

**The Effectiveness of Sub-degree Programmes  
The Associate Degree Programme: A Study of Graduates'  
Preparedness  
for Further Study and Employment**

**A thesis submitted to the University of Nottingham  
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**Abstract**

The expansion of post-secondary education in Hong Kong triggered the establishment of community colleges for the purpose of widening access to post-secondary education and enhancing the employability of graduates. Although the community colleges established in Hong Kong offer associate degree (AD) programmes, their subsequent educational value is still not evident. This study investigates how effective AD curricula are in enabling graduates to achieve competencies in generic skills necessary for further study and employment. The study employs a case study design and uses both qualitative and quantitative research methods to explore graduates' perceptions about the usefulness of AD programmes in preparing students for further study and employment. The research questions are: What motivates AD graduates to pursue further study? What perceptions do graduates have about the usefulness of AD programmes in enabling them to pursue further study and acquire employment? Does the AD curriculum enable students to acquire basic competency in generic skills essential for further study and employment? One hundred and six AD graduates were involved in the study. All qualitative data were analyzed using coding strategy, and all quantitative results using SPSS version 16.

The study has three main findings. First, the primary goal of AD graduates was to pursue further education, with a view to enhancing their career and socio-economic status, in the belief that most well-paying jobs are acquired based on academic merit. Second, the graduates perceived the AD programmes to be more useful for giving those who missed admission into UGC-funded universities the opportunity to pursue a bachelor's degree in an 'unconventional way' and for providing students with credentials required for further study, than for preparing them for employment. Third, the AD curriculum enables students to acquire basic competency in generic skills that are essential for pursuing further study and becoming competitive in employment and work performance.

The study concludes that the establishment of the AD programmes in community colleges has value for advancing students' educational prospects in Hong Kong. However, there is still a need to incorporate professional knowledge and widen students' real-life exposure in the AD curriculum. Therefore, community colleges need to work more closely with various public and private organisations to provide more internship and industrial attachment opportunities for students to develop strong generic skills competencies and demonstrate professional work performance.

## Declaration

I hereby declare that this thesis represents my own work and that it has not been previously submitted to this University or any other institution in application for admission to a degree, diploma or other qualifications.

A handwritten signature in blue ink, appearing to be 'A. G. de', is written over a horizontal line.

March 2019

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## Abbreviations

AD	Associate Degree
HKBU	Hong Kong Baptist University
CityU	City University of Hong Kong
CCCU	Community College of City University
CUHK	Chinese University of Hong Kong
EC	Education Commission
EDB	Education Bureau
EMB	Education and Manpower Bureau
FCE	Federation for Continuing Education in Tertiary Institutions
HD	Higher Diploma
HKALE	Hong Kong Advanced Level of Examination
HKCEE	Hong Kong Certificate of Education Examination
HKCC	Hong Kong Community College
HK Poly U	The Hong Kong Polytechnic University
HKU	The University of Hong Kong
HKU SPACE CC	HKU SPACE Community College
JQRC	Joint Quality Review Committee
LU	Lingnan University
OECD	Organisation for Economic Co-operation and Development
UGC	University Grants Committee

# CHAPTER 1

## INTRODUCTION

### 1.1 Background to the study

Ever since Tung Chee-hwa, the first Chief Executive of the Hong Kong Special Administrative Region (HKSAR), announced in his 2000 Policy Address the policy objective of enabling 60% of senior school leavers in the 17-20 year-old age cohort to receive a post-secondary education by 2010 (Tung, 2000), there have been significant changes to the landscape of Hong Kong's post-secondary education sector. Tung's vision was to enable Hong Kong to catch up with other developed countries and major cities in Asia (e.g. Singapore and Shanghai) in terms of increasing the proportion of workforce with a tertiary education, to address the city's need for a knowledge-based economy, due to globalisation. This vision echoes recommendations made by the Education Commission in its reform documents (Chiu & Cunich, 2008), advocating, among other things, the 'establishment of a diversified, multi-channel, flexible and inter-linked system of higher education' with a view to increasing the accessibility of post-secondary education opportunities (EC, 2000, p. 110). The reform proposals signalled the growth of private higher education by actively encouraging tertiary institutions and private organizations to provide alternative avenues for secondary school leavers other than traditional sixth form education, such as sub-degree courses. Specifically, the Education Commission encouraged the

development of community colleges offering associate degree (AD) programmes (EC, 1999b; EC, 2000). Originating from North America, community colleges and AD programmes were pioneered in Hong Kong in 2000 as a new type of post-secondary institution ‘providing learners with an alternative route to higher education which, to a certain extent, articulates with university programmes’ (EC, 2000, p. 126). Although community colleges have been established in Hong Kong and are offering AD programmes, evidence for their educational value remains scarce. This study seeks to remedy this by investigating how effective AD programmes are in enabling students to develop the generic skills necessary for further study and employment.

Historically, the government has funded higher and post-secondary education in Hong Kong. However, in 2000, the government announced a policy obligating community colleges and AD programmes to become self-financing, with limited or no direct government funding (EC, 2000). As such, it became necessary for community colleges to obtain funding from other sources, including the private sector, non-profit organizations, and student tuition fees.

To achieve the 60% participation target, the government played a facilitating role through some support schemes for the development of the full-time self-financing post-secondary education sector. However, the government restricted its financial commitments by the nature of the schemes provided. Following the 1997 Asian financial turmoil, which started in Thailand immediately after the return of Hong

Kong to China, Hong Kong's local economy contracted as financial markets plummeted and the unemployment rate soared (Kennedy, 2004). There was increasing concern as to how the university system would be sustained, especially as government expenditures on publicly funded institutions exceeded HK\$10 billion annually (UGC, 2001). The government could no longer rely on public expenditures to increase the post-secondary education participation rate, and so resorted to encouraging the development of self-financed community colleges and AD programmes.

At the start of the century, community colleges and AD programmes were new concepts in Hong Kong, but have subsequently become a main development focus. Since 2000, there has been a sharp increase in the number of self-financing post-secondary institutions and AD programmes, with the aggregate supply of self-financing sub-degree places increasing nine-fold from academic year 2000-2001 to 2005-2006, before stabilizing from 2005-2006 onwards (EDB, 2008).

The Education Bureau remarked that there was an enthusiastic demand for sub-degree places, based on over-enrolment from the 2000-2001 to the 2004-2005 academic years (EDB, 2008). The overall post-secondary participation rate, which reflects the availability of education opportunities for senior secondary leavers aged 17 to 20, had doubled in five years' time, from 33% in 2000-2001 to 66% in 2005-2006; in fact, Hong Kong overshot its 2010 target, achieving the objective five years ahead of schedule. Following the stabilization of the market, the participation

rate levelled off, remaining slightly above 60% since the academic year 2006-2007 (EDB, 2008). The rapid growth in the participation rate reflects increased student enrolment in the newly founded, self-financing community colleges (UGC, 2010).

Before 2000, sub-degree programmes in Hong Kong were typically Higher Diploma (HD) courses, mostly offered by such tertiary institutions as the Hong Kong Polytechnic University, City University of Hong Kong and the Vocational Training Council. Mostly publicly financed HD programmes were developed to meet the manpower requirements of specific industries, and their curricula were mainly vocationally oriented, specializing in professional knowledge (EMB, 2006). Having existed since the 1960s, HD programmes and their practicality are generally well regarded in society; community college and ADs, in contrast, were newly introduced to Hong Kong in 2000 and remain largely unrecognised by employers and the broader city community. This situation invites one to ask how effective AD programmes are at providing graduates with the knowledge and generic skills necessary to address the emerging demands of society.

## **1.2 Research problem**

The expansion of post-secondary education followed the expansion of Hong Kong's economy. The continuing education units of the UGC-funded universities adopted the Chief Executive's goal of mass tertiary education as their own goal (Cheung & Pyvis, 2006). Achieving mass tertiary education for the knowledge-based

economy required the incorporation of peripheral providers into the formal educational system. This elevated their status and increased their profiles within their own institutions (Post, 2003a; Post, 2003b). Most universities in Hong Kong realised the value of continuing education, and used their respective units to enrol students in AD programmes. For example, the University of Hong Kong's School of Professional and Continuing Education (SPACE) and Hong Kong Baptist University's College of International Education opened enrolment for their newly-developed AD programmes in 2000, while the City University of Hong Kong converted all of its publicly-funded HD courses into AD programmes, beginning in the 2000-2001 academic year.

Nearly all UGC-funded universities in Hong Kong decided to offer AD programmes in their respective self-financed continuing education units, in the belief that they already had the basic infra-structure and system needed to host part-time programmes. However, despite these units' connections to UGC-funded universities, the value of AD graduates has not been well recognised by most employers and society. This study investigates the effectiveness of the AD programmes in providing graduates with the generic skills competencies needed to pursue further study, and in enhancing their competitiveness in the job market.

### **1.3 What is known about the problem?**

The AD curriculum is characterized by the incorporation of substantial generic content pertaining to general education studies. The curriculum seeks to build up



students' broad-based knowledge, along with proficiency in Chinese and English languages and 'basic IT applications, interpersonal, communications, quantitative and analytic skills' (FCE, 2001, p. 22). The programme emphasizes promoting competence in generic and transferable skills, and is considered a learning pathway that prepares students for work, as well as for further study. Different from AD programmes, the HD programmes are traditionally tailored to meet the manpower requirements of specific professions or industries. Thus, HD curricula emphasize vocational or professional knowledge reflecting a specialist orientation. Moreover, the HD was originally designed as a terminal award for vocational purposes.

However, the education reform proposals (EC, 1999a; EC, 1999b; EC, 2000) launched by the Hong Kong Education Commission raised many questions, such as why the government chose to increase the post-secondary participation rate through promotion of the AD award, given that the HD qualification already had a long history of employer recognition. That decision, however, can be explained in terms of the structural changes occurring in Hong Kong as it moved from an industrial to a knowledge-based economy, and changes in workplace practices and structures, with employers demanding employees have various knowledge and skills needed for increased efficiency (Harvey, 2000; Cheng, 2004). The conventional practice of separating students' learning into specific disciplines or professions faced challenges. For example, the reform documents recommended that higher education should

develop students with broad-based knowledge and generic skills, in addition to the knowledge and skills needed for specific professions (EC, 2000). On that basis, the HD programmes were not addressing the changing needs of the educational landscape. Therefore, it was necessary to establish new programmes that would address the shortcomings in the HD programmes. The curriculum design of the AD programmes addressed the broader manpower needs of a knowledge-based economy more effectively than did the HD programmes.

The rapid expansion of the post-secondary sector has aroused serious concerns about the articulation path to publicly funded degree programmes upon completion of AD courses. There is a general perception that the AD programme is merely a bridging qualification for undergraduate studies; some even think AD graduates are not yet ready for immediate employment (EDB, 2008; UGC, 2010), and most AD graduates seek to ‘top up’ their studies immediately after graduation (EMB, 2006; EDB, 2008). At the same time, in previous years, there were concerns raised that AD programme graduates would not be able to obtain a place for further studies at publicly funded universities (EDB, 2008; Kember, 2010). Whilst the US education system provides college places for its AD graduates as a means of widening access to university education, there is no such provision in Hong Kong for sub-degree graduates.

In terms of employment, HD qualifications have achieved greater recognition

from employers than the AD (Tripartite Liaison Committee, 2009), based largely on the former's longer history, good track record, and status as an exit qualification for vocational and professional development. In contrast, most employers regard the AD as a bridging qualification for further studies, and not an entry point for employment. The AD curriculum is designed for general education and broad-based contents, and offers less specialized technical knowledge than the HD programme (EC, 2000; FCE, 2001). As such, AD qualification is considered more suitable as a stepping-stone for further studies than as a terminal vocational award (Kember, 2010). Such views reveal the misconceptions held by society and employers on the educational quality of AD graduates and their immediate employability (Lee & Young, 2003).

#### **1.4 What we still do not know?**

In Hong Kong, the Joint Quality Review Committee (JQRC) conducted a survey covering two cohorts (2005 and 2006) of graduates from sub-degree programmes offered by the self-financed units of the seven UGC-funded institutions. The aims of the study were to collect views of graduates about the usefulness of the sub-degree programmes, and to examine their post-graduation study progress and career development (JQRC, 2009). The survey results indicated that, among the 4,359 respondents, more than 61% (2,679) went pursued further studies on either a full- or part-time basis; 43.1% (1,880) of respondents attained full-time employment and another 17.3% (753) part-time employment within six months of graduation. Business

and Management was the most popular field for study articulation, attracting 50.2% (1,346) of the 2,679 graduates who went for further studies, followed by Social Science 10.8% (290); no other field of study enrolled 10% or more of the respondents. As a general observation, sub-degree graduates' progressions into degree studies are dominated by clear occupational purposes.

The JQRC survey (2009) revealed an increasing number of sub-degree graduates pursued further studies by articulating to degree programmes. They either enrolled immediately upon graduation or worked one or two years to save money for their studies. Furthermore, most sub-degree graduates were keen to pursue further education after completing their AD programme; however, there has been no in-depth analysis of the reasons motivating graduates to pursue further education, nor whether graduates believe AD programmes provide them with the skills and qualifications required to pursue further studies and employment. Moreover, we know little about how useful the AD curriculum is in enhancing graduates' attainment of generic skills necessary for addressing challenges in the knowledge economy.

## **1.5 Research questions**

The literature review led us to the following research questions regarding the usefulness of the AD programme in Hong Kong:

1. What motivates AD graduates to pursue further study?
2. How useful do graduates perceive AD programmes to be in enabling them to pursue further study and acquire employment?
3. Does the AD curriculum enable students to acquire basic competency in the generic skills essential for further study and employment?

Understanding AD graduates' motivations for pursuing further study, their perceptions of whether the programmes provide the credentials required for further study and employment, and whether they view the AD curriculum as providing them with the generic skills competency necessary for further study and employment will reveal the perceived value of established AD programmes in Hong Kong, the importance employers attach to AD programmes, the employability of AD graduates, and graduates' perceptions of the AD curriculum's effectiveness in facilitating the development of generic skills essential in the knowledge based economy.

## **1.6 Research approach**

This study employs a case study using both qualitative and quantitative research methods (see also section 3.3). The selection of case study was based on its ability to support in-depth investigations of trends and specific situations occurring in a community (Yin, 2017). Combining the two methods allows the strengths of one

method to compensate for the weaknesses of the other (Ercikan & Roth, 2006). For example, the research questions require exploring AD graduates' motives for pursuing further education, the extent to which AD programmes provide opportunities for students to pursue further education, and graduates' likelihood of getting employment. Similarly, it focuses on determining the effectiveness of the AD curriculum in enhancing graduates' attainment of generic skills. These questions necessitate a quantitative approach for data collection. However, the research questions also require a naturalistic interpretive approach to gain deeper understanding of AD graduates' perceptions about the usefulness of AD programmes for further study and employment, which is best done using a qualitative research approach. Furthermore, a mixed method approach helps the researcher to triangulate the results collected using various tools to gather stronger evidence, leading to more valid conclusions about the problem being investigated (Creswell, 2003).

### **1.7 Importance of the study**

Community colleges and the AD programme were introduced in Hong Kong in 2000, as a new type of post-secondary education. However, in recent years, both have often been the subject of largely negative media articles (UGC, 2010), often regarding the usefulness of the AD for further study and employment. This study seeks to understand if these criticisms are justified.

Since the turn of the century, there has been a sharp increase in the number of

self-financing post-secondary institutions and AD programmes in Hong Kong, leading the overall post-secondary participation rate to increase from about 33% in 2000-2001 to over 60% in recent years. This rapid growth in participation reflects increased enrolment in AD programmes in self-financing community colleges. In effect, the students have to bear the cost of education by paying high tuition fees. Given the political importance of the AD programme and the need for a competent workforce, having a high-quality AD curriculum is crucial to providing Hong Kong students with an effective educational experience. The predominance of AD programmes in the post-secondary sector makes it of interest for the researcher to look into the usefulness of the AD programme in preparing students for further study and employment.

Before 2000, sub-degree programmes in Hong Kong were typically HD courses focusing on vocational education to match with the manpower needs of specific trades or industries. In contrast, the AD is a new type of sub-degree programme, with a broad-based curriculum emphasising promoting students' competence in generic and transferable skills for work and further study (FCE, 2001). As the AD programme has become the focus of development, it is important to explore whether its curriculum is effective at nurturing students' competencies in the generic skills necessary for further study, along with the accompanying employment benefits to address the needs of a knowledge-based economy.

## **1.8 The researcher's professional identity**

I am a full-time teacher at a community college that is a continuing education unit of a UGC-funded university. For more than ten years, my work has focused on teaching and programme management. I routinely interact with students and am attuned to their learning needs and goals. I am familiar with community college settings in Hong Kong and their associated culture. This is therefore insider research (Hockey, 1993). I can use my insider knowledge to develop a rapport with interviewees and to facilitate good communication and idea exchange. My teaching experience allows me to gauge more accurately the truthfulness and completeness of the interviewee's responses (Hockey, 1993; Mercer, 2007).

However, too much familiarity may lead an insider-researcher to take things for granted and develop myopia (Mercer, 2007). The researcher may overlook crucial questions or key terms for further enquiry by focusing just on their own perspectives and assumed conditions. Interviewees may also feel uncomfortable if it seems that the researcher already knows the answers to the questions he or she is posing (Hockey, 1993). Also, conducting research in familiar settings and having prior knowledge of respondents' academic backgrounds requires the researcher to stay alert to ethical issues and confidentiality concerns (BERA, 2018).

There are pros and cons to conducting research in familiar settings. Being familiar with the community college norms and culture facilitates the researcher



utilising their prior knowledge to explain the complexity of the phenomenon under review, and to conduct the research in an ethically bound manner.

## **1.9 Organisation of the thesis**

This study comprises five chapters. Chapter 1 has provided the background to the study, its objectives, its design, and its importance. Chapter 2 reviews the relevant literature on the education system and the origin of community colleges and associate degrees in Hong Kong. This chapter also examines the development of associate degrees and the thinking behind the generic skills embedded in the AD curriculum. Chapter 3 describes the research design and methodological strategies adopted for the study. Chapter 4 presents and discusses the results in terms of students' motivations to pursue further study and the usefulness of the AD programme in enabling them to pursue further study and become competitive in the job market. Chapter 4 also presents and discusses data about the students' attainment of generic skills. Chapter 5 concludes the study and makes some recommendations for the development of AD programmes.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter describes the review of related literature, and is divided into themes. Section 2.2 presents literature on the background of the Hong Kong education system, and Section 2.3 on the role of Education Commission. Section 2.4 focuses on the origin of Community College and Associate Degrees in Hong Kong, whereas Section 2.5 discusses the development of community college and Associate Degree education, including the articulation and employability prospects of Associate Degree graduates. Section 2.6 discusses issues of globalisation, lifelong learning and its epistemological values, motivation and the importance of generic skills of the AD education. Section 2.7 summarises the chapter.

#### **2.2 Background of Hong Kong education system**

In Hong Kong, the expansion of educational provision has moved more slowly than the growth of the economy. In the first decade after the end of the Second World War, the population in Hong Kong drastically increased from around 600,000 in 1945 to 2.5 million in 1954. The increase in population was partly due to the ‘baby boom’ in the 1950’s and partly due to the influx of refugees from China. A large number of mainlanders fled to Hong Kong as refugees because of the political instability and outbreak of civil war in the Mainland. In so doing, they imposed a major burden upon

the already poverty-stricken small colony. However, as these ‘forced immigrants’ brought along their capital and technical experience into Hong Kong, they helped transform the productivity of the local economy. The manufacturing sector grew, with the textile sector contributing about 57% of total exports to the US (Scott, 1978) in the 1960’s.

Even though rapid population growth created a huge demand for the provision of basic education, the colony’s educational policies were formulated with little regard to public pressure (Sze, 1990). Since the 1950’s, the colonial government had investigated the feasibility of expanding primary education, as reviewed in the Fisher Report (Director of Education, 1951-1960) and the Marsh and Sampson Report (1964). However, considering the financial implications of such expansion, mass basic public education was deemed a ‘luxury’ that was not affordable, given the scant amount of taxation collected. In a 1965 Legislative Council White Paper on educational policy, the colonial government affirmed that free and universal six-year primary education was its ultimate goal, but one that was too expensive to implement immediately. As a transitional measure, the Education Department increased the number of subsidized placements in private schools and continued building government schools (Post, 2003a). However, following the outbreak of riots in 1967, the colonial government was forced to reform its position and assume a broader social role to address the demands of the general public. Eventually, by 1971, the colonial government declared that free and

compulsory six-year primary education would be legally enforced in the territory.

Subsequently, the 1974 Legislative Council's White Paper on secondary education proposed that three-year lower-secondary education (Forms 1-3) should be made free and compulsory for all. However, the policy paper also noted the related funding challenges, grimly forewarning that 'the financial and other commitments involved will represent a heavy burden, which can only be carried at the expense of other social and community needs' (Hong Kong, 1974, p. 2). After much debate, the Legislative Council decreed that lower-secondary education would be universalised by 1979.

Instead of waiting until 1979, however, Governor Murray MacLehose accelerated the government plan, declaring that three-year lower-secondary education would be made free and compulsory for all by 1978, reflecting the autonomy of the executive branch of Hong Kong's government. This decision was made not only to address public demands, but also in response to pressure exerted by the European Economic Community, which complained about unfair competition due to the 'child-labour' used in Hong Kong's textile industry (Post, 2010).

While government funding for free universal primary and lower-secondary schooling in Hong Kong is a relatively recent development, higher education has long received the majority of its funding from the government. Hong Kong's first university, the University of Hong Kong (HKU) was established in 1911 and remained the only

government-authorised degree-granting institution in the colony until 1963, when the Chinese University of Hong Kong (CUHK) became the second.

During the 1964 budget debate, members of the Legislative Council suggested that Hong Kong should set up a working group, akin to the University Grants Committee in the United Kingdom, to oversee the development and funding needs of higher education institutions. In 1965, the Hong Kong government formed its own University Grants Committee (UGC), based on the British model. In its early years, the UGC's primary function was to act as 'a buffer between the two - relieving the government from assuming direct responsibility for the universities, while providing money without expecting political conformity, and so safeguarding them from political interference' (Chomchai, 1973, p. 13). Whilst one may debate the truth of this statement, UGC has always been able to control the direction and development of the Hong Kong's higher education sector through its power over the funding mechanism (Wong, 2004).

Despite being a non-statutory advisory institution, the UGC was the body authorized to channel public funding to HKU and CU. In 1972, with the establishment of Hong Kong Polytechnic (currently The Hong Kong Polytechnic University – HK Poly U) to supply technically trained personnel to meet the needs of the economy, the UGC was renamed the University and Polytechnic Grants Committee (UPGC). In 1994, after the upgrading of the polytechnics into universities, the UPGC returned to its old

title, the UGC.

By the early 1980s, the public higher education system in Hong Kong comprised two universities and one polytechnic, with the UPGC being responsible for the allocation of public funds to all three. These three higher education institutions functioned as an 'elite public system' (Hayhoe & Zha, 2005, p. 11), accessible to only 2.2% of the 17–20 year-old age cohort.

