplete since administrators did not record all the inquiries.

Appendix 7 Collections of learner-researchers' and tutor-researchers' reflection

Appendix 7.1 Reflection of 2005 tutor-researchers' journals and seminars

Journals						
Main Category	**Total**		**Positive (praises)**		**Negative (criticisms)**	
	No. of entries	**% (N=75)**	**No. of entries**	**% (N=75)**	**No. of entries**	**% (N=75)**
Reflection on self or self's work	47	62.67%	2	2.67%	45	60%
Reflection on others or others' work	28	37.33%	19	25.33%	9	12%
Total	75	--	21	28%	54	72%

Seminars						
Main Category	**Total**		**Positive (praises)**		**Negative (criticisms)**	
	No. of topics	**% (N=42)**	**No. of topics**	**% (N=42)**	**No. of topics**	**% (N=42)**
Reflection on the orientation module	14	33.33%	2	4.76%	12	28.57%
Reflection on the learners' needs and concerns*	14	33.33%	--	--	--	--
Reflection on the research*	10	23.81%	--	--	--	--
Reflection on the technological context	3	7.14%	0	0%	3	7.14%
Reflection on the organizational context	1	2.38%	0	0%	1	2.38%
Total	42	--	2	--	16	

* These two topic categories cannot fall in either complimentary or critical column.

Appendix 7.2 Reflection of 2005 learner-researchers' journals and seminars

Journals						
Main Category	**Total**		**Positive (praises)**		**Negative (criticisms)**	
	No. of entries	**% (N=487)**	**No. of entries**	**% (N=487)**	**No. of entries**	**% (N=487)**
Reflection on self and self's study	295	60.57%	184	37.38%	111	22.79%
Reflection on the orientation module	144	29.57%	51	10.47%	93	19.1%
Reflection on the research	48	9.86%	39	8.01%	9	1.85%
Total	487	--	274	56.26%	213	43.74%
Seminars						
Main Category	**Total**		**Positive (praises)**		**Negative (criticisms)**	
	No. of entries	**% (N=215)**	**No. of entries**	**% (N=215)**	**No. of entries**	**% (N=215)**
Reflection on self and self's study	63	29.30%	25	11.63%	38	17.67%
Reflection on the orientation module	121	56.28%	19	8.84%	102	47.44%
Reflection on the research	31	14.42%	24	11.16%	7	3.26%
Total	215	--	68	31.63%	148	68.37%

Appendix 8: The Design of the Orientation Module

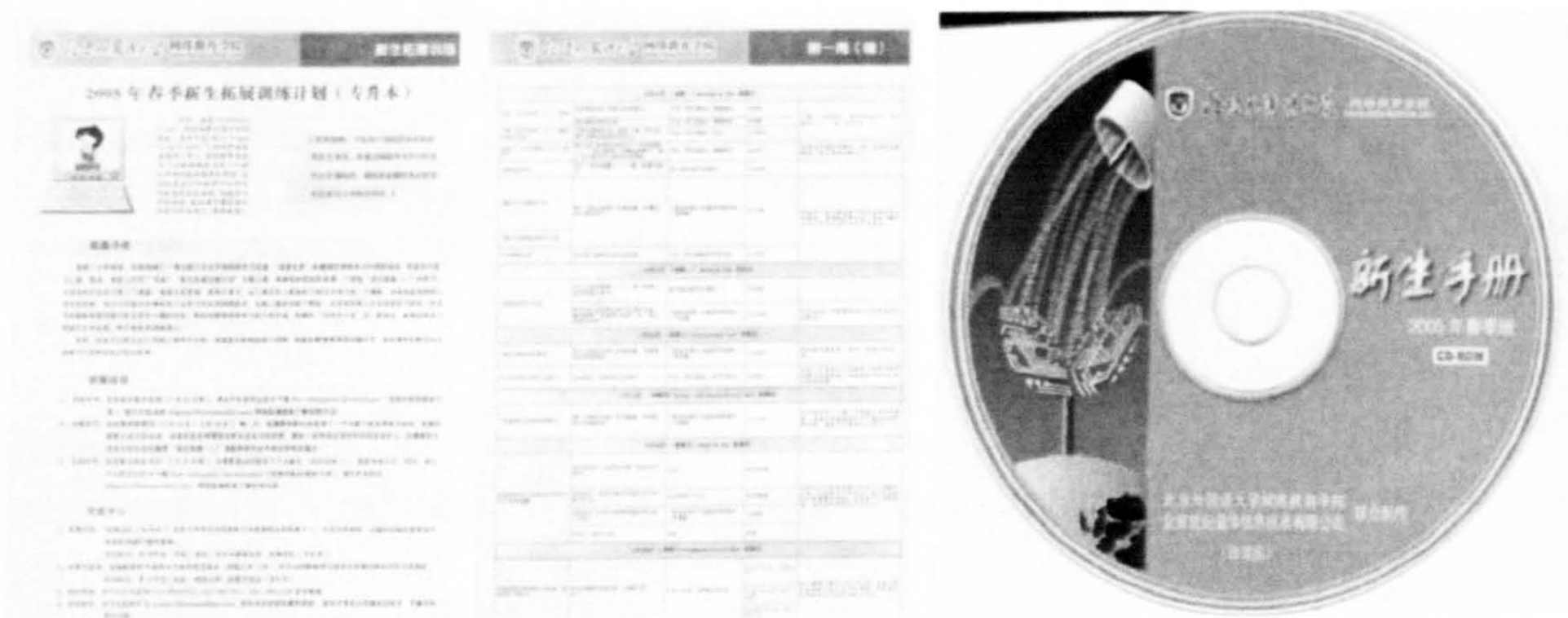
Appendix 8.1 The Design of the Orientation Module 2005