The funnel-like education system in Hong Kong prevented tens of thousands of students from receiving an advanced education. Admission to universities for undergraduate degree studies depended upon the student's performance in two levels of public examinations - the Hong Kong Certificate of Education Examination (HKCEE) and the Hong Kong Advanced Level of Examination (HKALE) - which were regarded as similar to the General Certificate of Secondary Education (GCSE) and A-Levels in the United Kingdom.

The HKCEE, taken at the end of Secondary Five (Form 5) by almost all students throughout Hong Kong, was passed by about one-third of each cohort (Biggs, 1998). Students who succeeded in the HKCEE were then eligible to move upwards into the two upper-forms, the Secondary Six and Seven (Form 6 & 7), which were preparatory grades for higher education. At the end of Secondary Seven (Form 7), students would sit the HKALE, which functioned as an entrance examination for university admission. For a student, admission to university and placement in a particular institution and

undergraduate degree programme was therefore dependent on his or her performance in the public examinations, as well as the number of publicly-funded openings approved by UGC for first-year undergraduate degree studies.

Up until 1989, the number of publicly funded degree places was deliberately kept low. By the mid-1980s, the UGC each year approved publicly funded degree places for fewer than 2,000 students who finished their Secondary Seven (Form 7) education -less than 3% of the relevant age group (Yung, 1991). As planned for in the Legislative Council's 1978 White Paper on education, university enrolments were only allowed to increase by 3% on an annual basis. Obviously, this slow progress in university education expansion was far from acceptable, given the rapid economic growth and social change of Hong Kong.

The 1980s were a kind of watershed in the history of Hong Kong, for many reasons (Hayhoe & Zha, 2005). Economically, most of the manufacturing plants, which used to employ hundreds and thousands of workers in Hong Kong, relocated to southern China, where there was an abundant supply of cheap labour. Hong Kong underwent a transformation from a manufacturing hub to a service-oriented economy. Politically, Hong Kong faced a change in sovereignty, as the 1984 signing of the Sino-British Joint Declaration meant it was to shed the British colony status it had had since 1842 and return to Chinese control, on 1 July 1997. However, between the signing and the handover, Hong Kong encountered significant human capital flight, as many

were worried about the fate of Hong Kong under Chinese control.

The human capital flight problem, or ‘brain drain’, intensified as an increasing number of educated, well-trained professionals left Hong Kong under foreign passports after the Chinese crack-down in Tiananmen Square, in 1989 (Shive, 1990). Under such circumstances, the Hong Kong government’s original plan to gradually increase the number of bachelor’s degree places by 3% annually was seen as acutely insufficient to mitigate the shortage of skilled professionals. To ensure the supply of graduates and to help restore public confidence, Governor David Wilson decided to accelerate the original plan by launching a huge expansion of university education opportunities in Hong Kong.

In 1989-1990, less than 8% of the relevant age group (about 7,400 students) was admitted to first-year bachelor’s degree courses (French, 1997). However, in October 1989 the government announced a massive expansion of university education, increasing the number of publicly-funded bachelor’s degree places substantially to allow about 18% of the relevant age group to access first-year, first-degree places by 1994-1995. This would increase the number of undergraduate university places to approximately 15,000, or roughly doubled the 1989 level. After five years, the participation rate in university education reached 18% as planned, with publicly-funded universities offering 14,500 first-year first-degree places for the 17-20 age cohort in 1994 -1995 (UGC, 1993).



The expansion of university education significantly widened the participation rate in publicly funded degree education, from 2% in the early 1980s to 18% by the mid-1990s. Despite that, demand for workers with higher-level skills exceeded supply, as the economy was transitioning into a service-oriented and high value-added one, propelled by the force of globalisation. Neither could the expansion meet the demands of the Hong Kong people, who had great aspirations for higher education attainment.

The rapid expansion of publicly funded universities had great financial implications. The recurrent grants allocated to UGC-funded institutions were about HK\$3.5 billion in academic year 1990-91; that amount had soared to HK\$7.7 billion in 1994-1995, and to over HK\$10 billion in 1996-1997. To control the soaring costs of higher education, the government, in 1994-1995, capped the number of UGC-funded first-year first-degree places at around 15,000, which represented about 18 per cent of the relevant age cohort. Since then, the cap has remained unchanged.

It is clear that budget controls and the cap on first-year publicly funded degree places have significantly impacted the post-secondary education sector in Hong Kong. For decades, such controls have helped to create and maintain an elite image of the city's publicly funded higher education institutions, due to the difficulty of obtaining a place to study in their undergraduate programmes.

### **2.3 Education Commission**

The changes in the economic and political situation in Hong Kong during the

1980s required reform of the education system as a whole, and of the higher education sector in particular, as critics of the government claimed there was not adequate planning for articulation between basic and post-secondary education (Post, 2003a). During 1980-1981, the government set up the Committee to Review Higher and Technical Education (CRE) which, in turn, consulted with a panel of the Organisation for Economic Co-operation and Development (OECD), which suggested there were 'tremendous social pressures from students, parents and industry for greater diversification of the education opportunities available' in higher education (Canon, 1997, p. 309). In response to the OECD suggestions, the government established the Education Commission (EC) as an advisory body to oversee the overall education system in Hong Kong (Parsons, 1984). In its first report, the EC stated that its function was 'to define overall educational objectives, formulate education policy, and to recommend priorities for implementation' (EC, 1984, p. 1). As Hayhoe and Zha (2005) remarked, the 'overall educational objectives' were meant to include responsibility for higher education.

In 1997, Hong Kong was handed back to China after a long period of colonial rule by Britain. Shortly afterwards, its new Chief Executive, Tung Chee-hwa, appointed a new EC to conduct a comprehensive review of the education system in Hong Kong (Lee & Young, 2003). The review was deemed imperative, due to the 'recent economic, political, social and cultural developments and the far-reaching

impact of information technology on education' and 'the reunification with the motherland' (EC, 1999a, p. 3).

#### **2.4 Origin of Community College and Associate Degree in Hong Kong**

Beginning in the 1950s, Hong Kong enjoyed steady and prolonged economic growth, until the Asian financial crisis of 1997-1998 threw it and the rest of the region into recession. Until then, the prosperity and affluent conditions of Hong Kong contrasted greatly with the emerging but relatively underdeveloped socialist market economy in China (Postiglione, 2009). As remarked by Kennedy (2004), Hong Kong served as the showcase for China's economic development, and it was generally expected Hong Kong would become the knowledge and service provider for China after the 1997 handover.

However, Hong Kong's prolonged economic prosperity ended abruptly with the onset of the Asian financial crisis in 1997-1998. The local economy contracted, with financial markets plummeting whilst the unemployment rate soared. Hong Kong endured economic downturn and recession between 2000 and 2004, leading to a record budget deficit of over HK\$70 billion in 2002-2003 (Lee, 2005). In terms of macroeconomic indicators, the GDP growth rate dropped from 7% in 1997 to -7% in 1998, whilst the unemployment rate soared from 1.1% in 1989 to 6.3% in 1999 and 7.8% in mid-2002 (Kennedy, 2004). Also, the 1998 and 2004 Avian flu outbreaks, together with the 2003 SARS epidemic, further devastated the Hong Kong economy.

Whilst the Asian financial crisis severely hit Hong Kong's open and external-oriented economy, it had less effect on Mainland China, whose market was huge and relatively more sheltered, allowing cities like Shanghai, Beijing, and Guangzhou to achieve rapid growth. There were concerns that Hong Kong was being marginalized, and that foreign investment might bypass Hong Kong after China's admission to the World Trade Organisation (WTO) in 2001 (Kennedy, 2004). Hong Kong's loss of competitive advantage raised the question of whether it could still serve as the knowledge and service provider for Mainland China. Accordingly, the Director General of the WTO urged Hong Kong to recognize the importance of education reform to confront the challenge, stating:

*The rise of an increasingly skilled Chinese workforce, as well as direct transportation links with Taiwan, means that Hong Kong will have to fight to keep its privileged place. ... If recently launched educational reforms have the intended effect of producing a more flexible, creative, and skilled workforce, Hong Kong will have a fighting chance to keep its vaunted position as China's international window over a longer time period (Panitchpakdi, 2002, quoted in Postiglione, 2009, p. 164).*

There was also an inter-mingling of economic, social, and political factors pushing for education reforms in 2000. Since China's adoption of the 'Open Door' policy in the late 1970s, enterprises had gradually moved their manufacturing plants from Hong Kong to China to make full use of the cost advantages and the abundant supply of labour and land. As a result, starting from the 1980s, Hong Kong underwent a

structural change from a manufacturing hub to a service-oriented economy. The government was wary that the current elite system of post-secondary education might not supply an adequate number of educated workers to meet the demands of globalisation.

As commonly noted in the literature (e.g., Lee & Young, 2003; Postiglione, 2009), the major catalyst for Hong Kong's rapid expansion of post-secondary education was then Chief Executive Tung Chee-hwa's 2000 policy address (Tung, 2000), in which he announced that it was his government's strategic goal to support the progressive increase in post-secondary education opportunities for senior secondary school leavers from the existing 30% to 60%, within 10 years.

Facing an increasingly challenging competitive environment and phenomenal economic advances in Mainland China, Tung claimed that Hong Kong had to catch up with other countries by increasing the proportion of its workforce with tertiary education, to meet the needs of a knowledge-based economy. In his speech, Tung also announced that 'the Government will facilitate tertiary institutions, private enterprises and other organisations to provide options other than the traditional sixth form education, such as .....sub-degree courses' (Tung, 2000, p. 23).

In truth, Tung's 2000 policy address basically echoed the recommendations proposed by the EC (Chiu & Cunich, 2008). In its consultative document, published in September 1999, the EC recommended the development of a 'diversified,

multi-channel, multi-layer higher education system' (EC, 1999b, p. 14). Whilst accommodating existing institutions, the EC in particular stressed the need to encourage the establishment of various types of post-secondary colleges offering full-time programmes as an option for senior secondary school leavers to continue their studies (EC, 1999b; EC, 2000).

Tung's 2000 policy address advocated increasing the proportion of the workforce with tertiary education, but did not promise the government would fund the expansion; rather, the new post-secondary places would be self-financing in nature, with students bearing the cost of education by paying high tuition fees. To achieve the 60% target, the government mainly played a facilitating role through a number of support schemes, but was careful to restrict its financial commitments by the nature of those schemes. Rather than making a long-term commitment to funding student places, early support for the new institutions included start-up loans and land grants, financial assistance schemes for students, and accreditation grants to assist non-self-accrediting institutions.

The fallout from the Asian financial crisis fuelled concerns about how Hong Kong's university system could be sustained, especially considering that government expenditures on UGC-funded institutions exceeded HK\$10 billion annually (UGC, 2001). Believing it could no longer depend on public funding to increase the participation rate in post-secondary sector, the government resorted to encouraging the

development of sub-degree programmes in a self-financed model.

The EC's *Learning for Life, Learning through Life* reform proposal, published in 2000, sparked system-wide education change, including the switch from a seven-year secondary school system to a six-year version (three years each at the junior and senior secondary levels) and the move from a three-year undergraduate degree system to a four-year one (EC, 2000). Hong Kong society generally refers to the change as the '3+3+4' New Academic Structure, which was phased in between 2009 and 2015.

The major re-structuring of secondary and university education foreshadowed a significant change, which would impact upon the academic structure at the sub-degree level. At the sub-degree level, the move to a four-year degree system necessitated significant changes to the existing structure and curriculum of AD programmes. This study does not address the '3+3+4' related issue, since the admission of sub-degree students with the Hong Kong Diploma of Secondary Education (HKDSE) under the '3+3+4' New Academic Structure did not commence until the 2012-2013 academic year, and the first batch of AD students with HKDSE academic background did not graduate until the summer of 2014. Apart from the time issue, the learning experiences of AD graduates with HKALE and HKDSE background would be different, and thus the consistency of the research sample would be affected.

In his 2000 policy address, Tung pledged that, by the end of the decade, 60% of senior secondary school leavers would obtain some form of post-secondary education.

Tung aspired to expand post-secondary education, but did not consider that the majority of future students would need to obtain a bachelor's degree (Post, 2003a and Post, 2003b); rather, these students could be equipped for the knowledge economy through shorter, less expensive learning programmes that were not financed by the government. Accordingly, the idea of community colleges and AD began to thrive. In the autumn of 2000, HKU SPACE, a continuing education unit of the HKU, and the College of International Education (part of Baptist University) started to enrol students in their newly developed AD programmes. City University of Hong Kong (CityU) also announced it would convert all its UGC-funded HD courses into AD programmes, starting from academic year 2000-2001. Meanwhile, nearly all tertiary institutions in Hong Kong, including the School of Professional Education (part of HK Poly U) and Lingnan University announced that they would offer AD programmes from 2001 on. These continuing education units of UGC-funded universities were able to respond promptly to the call for AD programmes because they already had the basic infra-structure and systems needed to support part-time programmes.

At the start of the century, community colleges and AD programmes were new concepts in Hong Kong, but become the main focus of development in subsequent years. From 2000, there was a sharp increase in the number of self-financing post-secondary institutions and AD programmes. The overall post-secondary participation rate doubled from 33% in the 2000-2001 academic year to 66% in the



2005-2006 academic year. In fact, Hong Kong overshot its 2010 target, achieving the objective five years ahead of schedule. Following the stabilization of the market, the participation rate levelled off at over 60%, where it has remained since academic year 2006-2007 (EDB, 2008). Generally, the rapid growth in participation rates came through the increased AD enrolments in the newly found self-financing community colleges.

Before the year 2000, sub-degree programmes provided in Hong Kong were predominantly HD courses. These HD programmes, nearly all publicly funded, were mainly offered by tertiary institutions, including HK Poly U, CityU, and the Vocational Training Council. Intended to fulfil the manpower requirements of specific industrial sectors, HD programme curricula are vocationally oriented (EDB, 2008; Tripartite Liaison Committee, 2009). Different from HD programmes, which have over 40 years of history and are generally well-accepted by society, the AD concept has only existed since 2000 and is not yet well-recognized by employers and the community. Hence, there is uncertainty about the role and functions of community colleges, as well as about the nature and usefulness of the AD qualification.

## **2.5 Development of Community College and Associate Degree in Hong Kong**

As a new type of sub-degree programme, the AD curriculum is characterized as broad-based, incorporating general education studies (FCE, 2001). It is markedly different from the HD, which emphasises vocational or professional knowledge

reflecting a specialist orientation. The AD programme started in 2000, using the American model of community college as its blueprint for development, whilst HD is a common sub-degree qualification found in the UK and other Commonwealth countries.

### **2.5.1 The U.S. Community College – Blueprint for development**

Based on the two-year ‘church colleges’ made possible by the Land Grant Act (Morrill Act) of 1862 and 1890, community colleges in the USA started out as ‘junior colleges’ at the beginning of the 20th century, providing post-secondary education opportunities for people who did not have access to formal universities (FCE, 2001). These junior colleges, which were akin to technical college and the later further education colleges for 16-19-year-olds in Britain, were the genesis of American community colleges. In 1947, after a period of relatively slow development, the Truman Commission Report on Higher Education, which presented equality of opportunity in education as a national target, gave a major boost to the development of community colleges, which were by then an organic part of the US higher education system. The Truman Commission advocated a multi-faceted expansion of higher education to achieve its goal, anticipating that junior colleges would provide education and formal accreditation for what it described as ‘semi-professional workers’ (Morgan, 2000, p. 229) who did not need the four-year curriculum of universities. Despite that, it was recognized that some students in this category might want and be able to transfer back to a four-year programme. Finally, the Commission recommended a change of

name from junior colleges to community colleges, highlighting the primary mission of these institutions was to serve the educational needs of a local community (Stubblefield & Keane, 1994). At the local level especially, community colleges established themselves as significant providers of post-secondary education to the mass of US citizens since the 1960s.

In Hong Kong, the function of community colleges and the AD's position at the core of the community college curriculum were encapsulated in the 2001 Education and Manpower Bureau (EMB) consultancy report, which stated:

*Community colleges are public higher education institutions. They are characterized by a two-year curriculum that leads to either the AD or transfer to a four-year college. The transfer program parallels the first two years of a four-year college. The [associate] degree program generally prepares students for direct entrance into an occupation. Because of their low tuition fee, local setting, and relatively easy entrance requirements, community colleges have been a major force in the post-World War II expansion of educational opportunities in the United States. They are also referred to as junior colleges (The Columbia Electronic Encyclopaedia, 2000, quoted in the 2001 EMB consultancy report undertaken by the Federation for Continuing Education in Tertiary Institutions, FCE, 2001, p.5).*

### **2.5.2 The Associate Degree programmes – Common Descriptors**

In response to the government's call for the development of a more flexible and diversified higher education system, nearly all continuing education units of UGC-funded institutions started to set up community colleges, launching their AD

programmes in academic year 2000-2001. However, there was no overall development co-ordination and planning; each institution individually introduced their own AD programmes and designed their own course contents. This unplanned development aroused public concerns about the value of the AD qualification and its role in the higher education system of Hong Kong, and there emerged an urgent need for a set of common descriptors applicable for AD programmes.

The government's Education and Manpower Bureau (EMB) assigned this task to the newly-commissioned Federation for Continuing Education in Tertiary Institutions (FCE), which, in 2001, published an agreed-upon set of common descriptors for AD qualifications, aimed at helping stakeholders, including students, parents, universities, and employers, to better understand the nature of ADs and gradually build up their confidence in such a qualification. As criteria for the accreditation of any future AD programmes, the common descriptors also help to ensure consistency of standards among AD providers. It is important to note that there were no common descriptors proposed for HD programmes in the 2001 EMB report. Due to their long history, HD qualifications had existing society-wide recognition from employers. The common descriptors for AD, as proposed by the EMB Report in 2001 (FCE, 2001), can be summarized as follows:

i. Programme Objectives -

In general, AD should provide an enriched education at post-secondary level

that prepares students for work, leisure, further study and active citizenship.

Specifically, AD should equip students with generic as well as specialized skills

that will enable them to perform effectively at associate professional level,

further their studies in universities or pursue professional development.

ii. Entry Requirements -

Generally, entry to AD programmes should adopt the principle of 'lenient entry,

stringent exit'.

iii. Programme Structure -

As a full-time programme, AD should have a 2-year curriculum, with no less

than 450 contact hours per year.

iv. Curriculum Design -

The AD curriculum should include a substantial amount of generic skills and

broadening contents to reflect the stated programme objectives. The core

strength of AD programmes is related to their non-specialist contents. An AD

programme with a substantial proportion of broad-based contents would better

prepare students for life and work in an increasingly globalised economy.

v. Learning Outcomes -

In general, AD graduates should hold a solid foundation of generic skills,

including Chinese and English language, information technology, interpersonal,

communications, quantitative and analytic skills, etc., that will equip them to

strive competitively in a knowledge-based economy. Additionally, they should possess knowledge and skills in a specialized domain, enabling them to work effectively at associate professional level, or else to further their studies either through universities or professional development programmes.

vi. Exit Qualifications and Articulations -

The exit qualifications for AD graduates lie between those of current matriculants and degree holders. Per the North American model, an AD is equivalent to 50% of a four-year university degree; in the context of Hong Kong, it is considered to be one-third of a three-year university degree (British model).

In other words, AD graduates can articulate to Year 3 of a four-year university degree (North American model) and Year 2 of three-year university degree (British model). These routes are articulation-in-principle only; actual articulation to a specific degree programme is considered on an individual basis.

As an exit qualification for employment purposes, the AD level is widely considered equivalent to the HD level. However, in reality, the generic and specialized contents contained in the two curricula are markedly different.

There exists confusion as to why the two qualifications are generally considered to be comparable exit qualifications for employment purposes (EMB, 2008).

### **2.5.3 Articulation prospect for Associate Degree graduates**

When the concept of the community college was first introduced in Hong Kong,

it was commonly envisaged that AD would offer a second chance for students who did not achieve the high marks in HKALE necessary to obtain a place for degree studies in one of the local UGC-funded universities.

By providing an articulation opportunity for high-achieving AD graduates to continue their studies in local UGC-funded universities, the ‘no-loser’ principle (EC, 2000, p. 36) envisaged by the EC became more achievable, with some AD graduates who were previously the ‘losers’ in public examinations having the potential to become ‘late bloomers’ who performed well in AD programmes and could therefore be admitted to UGC-funded university for further studies (Hayhoe, 2011, p. 9). Of course, these were the fortunate few who showed outstanding academic performance in the AD programmes.

In recent years, community colleges and ADs have often become the subject of headline articles, with the publicity being for the most part negative (UGC, 2010). Specifically, concerns have been raised that students who complete an AD may not be able to obtain a place at publicly funded universities (Kember, 2010).

Whilst the US education system provides college places for its AD graduates as a means of widening access to university education, there is no such provision in Hong Kong for sub-degree graduates. Although student enrolment in AD programmes began in 2000, formal arrangements have not yet been made by government to grant senior year places for AD graduates, in respect to their articulation to UGC-funded

universities. In June 2001, the government discussed how UGC-funded institutions might utilize their 'wastage', which comprised of 590 undergraduate places (1.3%) for academic year 1999-2000, to accept AD graduates to year-two undergraduate studies (FCE, 2001). However, the government did not make any formal provision for articulation between sub-degree and UGC-degree programmes, despite the rapid growth in the number of sub-degree students and types of sub-degree programmes.

As the pressure for articulation escalated, the government agreed to provide more articulation opportunities at UGC-funded institutions for AD graduates, starting from academic year 2005-2006; however, the provision was far from adequate, with only 840 publicly funded senior year intake places being allocated in 2005, despite there being more than 6,500 graduates of full-time self-financing sub-degree programmes. Though the number of publicly funded senior year places is increasing, most still cannot obtain one of the allocated places. While UGC-funded senior year places increased to 1,927 for academic year 2009-2010 (with 1,987 available in 2010-2011), the number of sub-degree graduates had climbed to almost 15,000. To provide further articulation opportunities for sub-degree graduates, the government announced the number of senior year places would be doubled to 4,000, in phases, starting from academic year 2012-2013 (Tsang, 2010). However, the majority of sub-degree graduates were still unable to obtain one of the limited places in UGC-funded universities, as the number of AD graduates reached 18,000 in 2012



(Concourse, 2017).

Financial implications for the government and capacity constraints at UGC-funded institutions have been cited as reasons for the limited provision of articulation opportunities for sub-degree graduates (EDB, 2008). The number of UGC-funded first-year, first-degree places was capped at around 15,000 since 1994-1995. The recent increase in the post-secondary participation rate was primarily achieved through the rapid growth of self-financing AD programmes. Maintenance of the policy of capping publicly funded first-year first-degree places at 15,000 implies that the number of senior-year intake places at UGC-funded institutions for AD graduates will be kept at a low level, relative to the number of students enrolled in AD programmes (Kember, 2010).

The pressure for articulation into degree programmes has led to the flourishing of ‘top-up degrees’ arrangements being offered to sub-degree graduates in Hong Kong. Chiu and Cunich (2008) explained that top-up degrees are ‘designed for those students who want to use their AD or higher diploma qualifications as a foundation for undergraduate studies in another institution which allows them to gain a bachelor’s degree within a shorter period of time than the usual candidature’ (p. 230). The arrangement of top-up degree programmes is relevant to community college AD graduates, whose qualification could be considered as completing the early part of an undergraduate curriculum. AD graduates could then articulate to undergraduate studies

at a more senior level than could secondary school leavers. Most often, the top-up degrees articulate with the AD to convert it into an undergraduate degree.

In Hong Kong, many top-up degree programmes are offered by the self-financed arms of UGC-funded institutions, in partnership with non-local universities. These top-up awards are granted by the overseas universities on a self-financing basis, although the teaching is mostly conducted by the local staff within the campus of the community college. This further implies that the learning facilities are not comparable to those of the UGC-funded universities. Even though non-local top-up degree programmes occupy a lower position in students' preferences (Kember, 2010; UGC, 2010), their enrolment numbers are increasing. In 2009-2010, 20,600 students enrolled in self-financing non-local undergraduate programmes conducted in Hong Kong (UGC, 2010).

To fulfil the articulation needs of sub-degree graduates, an increasing number of local institutions have also started to offer self-financing top-up degrees programmes. In the 2009-2010 academic year, the Open HKU enrolled 676 students in its full-time top-up degree programmes. Additionally, UGC-funded institutions and their self-financing arms (e.g., the HK Poly U's School of Professional Education and Executive Development) provided self-financing local full-time top-up degree programmes for 2,008 students in 2009-2010. In addition to those enrolled in full-time programmes, a considerable number of sub-degree graduates have registered for

part-time top-up degree programmes. In academic year 2009-2010, about 7,900 students were enrolled in part-time self-financed first-degree programmes offered by UGC-funded institutions or their self-financed arms (UGC, 2010).

The Hong Kong government claims that these articulation pathways are complementary to the provision of publicly funded places at the UGC-funded universities (EDB, 2008). However, as argued by Kember (2010), these top-up awards are mostly regarded as a poor substitute for articulation into an undergraduate programme offered by an UGC-funded institution.

The proliferation of top-up degree programmes - along with the diversity in admission criteria, exemptions requirements, and duration of studies for programme completion - has caused confusion as to what a 'top-up' degree actually is. For instance, non-local top-up degrees can be completed within 12 months, whereas the local top-up degrees offered by the self-financed arms of UGC-funded institutions may require 24 months for completion. Inconsistencies in duration and the number of credits required obtaining top-up awards has led to poor perceptions about their quality and value, as does the ease of access into self-financed top-up degree programmes, compared to the publicly funded ones offered by UGC-funded universities.

#### **2.5.4 Employment prospect of the Associate Degree graduates**

In both the US and Canada, 'the associate degree is designed to provide an educational experience that prepares students for work, citizenship and an enriched life

as an educated person, and to lay a solid foundation for further studies' (FCE, 2001, p. 7). In Hong Kong, the common descriptors state that the AD programme should enable students to develop 'a solid foundation of generic skills... which is sufficient for them to perform in the modern, knowledge-based working environment. In addition, they should possess the knowledge and skills in a specialised domain which are sufficient for them to perform effectively at associate professional level, or to further their studies in universities or through professional development programmes' (FCE, 2001, p. 22).

However, subsequent developments in the post-secondary sector have almost entirely focused on the articulation of AD to degree programmes (Lee and Young, 2003; EDB, 2008), partly because some sub-degree providers have promoted the AD qualification as a stepping-stone to articulation into UGC-funded degree programmes.

In Hong Kong, HD qualifications have achieved greater recognition than AD qualifications, from the perspective of employers (Tripartite Liaison Committee, 2009). With a good track record stretching over four decades, the HD award is generally regarded as an exit qualification for vocational and professional development in the employment market. As a significant portion of the AD curriculum is designed for generic skills and broad-based content, with less specialized and technical knowledge in comparison with the HD, the AD qualification looks more like a bridging qualification for further studies than a terminal vocational award (EDB, 2008; Kember, 2010).

To enhance recognition of the AD qualification in the business community, the Hong Kong government, which is one of the largest and most well thought of employers in the territory, has publicized that it considers AD graduates to be comparable to HD graduates in terms of appointment to all civil service and non-civil service posts (EMB, 2006; EDB, 2008). However, there are no publicly available statistics on how many AD graduates the government has recruited.

### **2.5.5 Financial Assistance for Associate Degree students**

In the 2004-2005 academic year, tuition fees for self-financed AD programmes provided by the local institutions ranged from HK\$30,000 to HK\$50,000. By academic year 2011-2012, tuition fees ranged from HK\$39,000 to HK\$62,1000. With a large number of students from less well-off families undertaking the self-financed AD courses (Post, 2010), the high tuition fees charged by the community colleges caused great concern in society. As the government had vowed to ‘ensure that no one would be deprived of further education opportunities because of the lack of means’ (Li, 2005), it began to offer financial aid packages to eligible students, consisting of means-tested grants or loans to cover tuition fees and non-means-tested loans to cover tuition fees and living expenses (UGC, 2010).

The importance of education for social mobility, status, and career advancement is well affirmed in Chinese culture (Pratt et al., 1999). That economic advancement is achieved through education is a general belief in Hong Kong, and in most Chinese

cultures. Parents and grandparents work hard and make sacrifices so that their children can receive a higher level of education than they did. As Postiglione (2009) argued, the value placed on education by the typical Hong Kong family is strong enough 'to convince less academically gifted students to pay a higher fee for a semester at community college than... at university, despite the fact that an associate degree is valued less than a bachelor's degree from the perspective of employers' (p. 165). Perhaps, the fact that several community colleges are actually continuing education units of UGC-funded universities helps lift their image and justify their high tuitions fees.

## **2.6 Globalisation and the Importance of Generic Skills**

This section discusses globalisation, lifelong learning and the value of lifelong learning epistemology, motivation, and the importance of generic skills.

### **2.6.1 Globalisation and Knowledge-based Economy**

In recent years, many educational reforms have been justified on the grounds that it is of the utmost importance to align educational practices and policies with the profound political, economic, and cultural changes that globalisation has signified (Rizvi, 2017). Indeed, globalisation has transformed the communities in which education takes place.

Globalisation is a contested concept, with no consensus in regards of its

definition. It relates to new phenomena about how the world is organized, in what ways knowledge is created and dispersed, and how communities are connected (Rizvi, 2017). Stiglitz (2002, p. 94) refers to globalisation as a form of ‘market fundamentalism’, which explains its relationship to ideas of free trade, new ways of work organizations, and labour relations. From another perspective, Simmons (2010) saw that the process of globalisation embraces an increasing extent of economic, political and cultural ‘connectivity’ (Simmons, 2010). Technological advancements enable the efficient flow of information and knowledge across the globe via global communication networks (Lauder et al., 2006). The idea of ‘global economy’ is pervasive, and can be characterized as informational, knowledge-based, and globally connected (Castells, 2000). As such, Ball (2008) posited that the purpose of education should be shaped in economic terms to meet the requirements of a global economy. In other words, the educational system must be able to develop different kinds of learners who are capable of working creatively, are flexible and adaptable, have a global perspective, and are lifelong learners. Such a view implies that ‘learning for the sake of learning’ is no longer adequate (Rizvi, 2017, p. 7). Indeed, the force of globalisation is often dominated by the concept of neo-liberalism. Key neo-liberal ideas - such as free markets, individual competition and economic efficiency - prevail as a popular discourse in many developed countries, such as the UK (Rizvi, 2017). Overall, governments place education and training as top priorities to provide

solutions for uncertainties in labour markets and economic competitiveness (Simmons, 2010).

In response to the competitive landscape in higher education, universities have become more active in creating courses that are more relevant to the workplace and changes in the nature of knowledge. Increasing emphasis is placed on the concepts of ‘experiential learning’ and ‘critical thinking’ to strengthen students’ transferable skills and prepare them to become competent in the knowledge economy (Olssen & Peters, 2005). Essentially, neo-liberalism’s educational purpose has led to the prominence of the concept of the knowledge economy (Rizvi, 2017), which the OECD defined as a type of economy based on the production, distribution, and utilization of knowledge and information (OECD, 1996a). As such, the OECD emphasised education as a key factor for the production of human capital and the generation of new knowledge (Olssen & Peters, 2005).

The emergence of the knowledge economy will require a large proportion of workers to become equipped with the knowledge and skills needed to use new technologies and be adaptable to continuously changing environments. Governments often link higher education with national economic competitiveness, which requires the education system to produce more highly skilled workers to enhance the country’s competitiveness in the global economy.

Hong Kong’s structural transformation from a manufacturing hub to a



service-oriented economy made the government wary that its elite system of post-secondary education might not supply an adequate number of educated workers to meet the needs of globalisation. In other words, the current education system was thought inadequate to nurture the lifelong learners needed in a knowledge-based economy. For example, many students stop learning after leaving school, posing a serious challenge to the Hong Kong government's policies and plans (EC, 1999a). Against this background, the government of Hong Kong took the lead 'to build a flexible higher education system that offers various channels and different modes of learning, so that everyone can pursue continuous learning at different stages of life' (Tung, 2000, p. 23).

The expansion of post-secondary education resulted in the establishment of shorter, less expensive, privately financed AD programmes, to enhance Hong Kong's competitiveness through nurturing an educated and highly-skilled workforce to meet the challenges of a knowledge-based economy. Field and Leicester (2000, p. XVII) suggested that the neoliberal discourse of lifelong learning developed out of economic changes, including 'the rapid diffusion of information and communication technologies. This reflects the OECD's (1996a) assertion that the increased pace of globalisation and technological change are among the forces underscoring the need for continuous upgrading of work and life skills throughout life.

### **2.6.2 The concept of lifelong learning**

In the present day, lifelong learning has been extended far beyond the provision of second-chance education and training for adults (Han, 2001), and has

become central to almost all government educational policies, planning, and management, as well as other social programmes (Bagnall, 2000). UNESCO illuminated the international discussion of lifelong learning in the context of adult education (Lee & Jan, 2018). During the 1960s and 1970s, UNESCO and Council of Europe documents used the phrase 'lifelong education' in connection with educational equity and humanistic concepts of the intrinsic value of 'permanent education' (Kennedy, 2004). Based on a more holistic interpretation, Faure et al. (1972) described the concept of lifelong education as one that supported and encouraged the right and necessity of each individual to learn for his socio-economic, political, and cultural development. By 1996, the OECD approach to lifelong learning was entwined with human capital formation. The OECD described lifelong learning in terms of an individual's lifelong career development, and investment in human learning as fulfilling global capitalism (Han, 2001). The neo-liberal discourse embedded in the OECD documents suggests that lifelong learning is related to retraining and learning new skills that would enable individuals to cope with turbulent changes in the workplace (Bagnall, 2000). Basically, the need for lifelong learning arises due the unprecedented pace at which changes are occurring in the world, often rendering one's previously learned knowledge obsolete within a short period. The situation necessitated people becoming lifelong learners by updating their knowledge and skills to remain competitive in the ever-changing world. Within Western welfare

states, high unemployment has been proposed as the main reason for the subsequent transformation of the concept of lifelong learning (Griffin, 1999). By advocating individual responsibilities, welfare states tried to forsake their responsibility to provide economic wealth and job opportunities. Lifelong learning highlights the active role played by individuals in learning by making choices regarding what to study in accordance to their values.

An enthusiasm for lifelong learning is one of the graduate attributes currently acclaimed by higher education institutions, employers, and governments alike in Hong Kong (Kember, Leung, & Ma, 2007). Overall, lifelong learning has been distinguished as a way of developing flexibility of skills and mindset (Bligh, 1982). In effect, lifelong learning is wide in perspective, including learning in formal, informal, planned and unplanned settings (Candy, Crebert, & O'Leary, 1994). Bath & Smith (2009) argued that lifelong learning is important, not only for national competitiveness, but also for social cohesion. On that basis, the value of lifelong learning is that it produces useful and productive citizens (Berman, 1984).

### **2.6.3 The value of lifelong learning epistemology**

The nature of lifelong learning is always best understood through a framework of educational epistemology (Bagnall & Hodge, 2018). Epistemology is a philosophical concept that explains how knowledge is created, learned, taught and

applied (Sulkowski, 2013). There are four prominent epistemological conceptions (Bagnall & Hodge, 2018). They include knowledge as truth (disciplinary epistemology), knowledge as authentic commitment (constructive epistemology), knowledge as power (emancipatory epistemology), and knowledge as effective action (instrumental epistemology). These epistemologies reflect the value of different conceptions and practices of education, including lifelong learning.

The key element of disciplinary epistemology is the view that knowledge is truth about reality (Abel 2011). Learners are immersed in the theoretical content of academic disciplines to learn bodies of knowledge (Hirst & Peters, 1970), and assessment criteria for educational attainment emphasizes learners' mastery of disciplinary content (Barnett, 1994). Educators are valued for their disciplinary expertise and regarded as important to transmit disciplinary knowledge to students through good teaching (O' Hear, 2012). On the other hand, the core of constructivist epistemology is perceiving knowledge as authentic commitment and engagement (Bagnall & Hodge, 2018). The learning of constructive knowledge occurs through human interactions (Fairfield, 2009). Learners are immersed in interactive engagements in situations they find important and meaningful (Dewey, 1966), and educators are commonly regarded as facilitators. The contemporary educational approach regards constructivist epistemology as being humanistic or student-centred

(Howlett, 2013).

Emancipatory epistemology views knowledge as power, and learning as involving the radicalization of learners against the false realities of the prevailing hegemonic framework (Freire, 1970; Newman, 1999). Educational engagement immerses learners in the emancipatory framework (Brookfield & Holst, 2011), and educators are valued for their commitment to that framework. Instrumental epistemology views knowledge as effective action (Bagnall, 2004), and the learning of instrumental knowledge as repeated cycles of practices, whilst assessments are evaluated as the performance of predetermined actions in specific practical engagements (Harris et al. 1995). Educators are valued for their experiences and their teaching expertise (Bagnall, 2004). The educational approaches reflecting the instrumental epistemology include behaviourist, outcome-based, and competence-based education (Elias & Merriam, 2005). Each epistemology reflects a distinctive view of what is educationally important. Despite these epistemologies being important in education policy and practice, the underlying emphasis is on what is important in the act of knowing, rather than the nature of knowledge (Bagnall & Hodge, 2018).

In the international arena, the contemporary cultural context has strongly favoured instrumental epistemology in adult and lifelong learning (Bagnall & Hodge,

2018). By the turn of the century, the European Commission issued its *Memorandum of Lifelong Learning* (European Commission, 2000) to set up a discourse on the implementation of lifelong learning. The epistemology of lifelong learning advocated by the European Commission is largely related to active citizenship and employability (Lee & Jan, 2018).

In 1996, the OECD published *Lifelong Learning for All*, with the aim to:

*...strengthen the foundations for learning throughout life, by improving access to early childhood education, particularly for disadvantaged children... promote coherent links between learning and work, by establishing pathways and bridges that will facilitate more flexible movement between education and training and work... rethink the roles and responsibilities of all partners-including governments – who provide opportunities for learning... create incentives for individuals, employers and those who provide education and training to invest more in lifelong learning and to deliver value for money.*

(OECD 1996b: 21)

The OECD's lifelong learning approach was ingrained with a human capital agenda (Field, 2001), in which human beings are largely viewed as a means for economic gains. The main role of lifelong learning is to cope in an ever-changing environment (Lee & Jan, 2018). The World Bank's perspective on lifelong learning is essentially related to economic rationalism (Lee & Jan, 2018), emphasizing the need for knowledgeable and skilled labour in view of the rapid transformation occurring in the global economy. It also highlights the importance of various education and

training systems for the facilitation of lifelong learning.

In Hong Kong, the ideology of lifelong learning arose from a visit by an OECD official in 1999, which led to a renewed understanding of the concept of lifelong learning and its 'association to the knowledge society' (Cheng, 2002, p. 164). The EC undertook a comprehensive review of the education system in Hong Kong, highlighting that the education system in Hong Kong ought to lay 'the foundation for lifelong learning' (EC, 1999a, p. 17). Moreover, the Sutherland Report (2002) reviewed the status of higher education in Hong Kong and recapitulated the need to embrace continuous learning, since one may 'no longer live off educational capital for the rest of one's working life' (p. 24). This statement affirms the value of lifelong learning epistemology in creating an innovative and knowledge-based economy and society through training and retraining of individuals, and the need for the government to help citizens adjust to the 'demands of the knowledge economy and society' (Tung, 2003, p. 25).

#### **2.6.4 The notion of motivation**

Motivation is a general concept used to explain why individuals engage in specific activity and what influences their learning (Beck, 2004). Motivation has an important influence on students' learning and helps to explain those processes that can

stimulate human learning behaviour (Galbraith, 1990). The literature divides the types of motivation that guide students' learning into intrinsic (internally derived) and extrinsic (externally derived) motivation. For example, the motivation to perform an activity for its own sake (not initiated by the desire for reward) is largely intrinsic; conversely, motivation to engage in an activity to earn a reward or avoid punishment is mainly extrinsic (Vansteenkiste, Lens & Deci, 2006).

There are different types of extrinsic motivation, which differ in the magnitude to which they reflect self-determination (Ryan & Connell, 1989). Deci and Ryan (1985) listed four types of extrinsic motivation - external, introjected, identified, and integrated forms of regulation. External regulation emanates from external contingencies, such as rewards and punishments; the contingencies prompting the behaviour have not been internalised at all. For example, a student who works hard for high marks to achieve a better opportunity for articulation to university study is externally orientated. Introjected regulation, in contrast, involves internal coercion, which pressures individuals to behave in certain ways to avoid feeling guilt and shame, or to establish their self-worth by getting the approval of others. A student who goes to university for a bachelor's degree to satisfy his or her parent's aspirations and society's view of higher education can be regarded as showing introjected regulation - i.e., as being coerced or pressured, not self-determined (Gagne & Deci, 2005).



Identified regulation occurs when individuals identify the value of an activity and accept the regulatory process as their own; for example, a student who does extra work in calculus because he accepts the importance of advanced mathematical skills for his self-selected goal of studying finances at university would feel relatively autonomous, as he did it willingly for personal reasons, not due to external coercion.

Lastly, integrated regulation occurs when individuals have the full sense that their behaviour is coherent with who they are, what they value, and what they deem important (Gagne & Deci, 2005). For example, an AD student may have one identification of being the top performer in class, with the best academic results, and another as the captain of a basketball team. These two identifications may seem contradictory, but are both valued by the student.

Deckers (2005) posited that intrinsic motivation is embedded in the activity being performed, i.e., one's internal desire to participate in an activity for its own sake. On the other hand, extrinsic motivation is guided by external factors, such as monetary rewards, high grades, or others' approval. When extrinsically motivated, people perform, not out of their inherent interest in the activity itself, but to achieve an outcome. Biggs (1987) referred to intrinsic and extrinsic motivation in describing the surface and deep motives in students' approaches to learning. Surface motives are instrumental to extrinsic motivation, whilst deep learning is intrinsic to actualising interest in the particular academic field. There have been various literatures written on

student motivation and its connection with student engagement, perseverance, performance, and academic achievements (Deci & Ryan 2008; Meece, Anderman & Anderman, 2006). Much of the research on motivation is based in school or workplace settings (Chong & Ahmed, 2012), with relatively little attention being paid to motivation in the context of higher education, especially such questions as why students decide to go to university and what factors motivate students to enter university and obtain a degree (Kember, Hong & Ho, 2008; Kember, Ho & Hong, 2010). In particular, few studies have investigated sub-degree students' motives for enrolling in universities.

#### **2.6.5 Importance of Generic Skills**

In its September 1999 consultative document, the EC stressed the need to develop a more flexible tertiary education system by encouraging 'the establishment of various types of post-secondary colleges', which would provide alternative routes for senior secondary school leavers to continue their studies (EC, 1999b, p. 14). Twelve months later, in its report, *Reform Proposals for Education System in Hong Kong*, the EC explicitly recommended the development of community colleges and ADs in Hong Kong (EC, 2000).

The HD and AD programmes are both considered to be at a sub-degree level. Given that the HD has enjoyed a longer history of recognition and achieved acceptance from employers, due to its practical and vocational nature (EDB, 2008; Tripartite

Liaison Committee, 2009), there is some confusion as to why the EC chose to increase the higher education participation rate through the promotion of community colleges and AD, with which the majority of the community was not familiar.

Hong Kong long ago left its industrial economy era and has emerged, since the 1990s, as a regional financial and trade centre. Previous industries that competed based on cheap wages, clear division of labour, and hierarchical organizational structures have been displaced by economic activities founded on advanced knowledge, innovation, and technology. A knowledge-based economy took shape in Hong Kong in tandem with the accelerated growth in information technology, which signalled the rising challenge of globalised competition (Tung, 2003) . Facing an ever-changing environment, employers demanded employees with a wide range of skills and the capability to acquire new knowledge and skills quickly at work (Harvey, 2000). Increasingly, the conventional practice of separating students' learning into specific disciplines or professions has been challenged; it is no longer sufficient for employees just to have specialised skills, as they are required to possess multi-faceted skills and knowledge in multiple domains to handle the complexity of work (Cheng & Yip, 2006). Hong Kong's vocationally oriented HD programmes were not suited to address the changing needs of the educational landscape, and it was necessary to establish new programmes that could overcome their bottlenecks. The AD programme, with its focus on general education and broad-based curriculum, is more tied to the manpower needs

of a knowledge-based economy, and the government asserted that ADs' broad-based knowledge and generic skills would contribute to upgrading Hong Kong's human capital (EC, 2000; FCE, 2001).

In the literature, Becker's (1964, 1993) human capital theory suggests that general skills are portable from one job to another and across different organizations, whilst specific skills are less portable, as they may only increase an individual's productivity in a specialized context. Tilak (2002) also noted that general education has always been considered more effective in improving the flexibility of employees for adaptation to changes. As a global phenomenon, individuals are now operating in an ever-changing environment. Cheng & Yip (2006) argued that communities are increasingly in need of individuals with general skills to support a knowledge-based economy.

In Hong Kong, it is increasingly asserted that the primary function of higher education is to develop talents capable of contributing to the economic growth of the society. This connection between higher education and economic competitiveness has long been recognized in other parts of the world.

In the United Kingdom, the Robbins Report of 1963 signified the objectives of higher education as providing 'instruction in skills suitable to play a part in the general division of labour' (Robbins, 1963, paragraph 25). In 1997, the Dearing Report into Higher Education highlighted the importance of education for employability,

emphasizing the development of students' generic abilities, which were expressed in term of 'key skills' (Dearing, 1997), including communication, numeracy, information technology, and learning how to learn. It was argued that these skills should form part of the programme specifications as one of the learning outcomes of all higher education courses (Dearing, 1997). Subsequently, the Department for Education and Skills (DfES) and the Qualifications and Curriculum Authority (QCA) added 'working with others' and 'problem solving' to the list of key skills (Lees, 2002).