I. Objective design			
Learner autonomy layer	Development of: Resource-seeking and selecting skills; Help-seeking skills; Collaborative learning skills; Plan-making skills; Time-management skills		
Language learning layer	Awareness of language learning strategies		
Affect layer	Development of: Positive attitude towards online education; Confidence in successful learning		
Technology layer	Acquisition of Essential computer and Internet skills required by the Institute's learning system		
System layer	Familiarization of the Institute's resource system; support system; assessment system; administrative rules and regulations		
II. Resource Design			
Resources	Orientation study plan	Orientation module	
Delivery media	Print: face-to-face at learning centres E-version: e-platform and CD-ROM download	Print: online bookshop E-version: e-platform and CD-ROM	
Structure	Pre-orientation guide +day-to-day activity plan + post-orientation guide	Unit – activity -- task	
Content	A suggested study plan from the admission to the end of the third week of the semester.	Three-week activities corresponding to the course objectives	
III Learner Support Design			
1) Learner Support Design – Online			
Media	Course forum	VOB	Emails
Interaction	T to L, L to L	T to L, L to L	T to L, A to L
Content	Learner-initiated, tutor guided	Guidance and experience exchange.	Learner-initiated
Time	24 hours, reply within one working day	1.5 hours every weekend during the	24 hours, reply within one working day

		course	
Moderator	Chair tutor	Chair tutor	Call centre staff
2) Learner Support Design – offline			
Media	Face-to-face		Telephone
Interaction	T to L, L to L, A to L		T to L, A to L
Content	Orientation module		Learner-initiated
Time	3 hours every weekend during the course;		9:00 am to 6 p.m. everyday
Moderator	Local tutor, local administrator		Call centre staff
IV. Assessment Design			
Type	Assignment		
Score type	100 points		
Content	Five-section questions of different types, corresponding to the course objectives		
Time requirement	120 minutes, at the completion of the course		
Delivery media	e-platform		
Submission media	e-platform		

Appendix 8.2 Orientation study plan 2005

Note: The orientation study plan was originally written and presented to learners in Chinese. It was presented in both print and e-versions (Please see below images of the print-version and CD-ROM cover). The version included in this thesis is the script.



Orientation Study Plan 2005 (Post-diploma BA)

【Important notice: Activities in the orientation study plan are subject to change. Please visit the bulletin board of the e-platform regularly for update information.】

Professor Guide

Hello, I am Professor Guide from the Institute, your professor for the orientation module. There is a saying "Well begun is half done." My responsibility is to guide , support and help you to have a good beginning at the Institute. Online learning is by no means a bed of roses. Success belongs to the persistent and diligent.

About the Orientation module

When you decided to learn at the Institute, you in fact involved yourself with a three to five-year online battle. Are you fully prepared psychologically, equipment wise and skill wise? The three-week Orientation module will guide and support you to complete your first course "Guide to Success", and the first two units of your second course "English in Daily Life." Your future three to five years study is in fact an accumulation of many three weeks like these. The Orientation module aims to train you to become competent in playing you new role as an online learner by acquiring essential autonomous learning skills, computer and Internet skills, etc. Professor Guide has set daily activities for you to follow. You can also make your own plan to begin the courses. However, since you are new to the Institute, you are

encouraged to follow this Orientation study plan, or at least use this plan as a reference to make your own plan.

Introduction to activities

Everyday during the orientation module, you will be asked to complete a series of tasks of a specific theme. Please see the weekly plan for details.

Support centre

1. **Orientation forum:** You and your fellow learners are welcome to share your feelings, questions on this forum. Professor Guide promises a reply within one working day. Route: Platform – Community -- Course-based Forum -- orientation forum
2. **Orientation community programmes:** Professor Guide will host an orientation community programme once every week via VOB where you, your fellow learners and Professor Guide can share your progress and attend to your possible difficulties. Route: Platform-Community – VOB -- orientation community
3. **Support hotline:** 010-88817912, 010-88817913, 010－88811106
4. **Support e-mail:** support@beiwaionline.com