In Australia in the early 1990s, the importance of teaching and learning generic skills for employability and transferability was emphasized by employers' organizations and the government (Mayer Committee, 1992). In 2001, the Australian Chamber of Commerce and Industry (ACCI) and the Business Council of Australia (BCA) conducted a major project to study the employability skills needs of industry; the resulting report, *Employability Skills for the Future*, published in 2002, defined employability skills as 'skills required not only to gain employment, but also to progress within an enterprise to achieve one's potential and contribute successfully to enterprise strategic directions' (DEST, 2002, p. 3)

In the existing literature, the conceptualisation of generic skills is complex, with divergent perspectives. The foremost problem relates to taxonomy, as 'generic skills' are often referred to and used interchangeably with 'key skills', 'core skills', 'transferable skills', 'employability skills', and 'soft skills' (Lees, 2002; Nabi & Bagley,

1998; Rigby et al., 2009). Further, these ‘skills’ are often variously described as competencies, capabilities, attributes, or learning outcomes (Lees, 2002; Knight & Yorke, 2002; Rigby et al., 2009). This study will follow the approach of employers and governments (e.g., Dearing Report, 1997; EC, 2000), which often connects generic skills with the concepts of employability and transferability.

While many different lists of generic skills have been developed in past decades, there is general agreement that importance of communication, numeracy, information and communications technology (ICT), improving one’s own learning and performance, working with others, and problem solving (QCA, 2002; EC, 2000) are all key generic skills, since they are effective in a wide range of employment situations but are not tied to any one-subject domain (Knight & Yorke, 2002), and can be used to support study in any discipline (e.g., Lees, 2002).

The EMB consultancy report stated that the content of AD studies will facilitate students to build up ‘broader skills of communication, computer literacy and information technology processing, language proficiency in English and Chinese, fact-finding and basic research and analytical skills’ (FCE, 2001, p. 5). The generic skills elements included in AD education are similar to the common list adopted in other countries. Invariably, almost all generic skill sets include communication, people-related skills, and thinking skills.

## **2.7 Chapter summary**

This chapter has provided a review of the relevant literature. It has described the history of the Hong Kong education system, as well as the origin and development of community colleges and Associate Degrees in Hong Kong. This chapter has discussed the role of community colleges in the provision of ADs, and the articulation and employment prospects of AD graduates, as well as issues of globalisation, lifelong learning and its epistemological values, motivation, and the importance of generic skills to AD education.

## CHAPTER 3

### RESEARCH DESIGN AND METHODOLOGY

#### 3.1 Introduction

This chapter describes the research design and methodology of this thesis. Section 3.2 presents the methodological strategies, while Section 3.3 describes the research design. Section 3.4 presents the procedures for data analysis, Section 3.5 discusses ethical issues, and Section 3.6 summarises the chapter.

#### 3.2 Methodological strategies for the study

Conventionally, there are said to be two research traditions: quantitative and qualitative. The differences between the two can be explained in terms of the ways in which data are collected and analysed (Gelo, Braakmann & Benetka, 2008). Quantitative research approaches involve a systematic process of collecting numerical data. The theoretical underpinnings of quantitative research focus on describing a population scientifically (Onwuegbuzie & Leech, 2003) and providing quantifiable data for making informed conclusions and generalisations.

The strength of quantitative research approaches lies in their ability to provide credible data that can be used to gauge the relationships between variables. Thus, in quantitative research, it is crucial to have a clear understanding of the sampling techniques involved. Sampling in quantitative research generally involves the use of



probability procedures, and includes simple random sampling, stratified random sampling, cluster sampling, systematic sampling, and multi-stage sampling (Onwuegbuzie & Leech, 2003). The strength of probability sampling is that it increases the possibility of making generalisable findings.

Despite the strengths of quantitative research approaches, criticisms have been levelled against them in the literature. For example, Patton (1990) pointed out that quantitative approaches are poor at addressing personal feelings, thoughts, and reasoning, due to the complex and subjective nature of these aspects. Moreover, they are not suitable for eliciting an in-depth understanding of a problem (Wiersma, 2000), and it is often difficult to assign participants randomly, as would be desirable to replicate experimental conditions. When small samples are involved, the possibility of making generalisations beyond the specifically examined context is limited.

In the light of limitations such as these, many see qualitative research as an effective alternative to quantitative research for understanding the human experience through an interpretive approach (Jackson, Drummond & Camara, 2007). Qualitative research approaches allow a researcher to interact with respondents in a natural setting (Hayhow & Stewart, 2006) and interpret the meaning of human experiences beyond their surface appearance. The strength of qualitative research lies in its ability to enable the researcher to acquire deeper understanding of a problem, typically using

non-numerical formats. Moreover, it reveals the complex nature of the problem under investigation (Miles & Huberman, 1984).

There are various qualitative research tools that can be used (McMillan, 2004), including interviews, observations, field notes, and documentary analysis. For example, the use of in-depth interviews enables a researcher to capture a profound understanding of individuals' experiences of particular phenomena. Adopting a qualitative research approach does not mean a researcher can ignore careful sampling techniques; for example, a widely-used sampling technique in qualitative research is judgmental non-probability sampling (Onwuegbuzie & Leech, 2003), wherein individuals are chosen based on the likelihood of their providing authentic information.

Despite the strengths of qualitative research, it also has some weaknesses. Mays & Pope (1995) argued that qualitative research approaches lack scientific rigour, and that, as they involve human subjectivity, they do not guarantee that different researchers will obtain similar findings if a study is replicated (Mays & Pope, 1995). Although researchers may use a qualitative research approach to generate in-depth information from a small population, they may not be able to generalise from their findings. The researcher needs to define the sample appropriately to generalise from the results. Selection of the appropriate research approach to use in any study depends on the stated research questions. The research questions in this study explore

graduates' perceptions of the usefulness of AD programmes (in business and management) for further study and employment. The three research questions are:

1. What motivates AD graduates to pursue further study?
2. How useful do graduates perceive AD programmes to be in enabling them to pursue further study and acquire employment?
3. Does the AD curriculum enable students to acquire basic competency in the generic skills essential for further study and employment?

Understanding and answering these research questions will enable us to determine how effective AD programmes are in preparing and enabling AD graduates to achieve the basic competency in generic skills necessary for further study and employment. Ercikan & Roth (2006) argued that both quantitative and qualitative aspects exist for any given phenomenon, while Yin (1994) argued that a study focused on a single phenomenon requires triangulation from different methods. This suggests it is worthwhile to integrate quantitative and qualitative approaches. Accordingly, this research will employ both qualitative and quantitative tools for data collection, on the underlying assumption that combining the two will provide a better understanding of the research problem than either approach alone, and that relying on one type of data source may not provide meaningful and useful answers to the research questions. Combining the two allows the researcher to use the strengths of one approach to compensate for the weaknesses of the other (Creswell, 2003; Ercikan & Roth, 2006). The initial results obtained by one method may be further explained by employing

another type of data, and ultimately enhance the understanding of the data obtained by the first. It is relevant at this point to provide an overview of the research design guiding this study.

### **3.3 Research design**

This study employs a case study using both qualitative and quantitative research methods. Case study was selected based on the method's ability to support in-depth investigation of trends and specific situations occurring in a community. As Shareia (2016) argued, a case study allows researchers to understand and learn more about a particular case. Similarly, Yin (2017) argued that case study has an advantage over other methods in that it addresses 'how' or 'why' questions about a contemporary set of events over which the research has no little or no control. Moreover, the use of case study allows investigation of the contextual conditions embedded in the real-life case under investigation (e.g., Yin & Davis, 2007). The purposes of the present study are to examine graduates' perceptions of the usefulness of AD programmes for further study and employment, and to investigate whether the AD curriculum has effectively enabled students to acquire basic competency in generic skills essential for further study and employment.

To achieve its purpose, this research uses a mixed methods approach combining both quantitative and qualitative methods to synthesize ideas from multiple perspectives and standpoints (Creswell, 2003; Johnson, Onwuegbuzie & Turner,

2007). To establish the validity of data, it uses a variety of data collection methods, as well as data triangulation (Yin, 2003). Campbell and Fiske (1959) pioneered using multiple research methods and formulated the idea of triangulation to adopt more than one research methodology to validate research findings. In the same line, Denzin (1978) described triangulation as ‘the combination of methodologies in the study of the same phenomenon’ (p. 291). Moreover, triangulation has great value for offsetting bias inherent in any data source. Since the research questions require exploring what motivated AD graduates to pursue further education, the extent to which the AD programmes provided opportunities for further studies and employment, and the effectiveness of AD curricula in enhancing graduates’ attainment of generic skills, a quantitative approach was needed to produce quantifiable conclusions. The researcher collected data using a self-administered questionnaire, which generated a general pattern of graduates’ perception regarding the usefulness of the AD programmes. The results helped to provide information reflecting the importance of the AD curriculum, in terms of its ability to provide generic skills and address Hong Kong’s employability agenda.

However, the research questions also require an interpretive naturalistic approach, to realize AD graduates’ perceptions about the usefulness of AD programmes for further study and employment. To review the effectiveness of the AD curricula, it is worthwhile to collect in-depth information about graduates’

learning experiences, which suggests the use of qualitative research methods to gain a deeper understanding of graduates' perceptions of their study programmes and the reasons underlying their feelings. Such an understanding may help to focus the research on pedagogical designs to plan authentic learning activities. Accordingly, the researcher used semi-structured interviews to collect data and to supplement the questionnaire results. The researcher also triangulated the results with data collected through documentary reviews, to provide stronger evidence from which to draw conclusions about the problem being investigated. The following sections present the study area, sampling techniques, participants, data collection methods, and analysis plan.

### **3.3.1 Study area**

This study covered graduates of self-financed AD programmes (in Business and Management) from six institutions that are either continuing education units or self-financing arms of six UGC-funded universities (Table 3.1). The selection was based on the institutions offering AD programmes in Hong Kong. The institutions (see Table 3.1) have well-established infrastructures for offering AD programmes and numerous AD programme graduates, and were thus promising settings for conducting this research. Within each institution, graduates from their AD programmes between 2007 and 2012 formed the frame from which the sample was drawn.

**Table: 3.1****Sampling frame**

<b>UGC-funded Universities</b>	<b>Continuing education units/ Self-financing arms</b>
City University of Hong Kong (CityU)	Community College of City University (CCCU)
Lingnan University (LU)	Community College at Lingnan University (CCLU)
The Chinese University of Hong Kong (CUHK)	The Chinese University of Hong Kong - Tung Wah Group of Hospitals Community College (CUTW)
Hong Kong Baptist University (HKBU)	College of International Education (HKBU CIE)
The Hong Kong Polytechnic University (HK Poly U)	Hong Kong Community College (HKCC)
The Hong Kong University (HKU)	HKU SPACE Community College (HKU SPACE CC)

**3.3.2 Sampling techniques**

Various types of sampling techniques are used in educational research. Two of the most notable are probability sampling and non-probability sampling (McMillan, 2004), each of which incorporates other types of sampling procedures; for example, four types of sampling procedure (simple random, systematic, stratified, and cluster sampling) are often used in probability sampling (McMillan, 2004). Sometimes, it may be difficult for a researcher to obtain a desirable sample using probability sampling, and may choose to use non-probability sampling techniques, such as convenience, quota, and purposeful sampling procedures. The current study used non-probability (purposeful) sampling techniques, as detailed below.

### **3.3.2.1 Purposeful sampling procedure**

Non-probability sampling techniques are often used in qualitative research. There are several types of non-probability sampling techniques, including purposeful sampling, which allows the researcher to determine the characteristics of the population under investigation (Patton, 1990) and select subjects whom the researcher believes will provide authentic information (McMillan, 2004). Additionally, the researcher may use different kinds of purposeful sampling procedures, including typical case, extreme case, maximum variation, snowball, and critical case.

To protect personal privacy, the community colleges declined to release their full lists of AD graduates for the questionnaire survey. Random sampling was therefore not possible. The researcher resorted to seeking help from peers and associates teaching at the tertiary education institutions in Hong Kong and past AD students who had previously been executive members of students' unions in community colleges to distribute the questionnaires. Non-probability or convenience sampling was used; the questionnaires were distributed to AD graduates who were attending full- or part-time degree programmes or professional courses taught by the researcher's peers and associates. Questionnaires were also distributed to AD graduates who had maintained contact with previous executive members of students' unions. As such, not every AD graduate had the chance to be included in the sample.

This study used the typical case procedure to select a sample of AD graduates



for semi-structured interviews. The procedure requires the researcher to have sufficient knowledge about the population under investigation. In this study, the researcher was familiar with the context of community colleges and had sufficient knowledge of the characteristics of AD graduates in Hong Kong due to her more than 10 years of teaching and programme management in the continuing education unit of an UGC-funded institution. Participants (samples) were selected based on the established criterion, and respondents' ability to provide data about the research problem.

### **3.3.3 Participants and sample size**

The participants were selected from the population of graduates from AD programmes in Business and Management between 2007 and 2012, from six institutions that are either the continuing education units or self-financing arms of the six UGC-funded universities (see Table 3.1). The question of determining an adequate sample size quickly emerged. In the literature, some scholars (e.g. Fowler, 2009) suggest that sample selection depends on one's common sense, and may range from 1% to 10%, if the population has the same characteristics. This research used the approach suggested by Fowler (2009) to set the sample size. Government statistics show that about 11,000 people graduated with an AD in Business and Management between 2007 and 2012, from the six sampled institutions (Concourse, 2017). The researcher's peers and associates teaching at tertiary education institutions, as well as

the previous executive members of students' unions at community colleges helped to distribute 800 questionnaires across the six sampled institutions. A total of 112 graduates completed and returned the questionnaires. Out of the total, six returned questionnaires were discarded, as the answers were incomplete; the remaining 106 returned questionnaires were used for statistical analysis.

Furthermore, three AD graduates from each category of programme (UGC-funded and self-financed) who were willing to take part in the semi-structured interviews were purposefully sampled, using criterion-based selection (LeCompte & Preissle, 1993). The researcher established a set of respondent characteristics in advance. The eligibility criteria included only those AD graduates who had completed an AD programme in Business and Management at least one year earlier. These graduates had more time to reflect on whether the AD programmes had proved useful for their further study and employment, and more experience on which to base their perceptions, allowing the researcher to benefit from their retrospective view. As they had left their community colleges, they could also comment freely and without fear of penalty. A total of six AD graduates who met the criterion were willing to participate in the interviews. For confidentiality and ethical reasons, the researcher assigned pseudonyms UG1, UG2 and UG3 to the UGC-funded graduates and SF1, SF2 and SF3 to the self-financed graduates. The aim of conducting the semi-structural interviews was to collect data to elucidate the questionnaire results.

### **3.3.4 Data collection**

Research instruments are tools researchers use to collect data (Cohen, Manion & Morrison, 2000). This study collected data using different data sources (questionnaires and semi-structured interviews) to widen its opportunities to obtain credible information. As Cousin (2009) argued, the use of different techniques helps in cross-checking the authenticity of data gathered from different sources. Moreover, triangulation was also used to mix the strengths of the quantitative and qualitative approaches (Creswell, 2003). The next sections describe each research tool.

#### **3.3.4.1 Questionnaire**

Researchers use questionnaires widely to collect information about problems existing in society, and to help us to understand people's opinions, attitudes, and experiences concerning a phenomenon (McMillan, 2004). Researchers also use questionnaires to provide freedom and anonymity to respondents in expressing their views. This tool also creates openness and minimizes bias. In this study, the researcher developed the questionnaire using the information derived from various reports and literature (e.g. EC, 2000; EDB, 2008; Lees, 2002; Nabi & Bagley, 1998; Rigby et al., 2009), as there was no existing example of a questionnaire particularly suited to this research. The tool was composed of Likert scale items and open and closed questions. The questionnaire also collected information about the AD graduates' motives for pursuing further study, their perceptions of the value of the AD

programmes, and the effectiveness of the AD curriculum in enabling students to acquire generic skills for further study and employment. A panel of three experts (a programme director, a curriculum planning officer, and a college lecturer) with extensive working experience in community colleges evaluated a draft of the questionnaire to determine whether it measured the intended variables; their suggestions were incorporated in the revised questionnaire. The modified questionnaire was piloted on four AD graduates who were not study participants to determine whether the questions were clear. The questions proved difficult to understand, and the researcher simplified the language. Starting in December 2013, the final version of the questionnaire was distributed to AD graduates in Business and Management at the six sampled institutions (Appendix 1). Respondents were requested to complete the questionnaire and return the form by post, using the included self-addressed return envelope. A total of 106 duly completed questionnaires were returned by July 2014 (a response rate of about 13%). (The distribution of questionnaires respondents among the six institutions is shown in Appendix 2).

#### **3.3.4.2 Interview**

An interview refers normally to an interactive dialogue, and may be conducted face-to-face, by telephone or video call, or in a large group setting. There are three main kinds of interviews used in qualitative research: structured, semi-structured, and unstructured (Cousin, 2009). The one most used in qualitative research is

semi-structured interview, as it allows the researcher to develop in-depth understanding of a phenomenon from participants' perspectives. The purpose of conducting the interviews was three-fold: first, to explore in-depth the AD graduates' motives for pursuing further study; second, to gain an in-depth understanding of whether the AD curriculum enhanced graduates' competences in generic skills; and third, to explore whether the AD programmes had value by empowering graduates to be more employable and competitive in the job market. In this study, six purposefully sampled AD graduates were interviewed. The researcher followed the structure of the questionnaire and asked the interviewees to express their views and give in-depth answers to the questions asked (see Appendix 3). Each interview lasted for about 30 minutes, and was audio-recorded. Interviews were transcribed verbatim and the transcript given to the respective respondents for review, to avoid misunderstanding or data inaccuracy. The literature shows that transcribing interviews helps the researcher generate rich data drawing on multiple perspectives.

### **3.4 Data analysis process**

The researcher collected data using a questionnaire survey and interviews. Data were analysed based on the three research questions stated in Section 3.2, and the nature of the collected data. The analytic process for each category of data is described in the following sections.

### **3.4.1 Questionnaire data**

Data gathered through questionnaires were analysed using the Statistical Package for Social Sciences (SPSS), version 16. Due to the ordinal nature of the measured dependent variables, the researcher used the non-parametric Kruskal-Wallis statistical test to generate descriptive and inferential statistics. For example, the data collected from five-point Likert scale (strongly agree to strongly disagree) questions were ordinal in nature, while the independent variable consisted of two categorical, independent groups (UGC-funded and self-financed graduates); a T-test for data normality was administered and revealed data were not normally distributed. The Kruskal-Wallis test generated mode and means for central tendencies and frequencies, as well as standard deviations for variability. The data generated helped the researcher to describe and interpret the characteristics, and infer the usefulness of the AD programme in Hong Kong.

### **3.4.2 Interview data**

In this study, the six AD graduate interviews (Appendix 4 shows the biographic data of the six interviewees, with pseudonyms) were conducted in Cantonese and their transcripts then translated into English. The translated versions were sent to the interviewees for verification to ascertain whether the meaning they intended had been conveyed (Appendix 5 shows an example of transcript). The interview transcripts were later transcribed verbatim and entered into the ATLAS.ti

software for coding. The researcher fractured the data into smaller units of meaning to obtain possible codes that might be developed further (Saldaña, 2010). The length of the coded text segments varied from one sentence to several paragraphs. Each time a new code was added, its corresponding definition was documented.

The initial coding of the interview transcripts produced 172 codes. However, thorough inspection revealed many repeated uses of the same word with either upper- or lower-case initial letters. For example, the data segment coded as “Employment” was also coded with a lower-case “employment”, which caused ATLAS.ti to treat the coded segment as different. The researcher merged all duplicates and renamed the new code in accordance with its relevant concepts. This reduced the codes to 80. Moreover, it was realized that some codes had different labels with the same meaning. For example, the code ‘further study’ was also coded with the label ‘further education’, which meant the code book contained many code duplicates with low frequencies. The researcher merged these codes (Friese, 2012), reducing the total number of codes to 35. These were later organized into main themes (main codes) and sub-themes (sub-codes), based on the theoretical literature and empirically founded data (Friese, 2012; Msonde, 2013). After the researcher realized no new sub-codes were emerging, she compared the coded sub-themes to identify similarities and differences. This helped her to refine the sub-code descriptions.

Trustworthiness during data analysis is a foundation of credible research. Any researcher who applies conceptual or empirical codes based on his or her subjective interpretations is liable to reach a biased conclusion. Subjective interpretation of codes can be addressed by employing independent (multiple) coders (Garrison et al., 2006). In this study the researcher invited an independent coder to evaluate the main themes (dimensions) and sub-themes to establish coding reliability and trustworthiness (Lincoln & Guba, 1985). Table 3.2 shows the rating of sub-codes under each main code for the two coders. The invited independent coder was an instructor with more than 11 years of experience in teaching and qualitative research at a community college in Hong Kong, and had also provided guidance to many AD graduates pursuing further studies.



**Table 3.2*****Researcher and independent coder agreement***

	Evaluating 35 sub-coders under 6 main themes (codes)						
Item	Further education	Employability	Articulation	Generic skills	Self-financing	UGC-funded	Total
Coder 1 Researcher	10	6	3	8	5	3	35
Coder 2 Independent coder	9	4	3	7	4	3	30
Agreement	9	4	3	7	4	3	30
Negotiated agreement	1	2	-	-	-	2	5
Disagreement	-	-	-	-	-	-	-

Source: Field Data, 2015

The independent coder evaluated the coding scheme to ascertain its accuracy and the validity of the sub-codes identified. The researcher and an independent coder were in agreement on 30 of the 35 sub-codes. Statistical analysis using SPSS version 20.0 determined the level of inter-coder agreement was 0.819 (Cohen's kappa), or approximately 82%, and was statistically significant ( $p < 0.0005$ ). The Kappa value was above 0.7 (70%), suggesting excellent inter-coder agreement (Gwet, 2012). The discrepancies between the researcher and independent coder on the few sub-codes were resolved through negotiation (Msonde & van Aalst, 2017). The researcher refined the sub-codes based on the agreement reached, and re-coded all of the data using the refined coding scheme. The coding scheme had six main themes (codes):

further education; employability; articulation; generic skills; self-financing; and UGC-funded.

The *further education* (study) code was intended to describe the AD's role as a valuable standalone exit qualification that enables students to pursue their further education. The further education dimension was also associated with how a person develops competence in his or her career by engaging in educational endeavours with a view to acquiring a good job and earns a higher income. It also describes elements such as students' attainment of professional qualifications, self-improvement, and career progression, as well as the competitive nature of the existing job market. In addition, the further education code covers entry requirements for civil service posts, and the appointment and basis of salary ranking in civil service posts.

*Employability* refers to employer demands for employees with a wide range of skills and the capability of acquiring new knowledge at work (Harvey, 2000). It also explains the way higher education develops students with broad-based knowledge and generic skills, in addition to the knowledge and skills for specific professions or industries (EC, 1999a; EC, 2000). The employability code also includes attributes such as provision of industry-related knowledge and skills, improved work confidence, recognition by employers, and competitiveness in the labour market. Other attributes linked with employability include job requirements and the broad set of generic skills

necessary for work and that contribute to upgrading human capital (EC, 2000; FCE, 2001).