Equipment required

1. **A computer:** This is what you can not do without if you want to do well in online study. You need it to play CD-ROM, to login to the e-platform to study courses, download and submit assignments and attend lecture or discussion programmes. Therefore, I suggest you have a computer with earphones, a mic and a CD-ROM driver. You also need to make sure that your IE, media player, etc. can support to play CD-ROMs and online courseware of the Institute. You should have at least a modem access to the Internet, and a broad-band access is highly desired.
2. **"Guide to Success"** This comes in print and online courseware versions. The two versions are basically the same, with the courseware version richer in audio, video and interaction functionalities. The print version can be obtained via BeiaiOnline online bookshop. The online courseware version becomes available once you get your login name and password to the e-platform.
3. **"Orientation module"** This comes in CD-ROM and online versions. The two versions are basically the same, with the CD-ROM version richer in audio and video components. The CD-ROM version will be distributed at the Opening Ceremony at your learning centre. The online version becomes available once you get your login name and password to the e-platform

Orientation study plan (Spring 2005) Week One

My general goals: Understand my role as an online learner; Understand and be able to use the resource, service, assessment and management support provided by the Institute; Make friends with my tutors and learning mates.						
My main resources: 1. Orientation module in CD-ROM version (will be distributed at the Opening Ceremony) or online version (platform--Orientation module); 2. Guide To Success in print version (can be ordered through the online bookshop) or online version (platform--course--course study).						
Please do Professor Guide a favour: Before you start the Orientation module, please download a "Pre-orientation Questionnaire" from the bulletin board of the platform, fill it up and send your completed questionnaire to guide@beiwaionline.com before Feb. 19, 2005.						
Day	**Goals**		**Activities**	**Access**	**Time**	**Prof. Guide's Remarks**
19 Feb.	Support Day	Get ready for the Orientation module.	Read the Orientation study plan. Put it at a place where I can see it everyday.	Print version to be collected at the learning centre. Online version can be downloaded from the platform.	20 minutes	This three-week plan is a mirror of your 3 to 5 years study at the Institute. Remember, well-begun is half done.
		Get a general idea of learner support at the Institute.	Listen to Prof. Gao's talk.	Orientation module (CD-ROM) -- Learner Support Section	10 minutes	
		Get to know how VOB works.	Entre VOB system. Test my earphones and mic.	platform--community-- VOB	10 minutes	If you are not sure, you can read Users' Guide first in the Orientation module.
		Use forum to communicate with my learning mates and to solve my problems.	Browse those forums I am interested in.	platform--community-- forum	my choice	If you have never sent a post in the forum, give it a try today! If your post is a question, Professor Guide will reply within one working day.
			Send a forum post.			

		Get to know e-mail and telephone communication channel with the Institute.	Remember the e-mail address and the telephone number.	homepage	my choice	You can make good use of these channels to solve whatever problems you encounter in your study.
		Get to know e-mail and telephone of my learning centre.	Remember the e-mail address and the telephone number.	homepage	my choice	
20 Feb.	Commu-nity Day	Get to know my tutors and my learning mates.	Attend the on-site Opening Ceremony.	my learning centre	To be specified on the platform	Arrangement for the Opening Ceremony may be different from centre to centre. Please confirm with your centre.
		Establish communication online.	Visit forum. Introduce myself to my classmates.	platform-community- forum	my choice	Hope now you have no problem using the forum!
		Share others' experiences.	Browse the forum posts.	platform--community-- forum	my choice	You may find forums of a variety of themes.
		Get a general idea of the learning system.	Attend the online Opening Ceremony.	Platform--VOB	20:00	
21 Feb.	Resource Day	Get to know what "Guide to Success" is about.	Read Module and Resources Introduction	Platform – course -- Course introduction	5 minutes	
		Get ready the course resources.	Get ready either print or online courseware of “Guide to Success”.	Platform -- Orientation module	5 minutes	
		Understand my roles as an online learner.	Study Units 1~3 of "Guide to Success".	print textbook or courseware (Platform -- Course Study)	30 minutes	

		Get to know the curriculum of my BA programme. Get to know what course resources are available.	Listen to Prof. Cao's talk and read the introductions to learning approaches of different courses.	Orientation module (CD-ROM or online version) -- Resource Section	60 minutes	Different from on-site learning where you communicate with your teachers and classmates face-to-face, communication in online learning mainly takes place in your platform.
		Get to know the course resources.	Browse the course resources.	platform--all the columns under course	30 minutes	
22 Feb.	Method Day	Get to know some useful strategies for English language learning.	Study Units 6~8 and Unit 10 of "Guide to Success".	print textbook or courseware (platform -- course)	120 minutes	
23 Feb.	Assess-ment Day	Get a general idea of the course assessment system of the Institute.	Listen to Prof. Tang's talk about different types of assessment.	Orientation module (CD-ROM or online version) -- Assessment Section	60 minutes	You need to download and submit your assignments and progress reports via the platform.
		Get to know how to do and submit my self-assessment.	Submit a trial self-assessment.	platform--course—self-assess ment	10 minutes	This is only a trial. Your performance will not be included in your course score.
24 Feb.	Rules and Regula-tions Day	Get to know important rules and regulations of study status management of the Institute.	Listen to Prof. Yan's talk and study the documents of study status management.	Orientation module (CD-ROM or online version) -- Study Status Management Section	60 minutes	You may find that you have a lot of reading to do. However, a good understanding of the rules and regulations will protect you from "crying over spilled milk."
25 Feb.	Family Day	Gain my family and friends understanding and support to my study.	Share my first week experience with them.	my choice	my choice	Support from your family and friends will mean a great deal to your commitment to 3 to 5 years' study.
			Show them the Institute homepage and platform.	homepage and platform	my choice	

			Read them a letter from the Institute.	Orientation module -- Family Section	10 minutes	
26 Feb.	Communi -cation Day	Share my first week experience with my tutor and my learning mates.	Attend the Orientation Communication VOB programme .	platform--community--VOB	19:30	

Orientation study plan (Spring 2005) Week Two

My general goals: Know what information I need to learn about a module before I start my study of the course and how to get the information; Learn to make my weekly study plan; Complete Unit One of "English in Daily Life".