The *articulation* code describes the process of credit accumulation and transfer schemes. This dimension explains the way students opt for unconventional ways to undertake university degree studies. In other words, it describes the process through which students who satisfy certain academic criteria on one programme become eligible to be admitted to another degree programme. In theory, for example, completion of the second year of an AD programme should enable students to articulate to the third year of a four-year North American university programme, or the second year of a local or three-year British university programme.

The *generic skills* code describes attributes needed to develop students' competence in various aspects of higher education (Knight & Yorke, 2002), and entails the abilities and capabilities graduates attain 'beyond disciplinary content knowledge which are applicable to a range of contexts' (Barrie, 2004, p.262). Sub-codes related to the generic skills dimension include broader skills of communication, computer literacy, information technology, language proficiency in English and Chinese, fact-finding, basic research, and analytical skills (FCE, 2001). The elements of generic skills code are invariably related to the concepts of employability and transferability.

The *self-financing* code describes an academic programme at the sub-degree level, awarded in the post-secondary education sector, for which the institution receives no recurrent government funding. This dimension explains the way an associate degree acts as a foundation to pursue undergraduate studies. Moreover, the self-financing code was associated with funding for students' educational operations, which came through their fee payment. In other word, students bear a larger part of the educational costs of their course and universities are forced to operate at lower per capita funding levels.

The *UGC-funded* code describes the public funding acquired by students through government-funded universities in Hong Kong. It explains the way government funding is obtained based on educational merits. Despite the increased number of publicly funded senior-year places, most graduates still fail to obtain an allocated place. The sub-codes emphasize the articulation opportunities for sub-degree graduates, and government efforts to double the number of senior-year places (Tsang, 2010). It also describes the limited number of places in UGC-funded universities arising from increased numbers of graduates aspiring to pursue further education (Concourse, 2017).

### **3.5 Ethical consideration**

Whenever research work is undertaken, researchers must take into account its effects on, and act appropriately to protect, participants. Participants are research subjects, but not objects; hence, researchers must pay attention to the ethical issues involved. Good conduct towards research subjects is important (Angell, 1997), and researchers need to take care over ethical issues at all stages of the research process (Steneck, 2006). Indeed, researchers must first obtain the informed consent of respondents for their participation and make them aware of their right to withdraw at any stage. Moreover, researchers must bear the obligation of protecting the anonymity of research participants and of keeping research data confidential (Frankfort-Nachmisa and Nachmisa, 1992).

In this study, the researcher made every effort to maintain ethical standards during data collection and analysis. To address ethical issues, the researcher considered the British Educational Research Association's (BERA, 2018) ethical principles (guidelines), which protect the welfare of participants and academic communities involved in research. For example, in the questionnaire survey and individual interviews, the researcher paid due respect to participants' privacy, autonomy, and value. An informed consent letter explaining the purpose of the study and the reasons for their participation was attached to the questionnaire. Respondents

signed the consent form before answering the questionnaires or being interviewed. Similarly, participants were informed of their right to withdraw from the study without giving reasons at any stage (See Appendix 1).

This study investigates AD graduates' perceptions about the usefulness of AD programmes, and thus is, to a considerable extent, research into the researcher's own practice as a teacher at a community college. Her dual roles as researcher and teacher created ethical concerns about the researcher's potential to influence participants due to the power relationships between teachers and students. This problem was addressed during the survey by making the researcher's role very explicit and ensuring data collected were used for research purposes only. In addition, the present study set the eligibility criteria to include only those AD graduates who had completed the AD programmes at least one year previously, to lessen the potential for tensions caused by the teacher-student power relationship; in short, graduates could give their views without fear of teacher retaliation.

The researcher made every effort to ensure the security of the research data. Various measures were adopted to enhance data security, including the use of a secure computer network, anonymizing of records, and the use of password protection and data encryption. In addition, the researcher stored interview transcripts, audio recordings, and completed questionnaires in a secured location. In other words, all gathered data were kept confidential to protect the respondents' anonymity and

privacy. Moreover, the researcher carried out the research in compliance with the requirements of Hong Kong's Personal Data (Privacy) Ordinance (1996), which is similar in nature to the UK's Data Protection Act (1988).

### **3.6 Chapter summary**

This chapter has discussed the methodological strategies and research design on which this thesis is based. Specifically, it has outlined the study's mixed methods approach, how AD graduates were purposefully selected, how data were collected using questionnaires and interviews, how the questionnaire data were analysed using the non-parametric Kruskal-Wallis test to generate descriptive and inferential data from ordinal measurement items, and how interview data were coded and analysed. The next chapter presents the results from this study.

## CHAPTER 4

### RESULTS AND DISCUSSION

#### 4.1 Introduction

This chapter reports the analysis of the data on graduates' perceptions of Associate Degree (AD) programmes. Section 4.2 presents the graduates' demographic characteristics while Section 4.3 presents and discusses data on the graduates' motives for pursuing further study. Section 4.4 presents and discusses results on the graduates' perceptions about the usefulness of AD programmes, after which Section 4.5 presents and discusses data on the usefulness of the AD programmes in enhancing graduates' attainment of generic skills. Section 4.6 presents and discusses the gendered variations in conceptions of the usefulness of the AD curricula. Lastly, Section 4.7 summarises the chapter.

#### 4.2 Graduates demographic characteristics

A total of 106 AD graduates took part in the survey. Out of those, 24 (19.6%) were UGC-funded, 69 (67.7%) were self-financed, and 13 (12.7%) were neither UGC nor self-financed. Table 4.1 presents the graduates' demographic characteristics. There were fewer male graduates (47; 44%) than their female counterparts (59; 56%). The ages varied considerably among the groups. For example, most of the UGC-funded (16; 67%) AD graduates were between 23-26 years of age, while most self-financed



AD graduates (36; 52%) and most of those in the ‘other’ category (8; 61%) were between 27-30 years of age. Such variations imply that self-financed graduates and graduates in the ‘other’ category were a bit older than UGC-funded graduates.

**Table 4.1**  
**Demographic characteristics of graduates (n= 106)**

Graduate category	Total # of graduates			Age group			
	AD	#Female	#Male	23- 26	27-30	31-34	35<
UGC-funded	24	14	10	16	5	3	0
Self-financed	69	37	32	24	36	9	0
Others	13	8	5	3	8	2	0
<b>Total</b>	<b>106</b>	<b>59</b>	<b>47</b>	<b>43</b>	<b>49</b>	<b>14</b>	<b>0</b>

**Source:** Field Data, 2014

These age variations might have some influence on AD graduates’ perceptions about the usefulness of the AD programme in preparing and credentialing them for further study and employment.

### 4.3 Motives of the AD graduates for pursuing further study

In the present study’s questionnaire, the AD graduates were asked to use a five-point scale (1: Strongly disagree; 5: Strongly agree) to indicate what motivated them to pursue further education. Table 4.2 shows most AD graduates were motivated to pursue further studies in hopes that the degree might help them to obtain credentials valued in the labour market - a common view internationally, as Grubb & Lazerson (2005) argued. As such, they were in high agreement with items like “Attain professional qualification” (M = 4.30), “Pre-requisite” (M = 4.20), and “General

self-improvement” (M = 4.13).

**Table 4.2**

**Descriptive statistics (percentage, M & SD) about reasons for AD graduates to pursue further study**

	Feature	Likert five points scale response (%)					Total	Mo	$\tilde{x}$	M	SD
		Strongly disagree	Disagree	Neutral	Agree	Strongly agree					
1	Get better job	0	0	3	57	40	100	4	4	4.37	0.551
2	Attain professional qualification	0	0	14	43	43	100	4	4	4.30	0.696
3	Pre-requisite	0	2	10	55	33	100	4	4	4.20	0.684
4	Earn more	0	0	13	55	32	100	4	4	4.18	0.651
5	General self-improvement	0	2	12	58	28	100	4	4	4.13	0.676
6	Do job better	2	3	38	42	15	100	4	4	3.65	0.84
7	Could not find a job	7	27	52	13	1	100	3	3	2.77	0.831

*Note.* Mo = mode,  $\tilde{x}$  = median, M = mean, SD = standard deviation.

Similarly, data in Table 4.2 indicate that the AD graduates pursued further studies with such aims as “Getting a better job” (M = 4.37) and “Earn more” (M = 4.18), which reflect economic concerns. On the other hand, respondents disagreed with the idea that they pursued further studies because they “Could not find a job”; rather, pursuing further study was part of a long-term career progression that would enable them to get a good job.

The researcher conducted in-depth interviews with students and asked them to describe their motives for pursuing further study, to triangulate the questionnaire

results and gain a deeper understanding of their views about the AD programme. After thorough analysis of the transcripts, two themes emerged - further education and employability. For example, the students' primary motive for pursuing further studies was to obtain a bachelor's degree to acquire a high-paying job. Since students' responses were relatively similar, the researcher selected some excerpts to exemplify their views:

*"I just don't think the associate degree is good enough for career development. For good jobs, employers demand a degree as the minimum requirement. A degree is the basic level required to survive in Hong Kong."* (UG 1)

*"I decided to pursue further study to get a degree. Having such a qualification will improve my earning power. This is based on the fact that the starting salary for a degree holder is higher than employees in a bank or in the government as a civil servant who has no such qualification."* (SF 1)

In these excerpts, the students from both groups (UGC-funded and self-financed) seem to be explaining the importance of advancing their educational experiences. It appears that the attainment of higher educational qualifications not only enabled the graduates to develop competence in their career, but also to acquire a job with higher remuneration.

The results presented above show that the primary goal for the students to further their studies was to obtain a bachelor's degree. This supports earlier research

findings, which reveal that, in most cases, students are motivated to pursue degree studies to obtain better career (Kember, 2010; Higgins et al., 2010).. As such, the students perceived that having a degree qualification was a basic requirement that enabled one to become employable. This is in line with the general belief that the primary goal of education in Hong Kong is to acquire ‘employment’ (Pratt et al., 1999, p. 250). A similar view was reported in Brooks and Everett’s (2009) study of a group of young adults in UK, which noted that for one to move up the career ladder one needs to obtain a higher education level. It appears students’ motives for pursuing degree studies arise mainly from the competitive nature of the existing job market (Brown et al, 2003).

In Hong Kong, acquiring a degree qualification seems to be an essential aspect of personal development. However, students were not satisfied with the AD level, which they generally regarded as the ‘first half of a full degree’ (UGC, 2010, p. 41). They perceived acquiring a degree qualification as a means to an end. As such, the AD graduates struggled to make themselves more employable by acquiring a bachelor’s degree (Hicks, Dismore & Lintern, 2009). On that basis, the students found it worth undertaking further studies to make themselves more competitive and employable in the job market.

Correspondingly, the AD graduates had high aspirations of obtaining a professional qualification, in keeping with the common view that the AD curriculum

is substantially composed of general education (Tripartite Liaison Committee, 2009). In that way, it was crucial for the AD graduates to pursue ‘professional qualifications’ to improve their employment credentials. Most locally and internationally based professional organizations, such as those in the fields of accountancy and finance, have set the first degree level as a pre-requisite for enrolment in the professional examinations leading to professional accreditation. Therefore, AD graduates desire to acquire a degree can be associated with their long-term plan to achieve professional status and career development.

Moreover, the findings from this study demonstrate that financial incentives provided to employees with degree qualifications were another reason leading AD graduates to proceed with further studies. For example, entry into civil service posts in Hong Kong is generally predicated on academic qualifications; sub-degree holders are mostly appointed at a lower starting salary point and ranking on the government’s master pay scale than those with degree qualifications. The private sector largely adopts a similar pay policy and system. Thus, increased access to better occupations and higher pay was a major motivation for AD graduates to pursue further studies, in line with the UGC’s (2010) assertion that graduates pursue further educational endeavour with a view to developing their careers and getting higher income.

Although the graduates achieved a general self-improvement, they may not have developed their thoughts or ability to translate what they learnt into practice,

especially at their work place. This finding is congruent to Dore's argument that the purpose of schooling is often perceived as just for obtaining qualifications for job attainment, instead of learning (1976; 1997). Such views suggest that learning to get a job dominates the mind of the AD graduates in pursuing further studies.

#### **4.4 Graduates' perceptions about the usefulness of AD programmes**

The literature shows that the participation rate of the 17-20-year-old age group in post-secondary education increased from 33% to over 60% in recent years (EDB, 2008) due to increased students' enrolment in AD programmes. The statistics reveal that 50% of AD graduates continue to advance their education by enrolling in local and overseas degree programmes (JQRC, 2009). Based on this background, it was essential to get insight into how useful AD programmes were from students' perspectives. On a scale of 1 to 5 (1: Strongly disagree; 5: Strongly agree), the AD graduates were asked to rank the extent to which the AD programmes enabled them to pursue further studies. Table 4.3 illustrates their responses to this question.

**Table 4.3****Descriptive statistics (percentage, M & SD) of graduate perception about usefulness of AD graduates for further study**

	Feature	Likert five points scale response (%)					Total	Mo	$\tilde{x}$	M	SD
		Strongly disagree	Disagree	Neutral	Agree	Strongly agree					
1	Meet admission requirement	0	2	12	65	21	100	4	4	4.07	0.634
3	Provide foundation knowledge	0	3	23	64	10	100	4	4	3.8	0.659
4	Improved engagement in lifelong learning	2	2	25	58	13	100	4	4	3.8	0.755
5	Improved self-confidence	2	3	28	55	12	100	4	4	3.72	0.783
2	Stimulate learning interest	0	10	32	53	5	100	4	4	3.53	0.747
7	Assessments emphasise on memorization than understanding	0	17	25	48	10	100	4	4	3.52	0.892
6	Improved opportunities to explore academic interest	0	8	42	45	5	100	4	3.5	3.47	0.724

Note. Mo = mode,  $\tilde{x}$  = median, M = mean, SD = standard deviation.

Combining ‘Agree’ and ‘Strongly Agree’, the results show that items such as “Meet admission requirement” (86%), “Provide foundation knowledge” (74%), “Improved engagement in lifelong learning” (71%), and “Improved self-confidence” (67%) were the aspects most highly endorsed by respondents. Other aspects, such as “Stimulate learning interest” (58%), “Assessments emphasize on memorization than understanding” (58%), and “Improved opportunities to explore academic interest”

(50%), were less strongly endorsed. Moreover, data suggest that the AD programme enabled graduates to become self-confident in learning and working.

Furthermore, data show that respondents perceived the AD programme as improving their skills for engagement in lifelong learning. In Hong Kong, lifelong learning has become the focus of the post-1997 education reform, with educational policies emphasising its economic benefits (Kennedy, 2004) for development of the local economy.

To elucidate the questionnaire results, the researcher asked the graduates, in in-depth interviews, “Do you think the AD programme is useful in helping students prepare for further study?” Overall, the graduates perceived the AD programmes were useful as they provide ‘unconventional ways’ to meet university requirements:

*“I wanted to enter directly into an undergraduate degree but I did not get good marks in public examinations to acquire a place. The AD programme provided me with an alternative route to fulfil the university requirement for degree studies. Actually, all AD students have the goal of entering university. To do so, one needs to achieve a very high GPA.” (UG2)*

In this excerpt, the main theme focused on was achieving educational excellence. The graduates acknowledged the importance of the AD programmes in providing an alternative way to meet university entrance requirements. In other words, graduates saw the AD programme as a gateway to obtaining a qualification



to pursue higher education. Similarly, some graduates perceived that the AD programmes provided them with ‘foundational knowledge’ to pursue further study:

*“The setting of AD programme is very similar to degree studies in universities. I have the option to choose my specialism subjects and decide on my major. After lectures, there are tutorial classes. We use the same textbooks as the ones used in universities. We are quite prepared for university life.” (UG1)*

In this excerpt, the graduate seems to explain the significance of the AD programme in providing useful knowledge and a learning environment similar to those in university settings. Although the AD programmes promote multi-faceted learning, some students still employ superficial approaches to learning, relying on the memorization of contents rather than understanding the meaning of the learning materials. For example, some graduates shared these views:

*“I needed to memorise a lot of material from notes and textbooks so as to get high marks by reproducing the right answers in tests and examinations. I had to study so many things within so little time. There was not much time left for thinking about the material and understanding.” (SF2)*

This excerpt reveals that some graduates adopted a rote learning approach to help them get good marks in examinations. This means that, given the high pressures of competition for good results, AD graduates may not necessarily be able to engage in critical thinking in the process of learning, which may hinder them in addressing

the emerging challenges of a constantly changing world. This makes one to question how effective AD programmes are at equipping students with relevant knowledge that meets the need of the global economy.

It is important to get insight into how AD programmes support students' employability agenda. The AD graduates were asked to use a scale of 1 to 5 (1: Strongly disagree; 5: Strongly agree) to rank the extent to which their AD programme had provided them with opportunities to enter the job market. The AD graduates' responses (see Table 4.4) show they had high level of agreement with the statements "Provision of a broad set of generic skills" (78% - again combining 'Agree' and 'Strongly Agree'), "Provide industry-related knowledge and skill" (65%), and "Improved confidence and job search" (65%), They were moderately in agreement with the statement "Well recognised by employers" (57%), and least agreed with the statements "Enhanced competitiveness in labour market" (49%), "Fulfil the job requirements" (43%) and "Improved networking" (31%). Overall, the data reveal that the AD programme provided graduates with a broad set of generic skills, such as language and inter-personal communication skills, necessary to function effectively in the workplace.

**Table 4.4**  
**Descriptive statistics (percentage, M & SD) of graduate perception about usefulness of AD graduates for employment**

	Feature	Likert five points scale response (%)					Total	Mo	$\tilde{x}$	M	SD
		Strongly disagree	Disagree	Neutral	Agree	Strongly agree					
3	Enhance the communication skills	0	2	20	75	3	100	4	4	3.8	0.514
2	Provide industry-related knowledge & skill	0	7	28	62	3	100	4	4	3.62	0.666
4	Improved confidence & job search	0	3	32	62	3	100	4	4	3.65	0.606
5	Well recognised by employers	2	5	36	55	2	100	4	4	3.5	0.701
6	Enhanced competitiveness in labour market	0	15	36	47	2	100	3	4	3.35	0.755
1	Fulfil the job requirements	0	7	50	40	3	100	3	3	3.4	0.669
7	Improved networking	0	17	52	26	5	100	3	3	3.2	0.777

*Note.* Mo = mode,  $\tilde{x}$  = median, M = mean, SD = standard deviation.

Although, the AD curriculum in Hong Kong has long been criticised for being too general and lacking specific vocational specialism (Kember, 2010), data reveal that AD programmes provided generic skills students believed useful in the contemporary workplace, including industry-related (technical) knowledge and skills.

This reflects that some respondents completed more professionally oriented AD

programmes, such as Accounting and Marketing.

Similarly, the data show that the AD programme helped graduates become confident in their job search and performance, indicating that how the AD programmes are designed helps graduates develop their career for employment. As a result, 57% of respondents found the AD programmes to be well recognised by their employers. However, although graduates perceived the AD programme as useful for further study and employment, very few felt it enhanced their competitive power in the job market and their ability to earn a high salary.

When asked, through in-depth interviews, “Do you think that the AD programme is useful in helping prepare students for employment?” the graduates’ responses showed some variations. While some focused on employers’ recognition and blurred distinctions between AD graduates’ capabilities and those of secondary school leavers, others centred their views on curriculum contents. For example, the excerpt below exemplifies the first category of graduates’ views:

*“As a matter of fact, most employers in Hong Kong do not understand what the AD qualification is all about. It is not clear whether it is an independent qualification or is a bridging course to undergraduate studies. Some employers do not see the difference between AD graduates and those who have completed the secondary education with Form 7 standard. This is unfair to those, like me, who need to enter the job market upon graduation from AD.” (SF3)*

In this excerpt, the graduates' views suggest that employers have low awareness of the status of AD programmes and the suitability of AD graduates, and seem to misinterpret what the AD programme is about, equating the AD qualification with a secondary education diploma. Conversely, the graduates from the second category seemed to capitalise on the curriculum contents of the AD programme, which their views revealed the curriculum contents focused on providing them with general education, rather than professional and specialised elements:

*“A substantial proportion of AD curriculum is related to general education and generic skills. I agree that such curriculum design may be necessary for preparing students to continue studies in undergraduate courses. However, this also causes concern from employers that the AD graduates lack professional knowledge and skills. To enhance their competitiveness in job market, many AD graduates join the professional examinations to gain a qualification for better career prospects.” (UG3)*

In this excerpt, the graduate emphasises two core issues: the nature of the AD curriculum, and employers' reservations about the AD graduates' competence. The curriculum content appears to focus more on equipping students with a general education and some generic skills, and less on specific professional knowledge. Additionally, the data show the graduates least agreed with statements that the AD programme had improved their networking, and perceived summer jobs or internships

as more important pre-employment opportunities to enhance their practical experiences; however, few are provided at the community college.

*“I do not think that the College had provided students with good opportunities for summer jobs or internships. Many classmates obtained jobs through their own network.” (SF2)*

*“The College has provided careers-counselling services. Job referral and job placements are also available. However, most of my friends got the job through their own networks. Personally, I got my summer job in an accountancy firm through my aunt.” (UG3)*

Basically, the introduction of AD programmes into the Hong Kong education system has played a dual purpose: (1) to widen access for students to pursue post-secondary education; and, (2) to enhance the employability of post-secondary graduates. The former is associated with there being too few government-funded university places in Hong Kong to allow all secondary graduates to pursue higher education; the latter arises from the demand for a high-level skilled workforce with tertiary education background to meet the needs of a knowledge-based economy. The major themes raised by students on the usefulness of AD programme were categorised in terms of accessibility to higher (post-secondary) education and employability in the job market are discussed in subsequent sections.

#### **4.4.1 Widening access to higher education**

The commonly perceived essence community colleges and AD programmes is to widen access to higher education for students who had missed the opportunity to get into local universities because they had achieved less competitive results in the highly selective public examinations. Thus, the AD programmes were designed as a credit-based conduit for graduates to proceed to university and pursue their degree studies, based on the credit unit transfer system. The usefulness of AD programmes in facilitating students' pursuit of higher education can be explained in terms of the need for articulation to the formal university curriculum, the demand for self-financing top-up degrees programmes, and the need to promote interactive teaching and active learning methods. The discussion of each of these aspects is presented in subsequent sections.

##### **4.4.1.1 Articulation opportunities for the AD students**

Articulation emerged among the main themes during analysis of interview transcripts. The Quality Assurance Agency for Higher Education (QAA) in the UK defined articulation as 'a process whereby all students who satisfy academic criteria on one programme are automatically entitled (on academic grounds) to be admitted with advanced standing to a subsequent part or year of a programme of a degree-awarding body. Arrangements, which are subject to formal agreements between the parties, normally involve credit accumulation and transfer schemes'. In

Hong Kong, most institutions offering AD programmes have credit transfer, articulation, and direct admission arrangements with many universities. As such, the greatest attraction of the AD programme is the possibility for articulation to formal university curricula (FCE, 2001). Findings from this study show that the students perceived the AD programme was useful in helping them meet admission requirements and pursue higher education through the articulation system:

*“The AD programmes offer articulation routes for me to get into universities.*

*However, there are only limited places for articulation opportunities.” (UG2)*

*“Though I worked hard, I did not get any offer from local universities for degree studies. Unless you are in the top 20%, you won’t get a place.” (SF 2)*

The biggest concern voiced in these excerpts was the way in which AD programmes provided students who missed admission under the UGC-funded degree courses to pursue higher education through articulation. It seems students expected to gain admission into universities, but could not due to stiff competition. Instead, the credit transfer system provided them with ‘unconventional ways’ to undertake university degree studies.