My main resources: 1. "English in Daily Life" (print version with accompanying cassettes or online courseware); 2. Tutorials courseware in CD-ROM (optional)

Day	Goals		Activities	Access	Est. Time	Prof. Guide's Remarks
27 Feb.	Prepara-tion Day	Get to know the module	Read or listen to the Module Introduction.	platform--e-campus--course introduction	60 minutes	Remember that every time you start a new course, you should visit these resources to get a general understanding of the requirement of the course and your learning pace.
		Plan your course progress.	Note down the submission dates of the progress reports and assignments.	platform -- e-campus -- assignment/progress report	10 minutes	
		Plan your unit progress.	Make a weekly study plan of Unit 1.	Part II of "Module Introduction to 'English in Daily Life'"	20 minutes	This week's Orientation study plan is in fact a typical weekly study plan.
28 Feb.	Study Day	Study the course.	Complete A1~A2 of U1	print textbook or online courseware	120 minutes	U=Unit; A=Activity. You need an average of 20 minutes to complete each task.
1 Mar.	Study Day	Study the course.	Complete A3~A4 of U1	print textbook or courseware	120 minutes	Keep a print or e-note in your study. You can use your note as a guide when you review the unit or the course. If you have questions, remember to use the communication channels
2 Mar.	Study Day	Study the course.	Complete A5 of U 1	print textbook or courseware	120 minutes	
3 Mar.	Study Day	Study the course.	Complete A6 of U1	print textbook or courseware	120 minutes	

4 Mar.	Study Day	Study the course.	Complete A7~A8 of U1	print textbook or courseware	120 minutes	introduced on the Support Day to solve them.
5 Mar.	Review Day	Review, reinforce and assess what I learnt in Unit 1.	Review "Review" and complete self-assessment	platform--e-campus-review and assessment	30 minutes	You have all these different ways to review this unit. But this does not mean you need to do them all. Make sure you complete your progress report. Also decide what review resources you prefer.
			Study the tutorial resources of Unit 1.	platform--e-campus--tutorials resources	60 minutes	
			Complete and submit the progress report of U1.	platform--e-campus--progress report	10 minutes	
6 Mar.	Communi -cation Day	Share my second week experience with my tutor and my learningmates.	Attend the Orientation Communication VOB programme .	platform--community--VOB	19:30	To keep a small class size, I would like you to attend the programme at different times according to your professions.

Orientation study plan (Spring 2005) Week Three

My general goals: Complete Unit Two of "English in Daily Life".						
My main resources: 1. "English in Daily Life" (print version with accompanying cassettes or online courseware); 2. Tutorial courseware in CD-ROM (optional)						
Day	**Goals**		**Activities**	**Access**	**Est. Time**	**Prof. Guide's Remarks**
6 Mar.	Relaxing Day	Relax for a day.	Spend today with my family or friends.	my choice	my choice	You have been working hard for two weeks. Reward yourself with a day's break!
7 Mar.	Study Day	Make a weekly plan.	Make a weekly plan for this week.		20 minutes	This week's Orientation study plan is in fact a typical weekly study plan.
		Study the course.	Complete A1 of U 2	print textbook or online courseware	60 minutes	
8 Mar.	Study Day	Practice vocabulary.	Use tips I learnt from the lecture.		my choice	Keep a print or e-note in your study. You can use your note as a guide when you review.

		Study the course.	Complete A2 of U2.	print textbook or courseware	90 minutes	use your note as a guide when you review the unit or the course.
9 Mar.	Study Day	Study the course.	Complete A3~4 of U2.	print textbook or courseware	90 minutes	
10 Mar.	Study Day	Study the course.	Complete A5~A6 of U2.	print textbook or courseware	120 min.	
11 Mar.	Study Day	Study the course.	Complete A7~A8 of U2	print textbook or courseware	90 minutes	
12 Mar.	Review Day	Review, reinforce and assess what I learnt in Unit 2.	Attend a face-to-face tutoria.	platform--e-campus--tutorial schedule	4 hours	
			Review "Review" and complete self-assessment	platform--e-campus-review and assessment	30 minutes	The review approach to Unit 2 is similar to that of Unit 1 with one exception: you can go to your learning centre to attend a face-to-face tutorial. Please make this opportunity to communicate with your tutor and classmates.
			Study the tutorial resources of Unit 2.	platform--e-campus--tutorials resources	60 minutes	
			Complete and submit the progress report of Unit 2.	platform--e-campus--progress report	10 minutes	
13 Mar. (Sun)	Communication Day	Share my third week experience with my tutor and my classmates.	Attend the Orientation Communication VOB programme .	platform--community--VOB	19:30	To keep a small class size, I would like you to attend the programme at different times according to your birth month.
Please do Professor Guide a favour: At the completion of the Orientation module, please download a "Post-orientation Questionnaire" from the bulletin board of the platform, fill it up and send your completed questionnaire to guide@beiwaionline.com before March 28, 2005.						

Assignment for the Orientation module

How are you getting on with the first three weeks? The remaining years of study will be equally challenging and rewarding. If you persist, success is yours.
I am eager to learn your performances and comment on the Orientation module. Please complete your assignment for the Orientation module and submit it online no later than 28 March. Route: Platform -- course -- Assignment

Stay in contact

As the first three weeks at the Institute are coming to an end, I should say good-bye to you. But I assure you that many Professor Guides to different courses are ready

to offer guidance and support to your study throughout the years. Hope that this three-week experience has well prepared you to be an online learner who is persistent, determined and confident in your future success. See you online!

Meet me at forums: Every course has a separate forum to attend to your course-based problems.

Meet me at VOB: Weekly programme schedules are released on the Institute homepage.

Meet me on the phone: 010-88817912,010-88817913,and 010-88811106

Meet me by email: support@beiwaionline.com

Appendix 8.3 The Design of the Orientation Module 2006

I. Generic design	
Title	Orientation to Online Learning
Educational programme	Post-diploma BA course in English language education
Target learners	Newly-enrolled learners
Level	BA third year
Credit	1
Study mode/route	See Orientation study plan
Study hours	45 hours
Study cycle	From admission to the second week of the semester
Fee	130 RMB
Learner size	NA
Tutor-learner ratio	1:30
Certificate	NA
II. Objective design	
Learner autonomy layer	To design activities that develop learners following skills: Setting goals; Making plans; Managing time; Seeking help; Seeking and selecting resources; Monitor learning process

Language learning layer	Bring learners to an awareness of language learning strategies (listening, speaking, reading, writing, vocabulary skills)
Affect layer	Build up learning community (interpersonal skills and collaborative skills); Develop a positive attitude towards online education; Build up self-confidence; Develop determination and perseverance.
Technology layer	To support learners to acquire computer and Internet skills essential for using the e-platform, viewing and downloading resources, and accomplishing assessment tasks.
System layer	To support learners to know and to use the resource, learner support, assessment and study status management system of the Institute.

III. Resource Design

1) Resource Design for Learners

Resources	Orientation study plan	Orientation module
Production media	Print / e-version (word document)	Print / e-version (courseware)
Delivery media	Print: face-to-face at learning centres E-version: e-platform and CD-ROM download	Print: online bookshop E-version: e-platform and CD-ROM
Structure	Pre-orientation guide +day-to-day activity plan + post-orientation guide	Phase 1: Becoming a competent online learners (15 hours) Phase 2: Becoming a competent English language learner (15 hours) Phase 3: Becoming a competent autonomous learner (15 hours/week, 1 semester)
Content	A suggested study plan from the admission to the end of the second week of the semester.	Goals, activities and assessment corresponding to the course objectives.

2) Resource Design for Tutors and Administrators

Resources	Group learning activity guide	Tutorial guide	Assignment guide
Production media	E-version (word document)		
Delivery media	Email + tutor and administrator platform download		
Content	Guideline to the organization of collaborative group work	Suggested activity designs of the tutorials	Keys to the assignment and feedback guidance

VI. Learner Support Design					
3) Learner Support Design – Headquarters					
Media	Course forum	VOB	Emails	Telephone	Mobile phone
Interaction	T to L, L to L	T to L, L to L	T to L, A to L	T to L, A to L	A to L
Objectives	Problem solving, community building	Reinforcing course objectives, check accomplishment, community building	Problem-solving	Problem-solving	Process-monitoring,
Content	Learner-initiated, tutor guided	Themes based on learning objectives. Guidance and experience exchange.	Learner-initiated	Learner-initiated	Dates of important events (e.g. VOB programmes, assignment submission dates, etc.)
Time	24 hours, reply within one working day	1.5 hours every weekend during the course	24 hours	9:00 am to 6 p.m. everyday	Three days before the events
Moderator	Chair tutor	Chair tutor and senior learners	Call centre staff	Call centre staff	Call centre staff
Supporting resources	Previous posts	Programme outlines	FAQ bank	FAQ bank	Important dates
4) Learner Support Design – learning centres					
Media	Face-to-face			Email	Telephone
Interaction	T to L, L to L, A to L			T to L, A to L	T to L, A to L
Objectives	Course orientation and tutorial, community building, organization of collaborative group work			Problem-solving	Problem-solving
Content	Orientation module			Learner-initiated	Learner-initiated
Time	3 hours every weekend during the course; provision of venues for group work upon requirement			24 hours	Varied

Moderator	Local tutor, local administrator	Local administrator	Local administrator
Supporting resources	Tutorial guide, group activity guide	NA	NA