In terms of identification, community colleges that were continuing education units of UGC-funded universities were a key theme among the interviewed graduates. These community colleges created the general impression that their students had admission priority and better articulation opportunities to their parent universities



(Kember, 2010; Postiglione, 2009), and thus enhanced their opportunities to undertake bachelor's degree studies in UGC-funded universities. However, the UGC's position was that local universities should consider each student on his or her own merits, in a fair and open manner (EDB, 2008; UGC, 2010).

Findings from the present study reveal that AD students generally had the goal of entering university. However, there are very few senior-year places available and only a very small proportion of AD graduates yearly can successfully articulate to government funded degree programmes. An outstanding academic result, in terms of Grade Point Average (GPA) scores, is invariably used as a criterion for screening students for university admission; as such, the intense competition for GPA in AD programmes resembles what students experienced under Hong Kong's long-established and highly selective public examination system.

#### **4.4.1.2 The demand for self-financing top-up degrees programmes**

Self-financing was among the themes associated with funding for students' educational costs. Since AD graduates did not get articulation opportunities in UGC funded programmes, they were required to bear a greater part of their educational costs. On the other hand, the continued demand for articulation into undergraduate studies led to the flourishing of self-financing 'top-up degree' programmes offered to AD graduates. Chiu & Cunich (2008) suggested that top-up degrees are designed for those students who want to use their AD as a foundation to pursue undergraduate

studies, maintaining that these programmes allow students to obtain a bachelor degree in a shorter time than do conventional degree studies. Their findings are consistent with the argument that the provision of top-up degree programmes is relevant to AD graduates whose qualification could be considered as completing the early part of an undergraduate curriculum. The top-up degrees articulate with the AD to convert it into a bachelor degree by way of advance standing or credit transfers (UGC, 2010).

Little (2006) has suggested that the provision of courses and qualifications by foreign suppliers in an ever-expanding qualifications market has opened up more opportunities for further studies. As a result of their aspirations for degree studies, large numbers of students also enrol in self-financing, non-local undergraduate programmes offered by the self-financed arms of UGC-funded institutions, in partnership with overseas universities. Findings from this study show that these top-up degree programmes enable AD graduates who do not have opportunities for further studies at local UGC-funded universities to pursue a bachelor degree through self-financed education. These findings suggest that the provision of top-up degree programmes is useful, as it provided students with alternative pathways to access higher education and obtain a degree qualification in their areas of interest.

Nonetheless, the findings also reveal that most students perceive the self-financing top-up award as a 'second choice', implying they are worth less than degrees obtained by the traditional route, via an UGC-funded university. The ease of

access into self-financed top-up degree programmes, compared to the publicly funded ones offered by the UGC funded universities, diminishes the perceived value of the top-up awards. As such, the AD students intensely compete to obtain a very high GPA score for admission into UGC-funded degree programmes.

In addition, findings from this study also show that most students aspire to take a UGC-funded degree course, as they cherish a real university experience and campus life. Lee & Topper (2006) suggested ‘the traditional campus life serves their dual role by allowing students to pursue a social life and develop personal philosophies and interests through elective courses, which also acquiring the skills necessary to earn a living’ (p. 85). However, the nature of self-financing operation implies that the learning facilities of these top-up degree programmes are kept to a bare minimum. This further suggests students may not have the chance to enjoy a campus life comparable to that at UGC-funded universities.

#### **4.4.1.3 Promoting interactive teaching and active learning**

The prospectuses of many community colleges in Hong Kong state that their AD programmes are student-centred and facilitated through the use of interactive teaching and active learning methods. Moving beyond traditional examination-based assessment, the evaluation of students’ performance is based on a combination of continuous assessment and the end-of-term examinations. However, contrary to what is stated in the college prospectuses, findings from this research show that students’

perceived that the methods used in the AD programme emphasise memorizing material from lecture notes and textbooks, rather than understanding it, and then reproducing memorised contents in examinations to get high marks. Students seemed to have little time to think about the meaning of what they had learnt. This rote learning can be attributed to the intense competition for articulation to UGC-funded universities, where students' learning focuses on academic results.

The impact of different assessment methods on students' approach to learning has been well-noted in various studies (e.g. Biggs, 1999; Entwistle & Entwistle, 1991; Entwistle, 2000; Marton & Säljö, 1997; Ramsden, 1997). Different types of assessment methods tend to shape the 'approaches to teaching and learning' Struyven, Dochy & Janssens (2005). Assessment formats emphasising factual recall or reproduction of information lead students to adopt surface approaches to learning (Entwistle & Tait, 1995); conversely, students who are inclined to adopt deep learning approaches are more likely to engage in deep thinking, pursue the courses effectively, and demand assessments tasks that require intellectual thinking and understanding, rather than just memory recall (Entwistle & Tait, 1995).

In the AD programmes, the evaluation of students' academic performance was both formative and summative. Findings from this study reveal that the AD graduates generally felt the end-of-term closed-book examination did not help them to better understand the meaning of what they had learnt. Instead, they learnt the course

materials to fulfil the assessment task, rather than to build knowledge for their future use. Furthermore, students generally perceived the examination as simply measuring their ability to reproduce memorised materials.

Although students had the idea that memorization would not help them become active learners, they nevertheless continued to pursue surface approaches to learning, mainly due to their perceived need to achieve high marks, consistent with Biggs' (1987) argument that a student who takes a surface approach sees a task 'as a demand to be met, a necessary imposition if some other goal is to be reached' (p. 15). On the other hand, the findings from this study also reveal that students perceived case studies and problem-based learning tasks to be practical, as these learning activities presented them with real challenges and helped them to understand the meaning of the materials taught (Sambell, McDowell & Brown, 1997; Biggs & Tang, 1999):

*“Personally, I find the real-life case studies useful but challenging. There are no straightforward answers, which enable us to copy from texts. We really need to read the case thoroughly and think what the main issues involved are.”* (SF1)

*“As the case studies often include new things that we did not know before, we rely on the Internet to search for information. Still, we need to decide which piece of information is useful.”* (UG2)

These excerpts reflect the potential of case studies to provide and engage students in real-life exercises, such as reading critically and searching for information

on the Internet to get authentic evidence that addressed the case under investigation. In addition, the findings show that these learning and assessment approaches enabled students to become more active in their learning; students first tried to understand the problem, thought about the principles and theories learnt in the course, and then applied the knowledge learnt to address the identified problems. During such a course of learning, students internalised the knowledge learnt and retained it longer for future application (Marton & Säljö, 1997; Biggs & Tang, 1999).

These findings are consistent with what the literature (e.g. Biggs, 1999; Segers & Dochy, 2001; Struyven, Dochy & Janssens., 2005) reports about students' experiences in activity-based learning. Most AD graduates had positive views about the self- and peer-assessment methods adopted in problem-based learning environments, and perceived that these assessment approaches led them to think deeply and enhanced their critical and analytical thinking skills. Struyven, Dochy & Janssens (2005) argued that students tend to 'switch' learning approaches (p. 337) when assessment methods change. Notably, students tend to apply surface approaches to learning when preparing for conventional closed-book examinations, and shift to more in-depth studies when assessment tasks are more open-end and intellectually challenging.

However, findings from this study reveal that most students did not feel personally motivated to engage in deeper, more active learning. They admitted that

the problem-based learning approach was necessary to promote deep and active learning (Sambell, McDowell & Brown, 1997), but did not have the time to use the approach due to their heavy workload and tight schedule; as such, they backed away from engaging in deep learning and building up real understanding (Drew, 2001). Thus, for instrumental reasons, some students lacked the motivation to invest time in developing their thinking skills and preferred to use surface learning approaches, which rely on memorization.

#### **4.4.2 The usefulness of the AD programmes for employment**

Employability was a key theme in students' questionnaires and interview responses, and explains the attributes employers are looking for in potential employees. In Hong Kong, the employability of AD graduates has become an important issue since the expansion of the post-secondary sector, predominantly due to increased enrolment in AD programmes and the questionable value (to students, parents, and employers) of AD qualification as an employment credential (EDB, 2008). Findings from this study shows that the majority of graduates perceived the AD programme as less useful for providing employment credentials and more useful for pursuing further study. Respondents were concerned with the public perception of AD programme as offering only a bridging qualification for degree studies, and of AD graduates as being not yet prepared for immediate employment (Legislative Council,

2011). Employers' treating AD graduates less favourably than other sub-degree graduates can be attributed to employers' low awareness of the importance of AD programmes and the employability of AD graduates (EDB, 2008; UGC, 2010). Similarly, the public's perception of the AD award as a bridging qualification for further studies is reinforced by the promotional efforts of many community colleges, which seek to bolster the AD qualification as a stepping-stone for undergraduate studies (Lee & Young, 2003; EDB, 2008). Findings from this study reinforce the view of the public, some employers, and even some graduates that the AD qualification is an 'incomplete degree' and that AD graduates are not ready for employment (UGC, 2010, p. 40).

Despite the doubt expressed by employers, this study elicits evidence that the AD curriculum has been designed to equip students with generic skills and specialised knowledge beyond the traditional vocational stream followed in the HD programme. This is congruent with government reform proposals (EC, 2000), which advocate that the AD programme would better prepare students for employment and adapting to the evolution of Hong Kong's knowledge-based economy. Findings from this study showed mixed results. On the one hand, the graduates who completed professionally-oriented AD programmes (e.g. Accounting) perceived that the AD curriculum should contain more specialised professional knowledge to enhance their competence for undertaking technical tasks. At the same time, some AD graduates found the general



education modules in AD programmes, such as philosophy and sociology, were useful in enhancing their reasoning and critical thinking skills, suggesting such skills were very important during their senior-year undergraduate studies. In addition, findings show that some AD graduates found the AD training provided cognitive thinking skills that helped them strategically plan their work and enhanced their employability. Indeed, the Phase Two Review of the Post-Secondary Education Sector (EDB, 2008, p. 35) reported that employers found AD graduates ‘more mature and diligent, have wider exposure and possess better inter-personal and social skills to meet their job requirements’.

Furthermore, the findings show that some AD graduates were worried that AD curricula being too general caused employers to doubt the employability of AD graduates; however, to enhance the employability of AD graduates, it is important to ensure the knowledge and skills they acquire are related to the needs of the economy and potential employments. Therefore, community colleges providing AD programmes need to foster closer collaboration with employer associations and professional organizations to receive crucial inputs needed for the development of market-driven AD curriculum.

Additionally, the findings of the study also show that only a small proportion of graduates felt the AD programme had improved their networking. As such, the community colleges may seek the support of employer associations and industrial

federations to provide AD students with more internship opportunities. Such pre-employment job experiences not only provide training opportunities to the attached students, but also widen their exposure to real-life experiences. The findings of this study further reveal that most community colleges have arranged internships and summer placement opportunities for AD students to provide them with practical work experience, and to help employers improve their understanding of the value of AD qualifications and the suitability of AD graduates, and gain confidence in both. However, these internships and summer placements are very limited in number, relative to the student population; as such, most AD students rely on their own network to seek permanent or short-term employment opportunities.

#### **4.5 Usefulness of AD curriculum for developing graduates' generic skills**

The generic skills theme describes the attributes needed to develop students' competence in various aspects of higher education (Knight & Yorke, 2002), and includes graduates' abilities and capabilities 'beyond disciplinary content knowledge, which are applicable to a range of contexts' (Barrie, 2004, p. 262). Attainment of these skills enables students to become competitive in a dynamically changing environment. Globally, the connection between higher education and economic competitiveness has long been recognised. Learning institutions need to equip students with broad-based knowledge and generic skills to develop graduates' competency in an increasingly globalised economy. Generic skills refer to those skills

that are effective in a wide range of employment situations, but not tied to any one-subject domain. These aspects, according to 2001 EMB Report (FCE, 2001), include the Chinese and English languages, information technology, interpersonal communication skills, numerical and analytical skills. Other aspects include critical thinking skills, problem-solving skills, work attitude, ability to become lifelong learners, intellectual skills, and intercultural understanding.

It is important to get an insight on how effectively the AD curriculum prepares AD graduates to attain generic skills. AD graduates were asked to rank, on a scale of 1 to 5 (1: Strongly disagree; 5: Strongly agree), the extent to which they had achieved basic competency in various elements of generic skills; Table 4.5 illustrates their responses. Data show that the mean scores for all items examined were over 3.0, indicating that the AD graduates generally had positive opinions about the value of the AD curriculum in developing their generic skills. Responses to each element of the generic skills are presented in subsequent sections.

**Table 4.5 Descriptive statistics (percentages, M, SD) of graduates' perceived value of AD programme for developing their generic skills**

Aspect	Likert five points scale response (%)					M	SD	
	Strongly disagree	Disagree	Moderate	Agree	Strongly agree			
<b>A. Inter-personal skill and Work attitude</b>								
1	Ability to work effectively as a team	0	1.2	10.7	76.2	11.2	3.99	.526
2	Ability to learn and work independently	0	2.4	14.3	71.4	11.9	3.93	.597
3	Willingness to change & accept new ideas	0	2.4	22.6	61.9	13.1	3.86	.661
4	Enhance time management skills	0	2.4	13.1	71.4	11.9	3.83	.598
5	Ability to plan and work independently	0	6.0	23.8	54.8	15.5	3.80	.773
6	Acquire leadership skills	1.2	3.6	27.4	61.9	6.0	3.68	.697
7	Time management in group or project works	1.2	15.5	29.8	42.9	10.7	3.46	.924
8	Focus on specialist skill relevant to job	0	16.7	34.5	45.2	3.6	3.36	.801
9	Doing familiar things rather than different	1.2	25.0	21.4	50.0	2.4	3.27	.910
<b>B. Research skill and Intercultural understanding</b>								
10	Enhanced ability to conduct research & inquiry	0	2.4	20.2	53.6	23.8	3.99	.736
11	Ability to explore ideas collaboratively	0	4.8	27.4	60.7	7.1	3.70	.673
12	Understanding cultural similarities & differences	2.4	6.0	33.3	54.8	3.6	3.51	.768
<b>C. Numerical skill</b>								
13	Analysis & interpretation of numeric data	0	4.8	13.1	63.1	19.0	3.96	.719
<b>D. Critical thinking and Problem-solving skill</b>								
14	Ability to look things at different perspectives	0	1.2	27.4	59.5	11.9	3.95	.558
15	Enhance analytical skills	0	1.2	17.9	72.6	8.3	3.88	.547
16	Synthesis of information to solve problems	0	1.2	27.4	59.5	11.9	3.82	.643
17	Look problems in new perspectives	0	4.8	21.4	63.1	10.7	3.80	.690
18	Application of theories & principles	0	4.8	26.2	54.8	14.3	3.79	.746
19	Confidence in tackling unfamiliar problems	0	6.0	22.6	58.3	13.1	3.79	.746
<b>E. Verbal &amp; Written communication skill</b>								
20	Ability to make oral presentation in English	0	0	14.3	71.4	14.3	3.90	.613
21	Ability to express thoughts in English	0	2.4	16.7	69.0	11.9	3.90	.613
22	Ability to write & communicate orally in Chinese	0	4.8	33.3	53.6	8.3	3.65	.703
23	Effective communication in Putonghua	2.4	8.3	40.5	42.9	6.0	3.42	.824
<b>F. Ability to pursue Lifelong learning</b>								
24	Improved self-awareness in strength & weakness	0	2.4	19.0	60.7	17.9	3.94	.683
25	Ability to take own responsibility in learning	0	2.4	19.0	60.7	17.9	3.90	.670
<b>G. Information Technology and Overall perception</b>								
26	Ability to use the Internet for work & study	0	10.7	46.4	35.7	7.1	3.39	.776
27	Provided with solid foundation for further study	0	2.4	28.6	52.4	16.7	3.83	7.25
28	Well prepared for work and employment	0	7.1	42.9	44.0	6.0	3.49	.720

*Note.* M = mean, SD = standard deviation.

#### 4.5.1 Personal and interpersonal skills and work attitude

The data in Table 4.5 show that the graduates valued the AD curriculum in promoting their ability to learn and work independently ( $M = 3.93$ ), and their willingness to accommodate and accept new ideas ( $M = 3.86$ ). They also rated it positively in enhancing their skills in time management ( $M = 3.83$ ) and in facilitating them to plan well their work independently ( $M = 3.80$ ). They also perceived that the AD curriculum moderately enhanced their leadership skills ( $M = 3.68$ ), and continued doing familiar things rather than different ( $M = 3.27$ ). Nonetheless, graduates perceived the focus of AD curriculum was on specialised knowledge relating to particular academic disciplines and professions ( $M = 3.36$ ), which may not increase graduates' confidence to explore new interests and take risks.

Due to constant changes in workplaces, employers are increasingly looking for graduates with good inter-personal skills for complex, project-based teamwork. Thus, the need for college graduates to work effectively in groups has become important and has been advocated internationally in recent decades (Dunne & Rawlins, 2000). The incorporation of teamwork and group projects in curricula can develop students' ability to work collaboratively (Hansen, 2006; Hernandez, 2002), and enhance their interpersonal, communication, problem solving, and other key generic skills. The data show that the graduates perceived that the AD programme curriculum enabled them to develop interpersonal relationships and the ability to work effectively as part of a

team ( $M = 3.99$ ) and their time-management skills ( $M = 3.46$ ), especially during project work. However, development of the skills necessary to work effectively in group projects did not turn up naturally; the authentic nature of the group assignment tasks embedded in the curriculum attributed to such improvement.

To get deeper insight into the development of students' interpersonal skills, the researcher asked students to elaborate on how they managed their group projects. Their responses showed that the use of teamwork was helpful in enhancing their interpersonal communication skills, as shown in the following two interview representative excerpts:

*“There were a lot of group projects involving teamwork. I would say the first challenge was to learn how to work with people. Typically, each team member has his/her own views and expectations. Lot of problems and conflicts arise and I started to know the importance of communication and conflict resolution skills.”*

(SF2)

*“Basically, I prefer individual assignment since I can control my own work. However, for complex problem-based learning project, I would say that group work is better. For example, when working on group basis, each member can share the workload and focus on the part that he/she can do best. You may also learn from others and get wider insight and ideas, which may be very different from your line of thinking.”* (UG1)

The two excerpts depict the graduates' views on how they were involved in their learning, and reveal that teamwork enabled them to work collaboratively and enhanced their cognitive thinking. It seems the graduates had limited formal experience working in teams; however, working collaboratively helped them to develop a repertoire of ideas, thus promoting their interpersonal communication skills.

Basically, globalisation leads organisations to strive continually for flexibility to deal with the fast-changing economy (Young & Henquinet, 2000), creating a complex working environment in which collaboration and effective teamwork are essential (Tarricone & Luca, 2002). The findings from this study show the AD curriculum was useful in promoting students' capability and competence to work in group settings, making students confident they could meet the demands of employers looking for employees with good teamwork ability. In response to the increasing use of team-based organisation structures, the AD curriculum has incorporated group-based projects to facilitate students' attainment of teamwork skills, and to help them integrate their educational experience with their future work environment. The literature shows that the incorporation of group projects in curricula can help promote students' ability to work in a team-oriented business and enhance their interpersonal communication, critical thinking, problem solving, and other key skills (Chapman & Van Auken, 2001; Hansen, 2006; Hernandez, 2002). Congruent to Young and

Henquinet (2000), this study found that efforts to achieve tasks in a timely manner during group work promoted the students' time management skills.

Hansen (2006) noted that, compared to conventional in-class lectures, the 'learning-by-doing approach' of group projects could enhance active learning, leading to greater understanding of information, improved interpersonal skills, stronger communication skills, and the development of critical thinking. Despite these positive observations, this study found that students had stressful experiences when working collaboratively in teams, likely because teachers placed them in groups without any instructional guidance on how to work collaboratively to achieve a common goal (Chapman & Van Auken, 2001; Hansen, 2006; Hernandez, 2002). This lack of pedagogical support thwarted collaboration and increased the likelihood of dysfunctional teams. Placing students into groups with little teacher guidance or facilitation will not promote deeper thinking and higher academic achievement (Johnson & Johnson, 1999; Rigby et al., 2009).

More importantly, the students acknowledged that group projects were useful in helping them to engage in active learning, and enriched their academic knowledge. They acquired and developed knowledge from multiple perspectives, which helped them understand better the subject they were learning; the knowledge exchanged during the process promoted intellectual growth, and group discussion helped them to create a social support mechanism through knowledge sharing (Alien, Beam & Carey,



1998). Such a support mechanism is especially helpful for students who have just started their tertiary courses.

#### **4.5.2 Research and Numerical skills**

The data in Table 4.5 show that the AD graduates felt the AD programmes' curricula enhanced their ability to conduct research and enquiry ( $M = 3.99$ ), and moderately enhanced their ability to explore ideas collaboratively ( $M = 3.70$ ). This may be attributed to the emphasis placed on research content, rather than the processes (Healey, 2005). The data presented in Table 4.5 also show graduates reported that they had learnt and acquired skills in analysis and interpretation of numerical data that they valued as relevant throughout life ( $M = 3.96$ ). This result may partly be attributed to the fact that AD students often apply mathematical concepts and statistical knowledge in case studies and analysis.

Correspondingly, the researcher asked students, through interviews, to explain "whether they had conducted any research during the AD studies and how they carried out the research tasks." In general, graduates' responses showed they were able to make use of the basic research skills learnt in the AD programme to finish the assignments:

*"We learnt about research skills during our English class. The computer course in Information Management also taught us how to use the Excel programme to*

*analyse data. Actually, we did a lot of research works during our AD studies. Most often, we would browse the Internet to find information. We might also make use of questionnaires or personal interviews to collect data if teachers required us to do so.” (UG 1)*

*“I think that I learnt about research skills early in my AD studies. To formulate a business plan for an organic food restaurant, our project group designed questionnaires and conducted interviews with our classmates to collect information. We shared some ideas throughout the project duration. Through the use of the Excel spread sheet, we carried out the statistical analysis of the data collected and present our findings in our research report.” (SF2)*

It appears that students were more committed to exchanging research knowledge through group collaboration in their research activities, suggesting they were more willing to learn from each other when faced with a challenging research problem. Although the students developed research skills, they were not confident in handling real-world issues with open-end approaches, as exemplified in the following excerpt:

*“The case studies that we need to handle were related to real life situations. For example, we were asked to help an insurance company to formulate its mission statement on social responsibility. Actually, there was not much information provided. We need to conduct research so to help define the problems. We felt*

*quite worried with such kind of open-end questions, as there may be more than one correct approach. Not sure what criteria teachers will use in grading our work.” (UG3)*

These results are not surprising and suggest that students were used to handling assessment problems with specified answers, such as those that have very specific marking schemes. Given that many real -world problems do not have straightforward answers, students are apprehensive and unsure of their ability to tackle them.