V. Assessment Design

Type	Formative assessment	Summative assessment
Total score ratio	0%	100%
Score type	100 points	100 points
Assessment type	Open source	Open source
Objectives	Help learners self-evaluate their achievement of the course objective on a daily basis.	Help learners evaluate their achievement of the objectives; Help instructional designers collect information to improve the orientation module; Create opportunities for learners to build up their learning community
Content	5 multiple-choice questions each day, nine based on the daily tasks	Five-section questions of different types, corresponding to the three phases of the course objectives
Frequency	Every day during the course	1
Group type	Individual	Individual and group work
Time requirement	10 minutes, at the end of each day's work	120 minutes, at the completion of the course
Make-up policy	Unlimited access	1 at the end of the semester
Presentation media	e-platform	E-version (word document)
Delivery media	e-platform	e-platform
Delivery date	Beginning of the semester	Beginning of the semester
Submission media	e-platform	e-platform
Submission date	Not required	21 days after the semester starts
Feedback type	Computer-marked	Tutor-marked
Feedback media	e-platform	e-platform
Feedback date	Auto feedback	10 working days after submission date

Appendix 8.4 Orientation study plan 2006

Note: The orientation study plan was originally written and presented to learners in Chinese. It was presented in both print and e-versions (Please see below images of the print-version and CD-ROM cover). The version included in this thesis is the script.

My Goals 目标	1）学会网络学习的生存本领； 2）了解开学前和期间的资源、软件、考核和学籍管理等与你息息相关的重要环节； 3）成为自信的网络学习者。	
Requirement 活动要求	完整地完成本你在收到《新生拓展训练营》光盘后两周内的第一阶段的活动。本阶段包括九项完成活动，每个活动下包含1个活动，每个活动预计时长1小时到2小时不等，活动的要求在任务指示里有详细说明。请你根据自己的实际情况选择完成活动的先后顺序，但整体活动的完成要求，将根据开学当日提交了满足计划性完成活动的注册新生给予完成证书的奖励。	
Completion Date 完成目标的时间	整个学习时间为1小时，希望你能够在开学后的第一周周末（2006年3月5日）达到这一阶段所预定的学习目标。	
My Resources 完成目标的资源	《新生拓展训练计划》	纸介版（发给每名教师学生） 电子版（获取路径：《新生拓展训练营》光盘中）
	《新生拓展训练营》	多媒体光盘版（交给同学教师发放） 网络课件版（获取路径：学习平台—新生拓展训练营）
	《成功指南》）	纸介教材版（在线订购、订购路径：学习平台—教材订购 或关注一招生简讯—教材订购） 网络课件版（获取路径：学习平台—学习园地—课程学习）

Orientation study plan 2006 (Post-diploma BA)

Professor Guide

Hello, I am Professor Guide from the Institute, your professor for the Orientation module. There is a saying "Well begun is half done." My responsibility is to guide , support and help you to have a good beginning at the Institute. Online learning is by no means a bed of roses. Success belongs to the persistent and diligent. Please follow me.

About the Orientation module

When you decided to learn at the Institute, you in fact involved yourself with a three to five-year online battle. "The fittest that survive" principle also applies to online learning. Are you fully prepared psychologically, equipment wise and skill wise? The Orientation module will start from the day you have your login name and password. **Its goal is to guide and support you to adapt to this new online learning environment within the shortest possible time, and to play confidently your role of an online English learner.**

Introduction to activities

Everyday during the Orientation module, you will be asked to complete a series of **goal-directed** tasks of a specific theme. These activities are divided into three phases as explained below.

Phase	Goal	Suggested study time	Weeks
Phase 1	To become a competent online learner	15 hours	Week One
Phase 2	To become a competent English learner	15 hours	Week Two
Phase 3	To become a competent autonomous learner	15 hours/week	The rest of the weeks of the first semester.

Support and community centre

During the orientation module, you can access the following channels to share your experience, or to seek for help for your problems. Your learning centre also provides face-to-face, email and telephone inquiry service.

Channels	Service and Route
Orientation forum	Open 24 hours. It will be moderated by Professor Guide who promises a reply within one working day. You and your fellow learners are welcome to share your feelings and questions on this forum. Route: Platform – Community -- Course-based Forum -- Orientation forum
Orientation community	Open at weekends of the first two weeks. It will be hosted by Professor Guide. You can have real time communication with her and your fellow learners. Route: Platform -Community – VOB -- Orientation community
Support hotline	Open on weekdays and weekends. Number: 010-88817912, 010-88817913, 010－88811106
Support e-mail	Open 24 hours. Professor Guide promises a reply within one working day. Address: support@beiwaionline.com

Pre-course preparation

Before you start the orientation module, you should have completed the following tasks.

Task 1 Confirm admission. ⇨ After you take the entrance exam, please confirm via homepage if you are admitted. Route: Homepage/enrollment/admission

Task 2: Pay tuition. ⇨ Once you are admitted, you will receive via email your admission and tuition information. When we receive your tuition, we will send you your login name and password to the e-platform. You can then start your study.

Task 3: Attend the Opening Ceremony ⇨ Check the date of the Opening Ceremony at your centre and do not miss this first chance to meet your tutors and fellow learners!

Phase One: Becoming a Competent ONLINE Learner

My Goals	1）Understand and be able to use the resource, service, assessment and management support provided by the Institute; 2）Establish my community with tutors and fellow learners. 3）Understand and play my role as an online learner.	
Requirement	Professor Guide suggests that you start Week One activities immediately after you are admitted. Phase 1 includes seven objectives each with several activities. You can choose to do them all or select some of them or rearrange the sequence of the activities according to your situation. Those activities with a star are highly recommended.	
Completion Date	You are expected to obtain all the objectives by the end of the first week of the semester.	
My Resources	Orientation study plan	Print version: available at the learning centre. E-version: available on the e-platform
	Orientation module	CD-ROM: available at the learning centre Courseware: available on the e-platform
	Guide to Success	Print-version: online bookshop Courseware: available on the e-platform-Orientation module

Objectives	Activities	Access	Suggested Time	Remarks
Preparation (Goal: Goal-setting and time-managing skills)				
1	Get to know the Orientation study plan. *	Read the Orientation study plan	Print version available at the learning centre. E-version on the platform	20 min.	This three-week plan is a mirror of your 3 to 5 years study at the Institute. Remember, well-begun is half done.
2	Get to know the assignment. *	Download the assignment for the Orientation module. Mark the submission date on your calendar.	Platform – Orientation module – assignment	20 min	You need to complete and submit this assignment at the end of the Orientation module.
3	Get to know homepage.	Visit the homepage and decide the columns you need to pay regular visit.	www.beiwaionline.com	Your choice	
4	Get to know the e-platform.*	Visit all the columns on the e-platform. Learn to use them.	Your login name & password.	Your choice	Guidance is available in "Technology Corner" in your Orientation module.
5	Make my study plan. *	You can either use this plan, or make your own plan using this plan as a reference.	Print	Your choice	Please make sure to include the submission date of the assignment and the Opening Ceremony in your plan.

6	Get support from family and friends	Show the homepage and e-platform to your family or friends. Explain what you expect of them to support your study.	www.beiwaionline.com	Your choice	You need support you're your family and friends since you will have more time for study and less time for them.
Day One: Friend Day (Goal: Interpersonal skills)					
1	Get to know my tutors and fellow learners.*	Attend the Opening Ceremony.	At your learning centre	Please confirm with your centre	
2	Set up my learning group.*	Set up your learning group.	Your choice	Your choice	You need to do the final part of your assignment in your learning group.
3	Get to know Professor Guide.*	Join VOB programme	Platform -- VOB	90 min (The first day of the semester)	If you need guidance, please visit "Technology Corner" in your Orientation module.
4	Share others' experience	Listen to the welcome speech from the President, the deans, and Excellent Learner Award and Excellent Graduate Award winners	Platform – Orientation module / CD-ROM	Your choice	
Day Two: Learning Support Day (Goal: Help-seeking skills)					
1	Learn to use VOB.*	Entre VOB. Test your earphones and microphone.	Platform - VOB	30 min.	If you need guidance, please visit "Technology Corner" in your Orientation module.
2	Learn to use forum.*	Visit the forum. Read those posts of your interest. Send a post.	Platform – forum	30 min.	
3	Learn about tutorial schedule.*	Get to know the tutorial dates, time, place, etc.	Learning centre administrator	20 min.	You are encouraged to attend as many tutorials as possible.

4	Learning about the tel. and email of the headquarters and the learning centre.*	Put these numbers in your address book.	www.beiwaionline.com	10 min.	You can access these channels to seek help and solve problems.
Day Three: Resource Day (Goal: Resource-seeking and selecting skills)					
1	Get to know my curriculum *	Read your curriculum.	Platform – curriculum	20 min.	Different from on-site learning where you communicate with your teachers and classmates face-to-face, communication in online learning mainly takes place in your platform.
2	Get to know the course resource system. *	Listen to Prof. Cao's talk and read the introductions to different types of courses and their resources.	Orientation module (CD-ROM/online version) -- Resource Section	60 min.	
Day Four: Assessment Day (Goal: Process-monitoring skills)					
1	Get to know assessment system.*	Listen to Prof. Tang's talk about different types of assessment.	Orientation module (CD-ROM or online version) -- Assessment Section	20 min.	Assessment is of great importance to your successful completion of the courses. You need to know how to administer them online and you need to remember the submission dates.
2	Get to know self-assessment. *	Read "Self-assessment Guide." Submit a trial self-assessment.		30 min.	
3	Get to know the assignment.*	Read "Assignment Guide" and submit a trial assignment.		30 min.	
4	Get to know the final exam. *	Read "Final Exam Guide".		15 min.	
Day Five: Rules and Regulations Day (Goal: Self-discipline skills)					
1	Get to know the rules and regulations. *	Read "Rules and Regulations".	Orientation module (CD-ROM/online version) – Rules & Regulations Section	60 min.	You may find that you have a lot of reading to do. However, a good understanding of the rules and regulations is important.