Based on the results presented above, research skills are an important aspect in helping students to develop enquiry skills and the ability to do research (Willison & O'Regan, 2007). Findings from this study show that students perceived the AD curriculum had improved their ability to conduct research and enquiry. Although a specific 'research skill and methodology' course may not appear in the AD curriculum (FCE, 2001; Tripartite Liaison Committee, 2009), students benefited from small-scale research activities that were built into project-based assignments, the assessment criteria for which often require students to conduct literature searches, agree on the methodology to be used, collect data, present their findings, and provide a conclusion based on the available evidence. These findings support Malcolm's (2008) argument that using research as an assignment task helps students to develop research-related competencies and critical thinking. Through engagement in

research-based learning activities, students are more capable to build a sound knowledge in the relevant field of studies (Dominick et al., 2000).

Thus, organising students to work in teams for research tasks may be the best way to enhance their research skills and social learning abilities (Johnson & Johnson, 1999). Although AD graduates believed the AD curricula had improved their ability to conduct research and engage in inquiry, they did not feel confident in handling loosely-structured, open-ended problems that resembled real world situations, which often have few specifications and relate to ill-defined situations students have seldom encountered.

Apart from the problem of unfamiliarity, the findings from this study reveal other issues about which students worried, especially time constraints. In handling ill-structured problems, students need to take long hours to understand the context of the subject, identify the problems, make their own assumptions, and discuss and agree on the solutions to be adopted. However, their work schedule is already so tight that students rarely found adequate time to reflect on open-end problems. Thus, the use of open-ended research projects may be more effective in the second half of the AD programmes, when students have already acquired some foundation knowledge.

#### **4.5.3 Critical thinking and problem-solving skills**

The data in Table 4.5 show that most respondents perceived the AD curriculum

to be effective in enhancing their critical thinking and problem-solving skills. As such, the graduates reported they had high ability to look things from different perspectives ( $M = 3.95$ ), enhanced analytical skills ( $M = 3.88$ ), and enhanced ability to synthesize information to solve problems ( $M = 3.82$ ). They were also able to look at things from new perspectives ( $M = 3.80$ ), could apply theories and principles ( $M = 3.79$ ), and had confidence in tackling unfamiliar problems ( $M = 3.79$ ). These results indicate that students were quite positive about their problem solving and critical thinking skills, as well as their ability to look at things from different perspectives.

To expand on the questionnaire results, the researcher asked student interviewees to explain how the AD programmes helped them enhance their problem solving, analytical, and critical thinking skills. The graduates held the view that the authentic learning activities included in the programme encouraged them to engage in analysis, synthesis, and evaluation of information from different perspectives, as well as to become more open-minded:

*“In some tutorial classes, teachers divided us into groups for debating. Either on the affirmative or negative side, we needed to research for information and think critically how we can pull the useful materials together and build up our arguments.” (SF1)*

*“Some lecturers required us to study article which imparted divergent views on some contemporary issues, for example, should Hong Kong build a new waste incinerator in an outlying island. We need to analyse the arguments of each opposing view. It is not a straightforward task, as we needed to see things from different perspectives.” (UG1)*

In these excerpts, students appear to explain that case study is typically used to enhance analytical skills by allowing them to try out what they had learnt and harness different capabilities by inquiring of one another. This is because students needed to read the case thoroughly, analyse ideas from different perspectives, and synthesise them to get deeper understanding of what they were learning.

The term critical thinking is used to describe the competencies applicable not only to teaching and learning contexts, but also to learning events in the workplace environment (Pithers & Soden, 2000, p. 239). These competences embrace the skills of argument (Kuhn, 1991) and evaluation (Pithers & Soden, 2000). Moreover, authentic teaching and learning practices can be used to denote students’ critical thinking and problem solving skills. Findings from this study reveal that students perceived the AD curriculum to be effective in enhancing their critical thinking and problem solving skills. As such, the graduates reported that they had a high level of ability to look at things from different perspectives, demonstrate profound analytical skills, and synthesise information to solve problems. In addition, the students were

able to look things from new perspectives and could apply theories and principles in addressing unfamiliar problems.

In the contemporary world, employers particularly merit employees who are reflective and able to pioneer change, as well as to provide innovative problem solving solutions that create value for the organisations (Harvey et al, 1997). A survey of Hong Kong employers' opinions on sub-degree graduates' performance (EDB, 2010) revealed that analytical and problem solving abilities were among the most important qualities sought by employers. Critical thinking is not an inborn ability (Snyder & Snyder, 2008), but can be taught. For example, Kennedy, Fisher & Ennis (1991) argued that students of all academic levels might benefit from training in critical thinking skills. Findings from this study reveal that most students developed critical learning and problem solving skills through the learning processes integrated within the AD curriculum. As such, most AD graduates perceived the authentic learning activities and continuous assessment tasks to be effective in developing their thinking skills for practical contexts (Bonk & Smith, 1998; Halpern, 1998; Ku, 2009). For instance, the debate learning activities motivated students to think deeply and clarify the reasoning behind their arguments (Norris, 1989), which emphasised the application of knowledge in new circumstances, rather than memory recall (Lewis & Smith, 1993). During the process, students learnt to go beyond the textbooks by

seeking knowledge and tolerating the ambiguity resulting from the trial and error involved in exploring possible solutions.

#### **4.5.4 Verbal and written communication skills**

Good communication skills are always one of the key attributes sought by potential employers. In almost every business transaction, employees need to write effectively to communicate with a wide range of people, both internal and external to the organization. The data in Table 4.5 show that graduates held the view that the AD curriculum improved their ability to make oral presentations in English ( $M = 3.90$ ) and their written English ( $M = 3.90$ ). The AD curriculum also moderately improved their ability to write and communicate orally in Chinese ( $M = 3.65$ ), while fewer respondents found it improved their ability to communicate effectively in Putonghua ( $M=3.42$ ). Generally, respondents perceived that the AD curriculum was more helpful in improving their written and oral communication skills in English, than in Chinese or Putonghua.

The researcher asked the interviewees whether “the AD curriculum enhanced their communication skills in English, Chinese and Putonghua”. Broadly, the graduates’ responses underscored the importance of the AD curriculum in doing so:

*“I have gained more confidence in presentations. At first, I was very nervous about speaking English in front of the class. Possibly, through frequent practices in project presentations, I got more confidence in my public speaking skills. More*



*important my written communication skills have improved because I was able to receive feedback on my assignments, which helped me to identify my mistakes. Good communication skill is the most important thing employers look for especially when you go to attend job interview.” (SF2)*

Students apparently had strong instrumental motivation, as they perceived good written and spoken English to be essential for academic and career success. They also valued the importance of teachers’ feedback in grammatical correction, as they helped to improve their English and basic academic skills. While others focused their views on the English language, some centred on Putonghua and Chinese:

*“Without a doubt, knowing Putonghua is a definite advantage for future careers development. However, there was a lot to memorise in our Putonghua class. You need to master the pronunciation, learn the sound of each vowel, read and write using the Pinyin system. Devoted a lot of times to study, as there were also weekly dictation and quizzes.” (SF1)*

*“We only speak Putonghua during class under teacher’s supervision. For socialising, we naturally use Cantonese, which is the local dialect for communication in Hong Kong. Obviously, English remains the most widely used language for our academic work.” (SF3)*

In these excerpts, students explained the practicality of knowing Putonghua, in view of China’s growing dominance in the global economy. They found Putonghua

learning a tedious process, but recognised it was beneficial for pragmatic reasons. However, learners must devote a lot of time and efforts to become conversant in Putonghua, as written Chinese characters do not display pronunciation information. Pinyin was devised as a phonetic system to pronounce Chinese characters in Putonghua; learners must first learn the consonants, vowels, and tones by heart, and then memorise the pronunciation. Students disliked the pressure involved in memorization during the learning process. While the AD curriculum aims to develop students' Putonghua speaking and listening proficiency, students seldom used Putonghua outside the classroom; instead, they mostly used Cantonese, the mother tongue of most Hong Kong people, for casual communication.

Generally, the ability to communicate effectively with others orally and in writing is one of the most desired qualities employers seek from graduates. The findings from this study show that graduates perceived the English courses in the AD curriculum to be practical and useful. Apart from general training in the English language and business communication skills, students acquired knowledge on how to write an effective personal statement. Students were encouraged to apply critical thinking skills when expressing their opinions, and used the language of argumentation in different communication settings. They also perceive that attaining English language skills was an important undertaking, and one which helped them to further their academic and careers development. Nonetheless, surveys of Hong Kong

employers' opinions on sub-degree graduates' performance revealed concerns about graduates' written and oral English language proficiency (EDB, 2010), implying students may have problems transferring their English communications knowledge from college to the workplace.

Hong Kong is an international financial centre. Its citizens' competency in English and Chinese are important if Hong Kong is to maintain its competitive edge in the global economy. For many years, English was the dominant language used in the workplace, educational institutions, and government services. With Hong Kong's return to Chinese sovereignty in 1997 and the tremendous growth of its economic ties with the Mainland, the demand for Putonghua, the national language of China, has grown in Hong Kong, and the language policy of 'bi-literacy (Chinese & English) and tri-lingualism (Cantonese, Putonghua and English)' endorsed. However, most Hong Kong locals are Southerners by origin and use Cantonese (Leung & Wong, 1996), referring it as their mother tongue (Leung & Hui, 2011).

Findings from this study show that students were introduced to the Pinyin system in the AD curriculum, and that most students were positive about learning Putonghua due to instrumental motives. However, they felt the pressure of learning, as they were required to master pronunciation, read, and spell using the Pinyin writing system within a short period; consequently, most AD students relied on memorization to learn Putonghua, without developing much learning interest. The findings also

reveal that the AD students seldom used Putonghua outside school, even though interactions between Hong Kong and China have grown tremendously. Without connecting Putonghua to other subjects, students could hardly advance their listening and speaking communication skills. The lack of practice in real-life situations partly explains why students found the AD curriculum only moderately enhanced their communication skills in Putonghua.

#### **4.5.5 Ability to pursue lifelong learning**

The concept of lifelong learning in higher education has been promoted in post-1997 education reforms in Hong Kong (Kennedy, 2004) and embraces a wide scope, enabling students to develop skills as foundation for further learning. The data presented in Table 4.5 reveal that the graduates improved their self-awareness in personal strength and weakness ( $M=3.94$ ) and developed a high level of ability to take responsibility for their own learning ( $M =3.90$ ). These results indicate that the AD curriculum is effective in facilitating students' engagement in active learning and developing their abilities to reflect on their own learning experiences. The results also suggest that, in doing so, the AD programme promoted the value of lifelong learning and that most respondents perceived the AD curriculum as helpful in developing their skills for lifelong learning.

Based on the questionnaire results, the researcher asked the interviewees to describe “whether the AD curriculum enhanced their skills and enthusiasm for

learning, and whether the programme provided them with a strong foundation for future learning and development”, to obtain information about the extent to which graduates were able to develop the attributes of lifelong learners. The following quote is representative of the graduates’ views:

*“I want to pass in the examination so that I can achieve my degree qualification. This is important as the qualification may help to improve my promotion prospect. I enjoy learning but I am also very pragmatic. I would like to complete my studies and finish all my examinations quickly. I do not want to take up any difficult courses of learning even though the contents sound very interesting to me.” (SF1)*

Their responses show that students tended to associate lifelong learning with employment and economic concerns, rather than an enthusiasm for learning. However, some students did enjoy learning in the AD programme, were enthusiastic about their subject area, and wanted to continue studying as exemplified in the following quote:

*“I chose to study a degree programme relating to marketing and management as I like these subjects. The marketing concepts and management theories taught in the AD programme interested me. I wanted to learn more as the subject sounded very fascinating to me.” (SF2)*

These results presented in this section reflect education policy in Hong Kong, which links lifelong learning with employability (Harvey, 2000; EC, 2000), and bases

the future economic prosperity of Hong Kong on the relationship between a well-trained workforce and the compelling forces of globalisation.

In the context of AD curriculum, apart from ‘employability’ concerns, it goes further, serving as an enabling device preparing students with sound foundation knowledge for future learning and development. Incorporating activities that encourage students to plan, review and assess their own learning helps to promote their valuing lifelong learning attributes.

Similarly, findings from this study indicate that most students found the AD curriculum improved their self-awareness of their personal strengths and weaknesses, and enhanced their ability to take responsibility for their own learning. These findings reflect students’ inclination to associate lifelong learning with their employment prospects, and to believe that pursuing a degree was essential to getting a promotion or access to better career opportunities. Such views reflect government initiatives aimed at increasing the proportion of the workforce with post-secondary qualifications and its drive for economic competitiveness. Furthermore, the AD graduates showed interest in pursuing higher education to acquire useful knowledge; however, they did not explain which aspect of the curriculum nurtured their academic interest for knowledge growth and lifelong learning.

Candy, Crebret and O’Leary (1994) noted that the successful lifelong learner possesses an inquiring mind and good information management abilities. In terms of

attitude, lifelong learners enjoy learning, value the use of learning for personal development and professional advancement, and appreciate the importance of keeping up-to-date as a professional (Bath & Smith, 2009, p.183). Findings from this study show that AD students were aware of the importance of stay up-to-date as a professional. During their AD studies, they were introduced to the trend of development in professional practice.

The graduates acknowledged that people need to re-skill throughout their career to cope with rapid changes in the external environment. Accelerating technological advancement and knowledge growth impact on professional practice and have become key drivers of lifelong learning. AD graduates enter a work environment that is fraught with uncertainty, and preparing students to engage in further learning through effective curriculum and assessment has become more complex. Boud (2000, p. 151) suggested that ‘assessment that meets the needs of the present without compromising the ability of the students to meet their own future learning needs’ is assessment that enhances lifelong learning.

#### **4.5.6 Information technology and overall perceptions**

The ability to apply information technologies at work, in study, and in daily life is becoming increasingly important in Hong Kong’s knowledge-based economy. As such, AD curricula include the teaching of information technology skills and require students to utilise a range of technology applications in various assignments

and project works. Generally, technologies have been widely used in AD programmes, with teachers and students needing to be competent enough to harness the potential benefits offered by technologies during the process of teaching and learning. Findings from this study showed a mixed result.

The data in Table 4.5 show that AD curricula moderately improved students' ability to use the Internet for work and study ( $M = 3.39$ ), which implies most students did not find it advanced their information technology skills. The researcher asked interviewees if they thought the AD programme was "effective in improving your skills in IT application"; their responses showed some variations in how they viewed the potential of information technology to enhance their learning.

While some graduates focused on technical competency in using software programmes, others centred on employing information technology skills to enhance their learning. The former asserted that, prior to the AD programme, they had knowledge and skills in different computer applications:

*"I don't think that the computer course has considerably upgraded my skills. I knew how to use many software programmes before I took up the course."* (UG3)

In contrast, the latter group of students highlighted the importance of integrating information technology into their learning process to broaden their knowledge base and enhance their technological application and presentation skills:

*"IT skills are important for our studies. We need to do a lot of Internet search for*



*information. We are not allowed to submit our assignment in hand written format. We must present them in word-processed forms with charts or graphs or other creative ways to enhance the presentation.” (UG2)*

In Hong Kong, most students start to interact with computers at a very young age. Most primary and secondary schools have IT facilities that support the use of IT in the general curriculum. Most students also have computers and Internet access at home, which they use daily. Findings show that, before enrolment in AD studies, most students have already acquired basic competency in computer operations and software applications, such as word processing and spreadsheets. As these students related learning to technical skills in computer operations and software applications, they did not perceive the AD curriculum as having enhanced their computer skills.

Other students perceived that it was crucial to integrate information technology into the curriculum, which is associated with the need to access and utilise electronic resources for learning and knowledge enrichment in the ‘information age’. Findings from this study show that the integration of technological skills into the AD studies prepared students for real-world environments. This is in line with the idea that multimedia presentations, computer communications, and Internet access are important in professional and workplace practices.

Moreover, the findings reveal that, throughout their AD studies, students accumulated a great deal of learning experience by using web engines to search for

information. Most students seemed to rely on the web to find the information needed to resolve case study problems. Some made use of statistics, figures, and views appearing on the web as evidence to support their answers and arguments. However, the study further reveals that the students had not yet developed their ability to analyse the information they sought. The web often presents a range of perspectives on the same topic, yet most students just retrieved and adopted those that supported their arguments, and showed little interest in examining the assumptions and underlying concepts embedded in the materials they retrieved and used (Crebert et al., 2011).

#### **4.6 Gendered variations in conceptions of the usefulness of AD curricula**

To examine further the research problem, gendered differences in conceptions of the value of the AD curriculum in facilitating students' development of generic skills were investigated using the Kruskal-Wallis Test.

Table 4.6 presents the results thereof.

**Table 4.6 Variations in conception between female and male graduates' on the value of AD programme to enhance generic skills**

	Aspect	H	df	Mean Rank		P
				Female (n = 43)	Male (n = 41)	
A. Inter-personal skill and Work attitude						
1	Ability to work effectively as a team	5.020	1	46.84	37.95	.025*
2	Ability to learn and work independently	.570	1	44.06	40.87	.450
3	Willingness to change & accept new ideas	.158	1	43.40	41.56	.991
4	Enhance time management skills	.022	1	42.81	42.17	.882
5	Ability to plan and work independently	.259	1	43.70	41.24	.610
6	Acquire leadership skills	5.708	1	47.85	36.89	.017*
7	Time management in group or project works	.737	1	44.60	40.29	.391
8	Focus on specialist skill relevant to job	2.105	1	39.00	46.17	.147
9	Doing familiar things rather than different	.411	1	40.97	44.11	.522
B. Research skill and Intercultural understanding						
10	Enhanced ability to conduct research & inquiry	.140	1	43.38	41.57	.708
11	Ability to explore ideas collaboratively	5.320	1	47.71	37.04	.021*
12	Understanding cultural similarities & differences	2.747	1	46.35	38.46	.097
C. Numerical skill						
13	Analysis & interpretation of numeric data	.026	1	42.86	42.12	.872
D. Critical thinking and Problem-solving skill						
14	Ability to look at things from different perspectives	3.646	1	46.38	38.43	.056
15	Enhance analytical skills	3.946	1	46.53	38.27	.047*
16	Synthesis of information to solve problems	2.428	1	46.05	38.78	.119
17	Look at issues or problems from new perspectives	.509	1	44.09	40.83	.475
18	Application of theories & principles	2.182	1	45.97	38.87	.140
19	Confidence in tackling unfamiliar problems	.851	1	44.63	40.27	.356
E. Verbal & Written communication skill						
20	Ability to make oral presentation in English	.165	1	43.34	41.62	.685
21	Ability to express thoughts in English	.338	1	43.73	41.21	.561
22	Ability to write & communicate orally in Chinese	2.273	1	38.98	46.20	.132
23	Effective communication in Putonghua	.273	1	41.24	43.82	.601
F. Ability to pursue Lifelong learning						
24	Improved self-awareness in strength & weakness	.034	1	42.92	42.06	.854
25	Ability to take own responsibility in learning	.000	1	42.49	42.52	.996
G. Information Technology and Overall perception						
26	Ability to use the Internet for work & study	3.570	1	47.03	37.74	.059
27	Provided with solid foundation for further study	.118	1	43.31	41.65	.731
28	Well prepared for work and employment	.186	1	41.48	43.57	.667

Note. H= Kruskal-Wallis Test, df = degree of freedom, n = sample size, \* $p < .05$ .

The results show several statistically significant differences in generic skills attributes between genders. For example, there were significant differences in gendered perceptions of the ability to work effectively as a team ( $H(1) = 5.020, p = 0.025$ ), with a mean of 46.84 for females and 37.95 for males. Similarly, there were significant differences in perceptions of students' ability to acquire leadership skills ( $H(1) = 5.708, p = 0.017$ ), with a mean of 47.85 for females and 36.89 for males. In addition, there were significant differences in perceptions between genders on graduates' ability to explore ideas collaboratively ( $H(1) = 5.320, p = 0.021$ ), with a mean of 47.71 for females and 37.04 for males. Finally, there were significant differences in perceptions on enhancing graduates' analytical skills ( $H(1) = 3.946, p = 0.47$ ), with a mean of 46.53 for females and 38.27 for males.

These results imply that female graduates valued the AD curriculum for enhancing their inter-personal and communications skills, especially during teamwork, which in turn enhanced their leadership expertise. The differences in conceptions between genders regarding graduates' inter-personal skills are in line with traditional social roles and values for females and males. For example, females often feel more comfortable with teamwork than males. Their relationship-oriented behaviours (Riggio, 2008), based on understanding and communications, help them maintain inter-personal relationships for team performance. This explains why females are often seen to act as social leaders or facilitators in group settings. Facione et al. (1995,

p. 10) reported that ‘women were more disposed toward being open-minded and cognitively mature’, which may also partly explain why our female graduates were more positive about their research abilities and problem solving skills.

The variations in generic skills conceptions between genders may have some implications for the pedagogy and curriculum of AD programmes, and may raise concerns about whether the development of generic skills can or should be modified based on gender (Nabi & Bagley, 1999).

#### **4.7 Chapter Summary**

The research findings and implications discussed above suggest that the primary goal of the AD graduates in pursuing further studies was related to their intrinsic motivation for careers and economic advancement. They perceived AD programmes as providing them with an alternative pathway to undertake degree studies. They aspired to access UGC-funded degree courses, but were often stymied by the limited number of available spaces; therefore, AD graduates often turned to less-preferred, self-financed options for their further studies. Most graduates perceived the AD programmes as less useful for providing employment credentials than as a bridge to further study. Apart from the problem of low employer awareness, the AD award has not yet established a clear identity as a stand-alone qualification whose graduates are ready for immediate employment. The chapter also highlights the value of the AD curriculum in developing generic skills essential for students’ further

study and employment. The authentic nature of teaching and assessment strategies enabled students to develop teamwork, research, critical thinking, and problem-solving skills, as well as become more engaged in active learning. However, some AD students still relied on memory recall to handle their learning, as they perceived a surface learning approach would help them achieve good examination results and articulate to UGC-funded universities.

## **CHAPTER 5**

### **CONCLUSIONS**

#### **5.1 Introduction**

This chapter presents the study's conclusions and discusses its significance. Section 5.2 presents three interlinked conclusions relating to the research questions, while Section 5.3 describes the study's limitations. Section 5.4 offers some recommendations, while Section 5.5 focuses on the significance and contributions of this research.

#### **5.2 Conclusions**

The first research question sought to determine the motives of the AD graduates in pursuing further study. The findings suggested that their primary goal was to acquire a bachelor's degree, with a view to enhancing their career and socio-economic status (UGC, 2010), in the belief that most well-paid jobs are acquired based on academic merit. Their extrinsic motivation conformed with the general societal expectation that a bachelor's degree provides a route to a satisfying career and is a pre-requisite for enrolment in professional examinations. In that regard, most AD graduates pursued further studies to achieve professional accreditation and to become competitive in the job market.