Day Six: Methods Day (Goal: Learning styles and strategies)					
1	Get to know useful learning methods.	Study Units 1 to 3, 6-8 and 10 of "Guide to Success".	Guide to Success (print or online version)	120 min.	
Day Seven: Collaboration Day (Goal: Collaborative learning skills)					
1	Share my experience with my tutors and fellow learners.	Attend Orientation Community Programme	Platform - VOB	90 min.	Learning autonomously does not mean learning alone. You will find that your tutors and fellow learners will give you the support you need.
2	Learn in a group. *	Join your learning group to complete the activities described in the final part of your assignment.	Your choice	Your choice	You need to report your group discussion in your assignment.
3	Do my assignment.*	By now you should be able to complete all the sections of your assignment.	Platform – Orientation module – assignment	120 min.	You do not have to do your assignment at one time. Check the final submission date and plan your time well.

Phase Two: Becoming a Competent ENGLISH LANGUAGE Learner

My Goals	1）Get to know some useful English learning methods. 2）Study Unit 1 of "English in Daily Life". 3）Learn to make weekly plans. 4）Understand and play my role as an English language learner.	
Requirement	You can start Phase 2 activities when you have achieved all the objectives of Phase 1 activities. This phase will guide you to the learning process of a unit of a course. You are highly recommended to follow the procedure.	
Completion Day	You are expected to obtain all the objectives by the end of the second week of the semester.	
My Resources	English in Daily Life	Print version: available at online bookshop
		Platform version: platform – Orientation module
		Tutorial CD-ROM (optional): available at online bookshop

Objectives		Activities	Access	Suggested Time	Remarks
Day One: Starting a Course (Goal: Plan-making skills)					
1	Get to know the course.	Read Course Introduction and Resources Introduction of "English in Daily Life".	Platform – Orientation module – course introduction	10 min.	Remember that every time you start a new course, you should follow this procedure to ensure that you keep yourself well informed of the essential course information.
3	Plan my course progress.	Note down the submission dates of the self-assessments and assignments in your calendar.	Platform – Orientation module – assignment or self-assessment	20 min.	
4	Plan my unit progress.	Make a weekly study plan of U1.	This plan is a sample weekly plan.	20 min.	
Day Two: Studying a unit (A1~A2)					
1	Complete A1~A2 (6 tasks).		English in Daily Life (print or online version)	120 min.	A=Activity. You need an average of 20 minutes to complete each task. You don't need to do all the tasks at one time.
Day Three: Studying a unit (A3~A4)					
1	Complete A3~A4 (5 tasks) of Unit 1		English in Daily Life (print or online version)	100 min.	
Day Four: Studying a unit (A5)					
1	Complete A5 (8 tasks) of Unit 1		English in Daily Life (print or online version)	150 min.	
Day Five: Studying a unit (A6)					
1	Complete A6 (8 tasks) of Unit 1		English in Daily Life (print or online version)	150 min.	
Day Six: Studying a unit (A7~A8)					
1	Complete A7~A8 (8 tasks) of Unit 1		English in Daily Life (print or online version)	150 min.	
Day Seven: Reviewing a unit					
1	Review Unit 1.	Read Unit focus points and my notes	Platform – Orientation module – Resource – Focus point (Unit 1)	30 min.	

2	Self assess.	Complete the self-assessment of Unit 1.	Platform – Orientation module – Self-assessment (Unit 1)	30 min.	
3	Share my experience.	Attend Orientation Community Programme	Platform - VOB	90 min.	If you have time, you are encouraged to attend both activities.
		Attend tutorials	Learning centre	180 min.	

Phase Three: Becoming a Competent AUTONOMOUS Learner

My Goals	1）Complete "English in Daily Life" and "English at Leisure". 2）Understand and play my role as an autonomous learner.
Requirement	Phases 1 and 2 should have prepared you well for this semester's study. If you follow this one week one unit pattern until the end of the semester, you will be able to complete the required courses.
Completion Day	The end of the semester
Reminder	Please visit the homepage and platform regularly in order not to miss important events.

Dates	Goals	Access	Time
Week 3	Unit 2, English in Daily Life	Print textbook and platform resources	You need to have an average of 10 hours each week to study the units. At the same time, you need to plan time for offline and online support activities and programmes. You can follow the three patterns to arrange your time: 1) Average hours every day. 2) More hours on weekends than on weekdays. 3) All hours on weekends.
Week 4	Unit 3, English in Daily Life		
Week 5	Unit 4, English in Daily Life		
Week 6	Unit 5, English in Daily Life		
Week 7	Unit 6, English in Daily Life		
Week 8	Unit 7, English in Daily Life		
Week 9	Unit 8, English in Daily Life		
Weeks 10-17	One unit a week, English at Leisure		

Reminder: Important Dates

Please entre the dates of the following events as reminders.

Date	Event
	Entrance exam
	Admission information release
	Registration closed
	Opening ceremony
	VOB programme (beginning of the semester)
	Collaborative group work
	VOB programme (first weekend)
	Completion of Phase 1 activities
	VOB programme (second weekend)
	Completion of Phase 2 activities
	Assignment submission
	Final exam registration
	Completion of Phase 3 activities
	Final exams