Secondly, the study revealed that graduates recognised the AD programmes as a means of providing them with credentials to pursue further studies, whether through

UGC-funded or self-financed degree programmes. In other words, the AD programmes provided an academic foundation for students who had missed admission into UGC-funded universities and who required an ‘unconventional (alternative) way’ to pursue their bachelor’s degree studies. The impact of the authentic nature of teaching and learning in the AD programme was two-fold. First, it enabled graduates to develop confidence in their problem-solving and critical-thinking skills, and furthered their intellectual growth. Secondly, it was pedagogically valuable, enhancing graduates’ generic skills and industrial-related knowledge they believed useful in the contemporary workplace.

Yet, despite the views of the graduates, the study indicated that employers have low awareness of the value of the AD programmes and the generic competency and employability skills attained by AD graduates. The misconceptions prevail that the AD programme is merely a bridging course for undergraduate studies, and that AD graduates are not ready for immediate employment. This disparity in perception is central to the findings of this study, which indicate that AD graduates are adequately prepared to take up jobs at the elementary management and assistant professional levels. The most attractive feature of the AD programme was its articulation system, which integrated the AD curriculum with formal university studies. Although a very small proportion of AD graduates successfully achieved articulation to UGC-funded degree programmes, the remainder could access self-financing ‘top-up’ degree



programmes; however, graduates were less satisfied with the latter, as they offered few opportunities to experience campus life and were less recognised in society.

Thirdly, the study demonstrated that the AD programme enabled students to acquire generic competencies essential for them to pursue further education and to become competitive in the job market. It enabled students to develop positive professional behaviours such as time management and adaptability to change. The incorporation of teamwork and group projects in the AD curriculum not only enabled students to develop interpersonal and communication skills, but also helped them to relate their educational experience to the likely demands of their future working environments.

The authentic nature of the teaching and assessment strategies embedded in the AD curriculum enabled students to develop research, critical thinking, and problem-solving skills, and was helpful in improving graduates' writing and oral communication skills - albeit more in English than in Chinese or Putonghua, as teachers' provision of feedback and grammatical corrections was more common in English language sessions. In addition, the AD curriculum facilitated graduates to engage in active learning and reflect on their own learning experiences, thus promoting lifelong learning.

However, the graduates did have some concerns about the AD focus upon generic skills, and its limited emphasis on specialised and technical knowledge. There

were worried about whether AD graduates were adequately equipped with the skills and knowledge essential for immediate employment. Yet while the graduates were less confident about their competitiveness in the labour market, their acquired competence in generic skills was of great importance to employers. Employers in Hong Kong today place less emphasis on the subject discipline of a degree than they do on the value that generic skills can bring to an organisation (Cheng, 2004). Therefore, a valuable employee is not only distinguished by academic qualifications, but also by strong generic competencies and demonstrable professional behaviour.

### **5.3 Limitations and future research**

This study explored AD programmes and the expansion of the self-financing sub-degree sector following the 2005-2006 economic stabilization. The number of sub-degree graduates consistently exceeded 10,000 annually between 2007 and 2012. This study engaged a small number of these graduates, a sample of 106. These graduates were drawn from AD programmes offered through continuing education units and community colleges affiliated with UGC-funded institutions. These sub-degree education providers are the most established ones, with an intake of more than 1,000 students per cohort. With such small numbers involved, the findings of this study may not be generalized to the larger population of students graduating from self-financing sub-degree programmes. This would require a much larger sample, and an extension of the sample to key stakeholders such as employers, trade associations,

and government organisations. This would extend the perspectives considered and give a fuller picture of the value attributed to AD programmes in Hong Kong society and the labour market.

A further limitation of the study is its reliance upon a survey questionnaire and interviews. Its design could be extended by incorporating other data collection tools, such as focused group discussion and on-site observation of AD graduates at work. In addition, the analysis of generic skills focused on determining whether students had acquired them; the study did not have scope to investigate the extent to which AD graduates also practiced these learnt skills in the workplace.

Thirdly, as is widely known, the effectiveness of any programme can be associated with its students' demographic characteristics, such as gender, age, and socio-economic status. This study has not explored the extent to which the AD programmes accounted for demographic variables and provided an inclusive curriculum from which all could benefit equally. Future research could investigate attainment gaps related to demographic characteristics, and the factors influencing the differential acquisition of generic skills.

#### **5.4 Recommendations**

Through understanding the perceptions of AD graduates in Hong Kong, the present study attempts to generate some useful points of reference for the Hong Kong government to formulate policies to promote AD graduates' opportunities for further studies and employment. The government has an important role to play in facilitating

the long-term development of the self-financing sub-degree sector, since investment in higher education is pivotal to maintaining the quality of Hong Kong's human capital and its global competitiveness.

In the present study, some AD graduates were dissatisfied that they had paid high tuition fees, yet were unable to achieve upward mobility, in terms of their earnings and career development (So, 2016). This partly explains why society in general doubts the usefulness of the AD as a stand-alone qualification, and why most AD graduates aspired to pursue further studies to enhance their earning potential and occupational mobility. The subdued earning growth of the AD graduates should be viewed more objectively, in terms of the economic environment.

The Hong Kong government's Education Bureau on a regular basis surveys employers' opinion about the performance and attitude of the tertiary graduates they have employed (EDB 2013a; EDB 2013b). The most recent survey reports an overall score for self-financing sub-degree graduates of 3.35, only slightly lower than UGC-funded degree graduates' score of 3.53 (where 5 = always exceeds expectations, and 1 = always fails to meet expectations). UGC-funded universities receive about HK\$200,000 in government subsidies per annum for each first-year first-degree student admitted. Despite AD graduates' contributions to Hong Kong's knowledge-based economy (Yuen, 2015), there are no recurrent government subsidies for most sub-degree programmes.

The evidence of value from the AD programme suggests that the Government should consider providing more financial assistance, such as direct subsidies, scholarships, grants, and interest-free loans, to relieve students' tuition fee burden (Yuen, 2015). As the largest employer in the Hong Kong economy, the government could also take the lead in recognizing the value of the AD qualification, and in enhancing public understanding and acceptance of sub-degree qualifications for employment purposes, in both the business community and the public sector.

### **5.5 Significance of study**

The robust development of community colleges and AD programmes has significantly contributed to increasing Hong Kong's post-secondary participation rate to over 60% since the turn of the century. Despite this impact, evidence to verify the educational value of the AD programmes remains scarce. This predominance of AD programmes in post-secondary education aroused the researcher's interest in examining the value of AD education in preparing students for future study and employment. The resultant study was an opportunity to examine AD graduates' perceptions of their programmes and to investigate how effective the AD curriculum is in enabling graduates to achieve generic competencies necessary for further study, along with the accompanying employment benefits for careers development.

In Hong Kong, obtaining a degree qualification seems to be essential for career and economic advancement. As such, the AD graduates felt that pursuing further

study was part of a long-term career progression that would enable them to get a good job. Their motivation for pursuing degree studies arose from the competitive nature of the existing job market. This contradicts reports that AD graduates pursue further study because they cannot find a job. Here we have one of the significant findings of the study: AD programmes have real benefits for students and for the economy, but the government will not maximise this value unless it proactively markets AD programmes to students, parents and employers. The second research question explored graduates' perceptions of the usefulness of AD programmes for educational advancement and employment. In Hong Kong, students often aspire to obtaining a degree qualification. However, there are too few UGC-funded university places in Hong Kong to accommodate all secondary graduates. Many AD graduates were denied direct entry to degree programmes because they achieved less competitive results in the highly selective public examinations. The surveyed graduates said the AD programme was useful in providing them with 'unconventional ways' to pursue degree studies, particularly through its articulation system. Indeed, these AD students, who were previously the 'losers' in public examinations, have the potential to become 'late bloomers' who perform well in AD programmes and subsequently are admitted to UGC-funded universities for degree studies (Hayhoe, 2011, p. 9). An AD education gives students the confidence to continue striving for the best in academic studies, even though they did not perform as well in the public examination system.

As a move beyond the traditional examination mode of assessment, the evaluation of students' performance in AD programmes is based on a combination of continuous assessment and the end of term examinations. The present study has indicated the impact of these assessment methods on students' approach to learning.

Some surveyed AD graduates adopted a surface learning approach, relying on memorisation to help them get good marks on closed-book final examinations. However, the case studies and learning projects based on real-world problems included in the continuous assessment scheme allowed them to think deeply about the questions involved and become more involved in active learning. In line with findings elsewhere in the literature Struyven, Dochy & Janssens (2005), the findings of the present study indicate that students tended to 'switch' learning approaches (p. 337) when the assessment method changed. Notably, students tended to apply surface approaches to learning when preparing for closed-book examination, and shift to more in-depth study when assessment tasks were more intellectually challenging; e.g., real-life case studies. The findings imply that AD educators may need to continuously review their assessment design to develop in graduates the attributes (e.g., thinking and problem-solving skills) stated as programme objectives.

In connection to the above, the present study has reported some positive indicators about students' views on the strength of the AD curriculum in enabling them to acquire basic competency in generic skills necessary for further study and

employment. Notably, the authentic nature of learning and continuous assessment strategies embedded in the AD curriculum were effective in developing students' research, critical thinking, and problem-solving skills; for instance, the incorporation of group-based projects in AD curricula facilitated students' attainment of teamwork skills and enhanced their interpersonal, problem-solving, communication, critical thinking, and other key generic skills through the 'learning-by-doing approach' of group work (Hansen, 2006). The use of research as an assignment task helped students to develop research-related competencies and critical thinking skills, which AD graduates regarded as 'both a product and process' of AD education (Willison & O' Regan, 2007). The findings indicate that the use of authentic learning and assessment strategies were valuable in developing AD graduates' generic skills. This study elicits evidence that AD programmes produce graduates who were competent in the generic skills needed to address the emerging demands of the job market.

Education policy in Hong Kong has linked lifelong learning to employability (EC, 2000), and the development of a well-trained workforce to the emergence of the knowledge-based economy, to support the future economic prosperity of Hong Kong. This study suggested that most AD graduates were inclined to associate lifelong learning with their employability. They were aware of the importance of staying up-to-date as a professional, and were ready to take responsibility for their own learning. They acknowledged the need to re-skill throughout their career to cope with



rapid changes in the external environment. From this perspective, the AD curriculum is effective in helping AD graduates develop lifelong learning skills to suit their future work environment, which serves the government's employability agenda and is highly regarded by employers.

This study provides an overview of the perceived value of established AD programmes in Hong Kong. The findings also reveal some misconceptions within society and among employers regarding the educational quality and employability of AD graduates. As such, the study may allow educators and the public to recognise the educational value of AD education, and reflect on whether their criticisms thereof are too narrow. The positive effects of AD education on students' long-term development are neglected at their peril.

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# Appendix

## Appendix 1

### Questionnaire Survey Graduates of Associate Degree

Dear Sir/Madam,

Thank you for your participation in this questionnaire survey.

The aim of this questionnaire survey is to collect data about graduates' perceptions regarding the usefulness of AD programmes (in Business and Management Studies), and to what extent graduates feel the AD programmes (in Business and Management Studies) have helped them to develop the generic skills necessary for their further study and employment. The data collected from this questionnaire survey will be used for a doctoral study relating to the topic, 'Graduates' Preparedness for Further Study and Employment'. I invite AD graduates who completed their AD programmes (in Business and Management Studies) at least one year ago to participate in this survey.

Your feedback in this survey is valuable, as it will help to facilitate a more comprehensive assessment and ultimately the generation of a more objective judgment as to the usefulness of AD programmes (in Business and Management Studies) for further study and development in Hong Kong.

Your participation in this questionnaire survey is completely voluntary. You have the right to withdraw from this survey at any time. You also have the right not to complete this questionnaire if you so choose.

In this questionnaire survey, no personal identifying information is requested; thus, your responses will in no way be connected to you personally. The confidentiality and anonymity of your questionnaire responses is strictly assured.

This questionnaire will take about 20 minutes to complete. For each question, please answer so as to give your personal opinion, according to your thoughts, feelings and perceptions. After you have finished the survey, please insert the consent form and the completed questionnaire in the postage-paid return-addressed envelope (enclosed).

If you have any questions regarding the attached, please free feel to contact me at email address [akcchan7@gmail.com](mailto:akcchan7@gmail.com) . Thanks a lot for your support!

Yours faithfully,

Amy Chan

## Participant Consent Form

**Project Title:** The AD program: A Study of Graduates' Preparedness for Further Study and Employment.

**Researcher's Name:** Amy Chan

**Supervisors' Name:** Professor John Holford and Doctor Sarah Speight

I have read the covering letter of the questionnaire and the nature and purpose of the research project has been explained to me. I understand and agree to take part.

I understand the purpose of the research project and my involvement in it, and I understand that I may withdraw from the research project at any stage. This withdrawal will not affect my status now or in the future.

While information gained during the study may be published, I recognize that I will not be identified and my personal results will remain confidential. I understand that all data will be treated with the utmost confidentiality and anonymity, and will be stored, after initial reception, by an assigned number only. The name-number key will be kept only by the researcher in a secure location.

I understand that I may contact the researcher (Amy Chan) or the supervisors (Professor John Holford and Doctor Sarah Speight) if I require further information about the research, and that I may contact the Research Ethics Coordinator of the School of Education, University of Nottingham, if I wish to make a complaint relating to my involvement in the research.

**Signed:** \_\_\_\_\_ (research participant)

**Print name:** \_\_\_\_\_

**Date:** \_\_\_\_\_

### Contact details

**Researcher:** akcchan7@gmail.com

**Supervisors:** John.Holford@nottingham.ac.uk

Sarah.Speight@nottingham.ac.uk

**School of Education Research**

**Ethics Coordinator:** educationresearchethics@nottingham.ac.uk

## Questionnaire Survey Graduates of Associate Degree

### Section I: Background Information

1. What is the full title of the Associate Degree programme you have completed?  
(For examples: Associate of Business Administration (Marketing); Associate in Business (Business Management))  
  
\_\_\_\_\_
2. From which institution did you graduate and receive your Associate Degree?  
  
\_\_\_\_\_
3. In which year did you receive your Associate Degree?  
  
\_\_\_\_\_
4. What is your gender?  
    Female  
    Male
5. What is your current employment status?  
    Employed full-time  
    Employed part-time  
    Self-employed  
    Seeking employment  
    Further studies (please jump to Section II)  
    Others, please specify \_\_\_\_\_
6. Please indicate the sector or industry in which you are presently employed.  
  
\_\_\_\_\_
7. Have you pursued further studies since graduating from your Associate Degree programme?  
    Yes  
    No (please go to Section III)

Section II – Information relating to further studies

This section asks about the programme of study in which you are now studying or in which you enrolled after you graduated from your Associate Degree programme:

1. Nature of programme:
  - Government-funded/UGC-funded
  - Self-financed
2. Type of programme:
  - Local Degree programme
  - Local Top-up Degree programme
  - Non-local Degree programme
  - Non-degree programme
  - Others, please specify \_\_\_\_\_
3. Study Mode:
  - Full-time study
  - Part-time study
4. Level of your programme:
  - Bachelor's Degree
  - Master's Degree
  - Professional Diploma/Certificate
  - Others, please specify \_\_\_\_\_
5. This part of the questionnaire asks about your reason(s) for engaging in further study.

To answer, please blacken the space beside each statement that most precisely reflects the extent to which you agree or disagree with the statement.  
(SD – Strongly Disagree; D – Disagree; N –Neutral; A – Agree; SA – Strongly Agree).

**SD D N A SA**

I have pursued further study after graduation from the Associate Degree programme because:

- a. I want to get a better job.
- b. I want to do my present job better.
- c. I want to earn more.
- d. it is a pre-requisite for advanced study.
- e. I want to attain a professional qualification.
- f. I want to achieve general self-improvement.
- g. I could not find a job.
- h. other than the reasons stated from a to g, I want to

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### Section III – Usefulness of the AD programme

This part of the questionnaire asks your opinion regarding the usefulness of the Associate Degree programme (in Business and Management Studies) for further study and employment.

To answer, please blacken the space beside each statement that most precisely reflects the extent to which you agree or disagree with the statement.

(SD – Strongly Disagree; D – Disagree; N – Neutral; A – Agree; SA – Strongly Agree)

**SD D N A SA**

1. I feel that the AD programme in BMS is useful for further study because
  - a. it has helped me to meet the admission requirements for further study.
  - b. it has stimulated my enthusiasm for further learning.
  - c. it has provided me with a good knowledge foundation for my degree studies.
  - d. it has improved my skills for engagement in lifelong learning.
  - e. it has helped me to become more confident in my own ability.
  - f. it has provided me with opportunities to explore academic interests with staff and students.
  - g. the assessment methods of the AD programmes emphasize on what I have memorized rather than what I have understood.

**SD D N A SA**

2. I feel that the AD programme in BMS is useful for employment because
  - a. it has helped me to fulfil the job requirements.
  - b. it has provided me with industry-related (technical) knowledge and skills necessary for work.
  - c. it has provided me with a broad set of generic skills (for example: communication skills) necessary for work.
  - d. it has improved my confidence and performance in job search.
  - e. it is well-recognized by my employer.
  - f. it has enhanced my competitive power to earn a high salary.
  - g. the learning activities embedded in the AD programme have

allowed me to build contacts with the wider community (for examples, employers and the industry).

#### **Section IV – Development of Generic Skills**

Below are a series of statements relating to generic skills that are essential for further study and employment. Please indicate if you think you achieved a basic competency in each of these generic skills, through the Associate Degree programme (in Business and Management Studies) curriculum.

To answer, please blacken the space beside each statement that most precisely reflects the extent to which you agree or disagree with the statement.

(SD – Strongly Disagree; D – Disagree; N – Neutral; A – Agree; SA – Strongly Agree)

**SD D N A SA**

Through my study in the Associate Degree programme  
(Business and Management Studies),

1. I have improved my ability to express my thoughts clearly in written English.
2. I have improved my ability to make oral presentations in English.
3. I have improved my communication skills in both oral and written Chinese.
4. I have improved my ability to communicate effectively in Putonghua (Mandarin).
5. I have learnt how to comprehend the meaning and implications of numerical data.
6. I have become more willing to change and accept new ideas.
7. I have improved my skills in IT applications.
8. I have learnt how to apply theories and principles to practical situations.
9. I have improved my ability to work effectively as a team member.
10. In many of my group work/projects, a lot of time was lost working out a mutually convenient schedule for all members.
11. I have acquired leadership skills.
12. I have improved my ability to work independently.
13. I have enhanced my analytical skills.
14. I am more able to look at things from different perspectives.
15. I have improved my ability to access and synthesis

information from different sources to solve problems.

16. I am more confident about tackling unfamiliar problems.
17. I have enhanced my capacity for research and enquiry.
18. I have learnt how to plan my own work.
19. I have become more aware of my personal strengths and weaknesses.
20. I have become more aware that I can take more responsibility for my own learning.
21. I have improved my skill in time management.
22. I have focused all my efforts on learning the specialist skills I believe are relevant to the job or industry I want to work in.
23. I am encouraged to look at existing issues or problems from a new perspective.
24. I learnt to explore ideas confidently with other people.
25. I usually do familiar things I know I enjoy, rather than try something different.
26. I am more able to understand similarities and differences between cultures.
27. I am adequately prepared for work in the employment market.
28. I have been provided with a solid foundation for further studies.

**Section V - Open Questions:**

1. Which aspect(s) of the AD programme in BMS do you feel is (are) the best in helping prepare students for further study and employment?

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2. Which aspect(s) of the AD programme in BMS do you feel is (are) most in need of improvement for students' further study and employment?

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If you are willing to provide further help by participating in an individual interview to further discuss the issues raised in this questionnaire, please leave your email address or mobile phone number (whichever is more convenient) for future contact.

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Thank you for completing this survey.



## Appendix 2

### Distribution of questionnaires respondents among the six institutions (n = 106)

	No. of respondents	Further Studies	Others	Gender = Male	Gender = Female
CCCU	25	22	3	13	12
CCLU	5	4	1	2	3
CUTW	5	5	0	1	4
HKBU CIE	4	3	1	2	2
HKCC	27	22	5	13	14
HKU SPACE CC	40	37	3	16	24
<b>Total</b>	106	93	13	47	59

Note:

CCCU: Community College of City University

CCLU: Community College at Lingnan University

CUTW: The Chinese University of Hong Kong – Tung Wah Group  
of Hospitals Community College

HKBU CIE: College of International Education

HKCC: Hong Kong Community College

HKU SPACE CC: HKU SPACE Community College

### Questions prepared for Interviews

1. Please describe your reasons for pursuing further study. What motivated you?
2. Do you think the AD programme is useful in helping students prepare for further study?
3. Do you think the AD programme is useful in helping students prepare for employment?
4. Do you think the AD curriculum is effective in enabling students to acquire basic competency in generic skills essential for further study and employment?
5. How did you manage group projects or group assignments during your AD studies?
6. Did you conduct any research during your AD studies? If so, how did you carry out the research tasks?
7. In what ways did the AD programme help you enhance your problem-solving, analytical, and critical thinking skills?
8. Do you think the AD curriculum has enhanced your communication skills in English, Chinese, and Putonghua?
9. Do you think the AD programme is effective in improving your skills in IT application?
10. Do you think the AD curriculum has enhanced your skills and enthusiasm for learning?
11. Did the AD programme provide you with a strong foundation for future learning and development?
12. Do you feel, in learning these generic skills, you had sufficient practice in using them so you could apply them proficiently in a practical setting, either in academic study or at work? Give examples.

## Biographic data of six interviewees

### 1. Biographic data of UG 1:

Pseudonym:	UG1
Date of interview:	The interview was held on 28 August 2014.
Biographic data:	At the time of interview, UG1 is 29 years old. Gender: female.
Associate Degree programme/ Institution attended:	UG1 had completed the Associate Degree in Business (Accounting) programme provided by the HKU SPACE Community College. She graduated in year 2008.  The HKU SPACE Community College, being the self-financed continuing education unit of the University of Hong Kong (HKU), offers Associate Degree (AD) and Higher Diploma (HD) programmes for senior secondary school leavers.
Further studies/ Employment:	UG1 worked hard to become a university student to fulfil her parents' expectations. Like many, her parents believe that a degree is a ticket for good job and high salary in Hong Kong.  With good GPAs, UG1 had achieved articulation opportunities to further study at an UGC-funded university.  HKU admitted UG1, to continue her studies for a bachelor degree programme in Information Management.  Through the senior-year entry arrangement, UG1 enrolled in Year 2 of the three- year degree programme. She studied in HKU for 2 years from 2008-2010 and attained her bachelor degree with a second-up honour.  UG1 worked at the IT field upon graduation from HKU. She started working as a graduate trainee at a telecom company. Subsequently, UG1 changed to work as an Information Management officer at a hospital group.  At the time of personal interview, UG1 had enrolled for a part-time Master degree programme in psychology. She wants to learn more about psychology even though it is not job-related. She explained that the AD programme has helped her to develop an interest in learning new thing.

## 2. Biographic data of UG 2:

Pseudonym: UG2

Date of interview: The interview was held on 5 September 2014.

Biographic data: At the time of interview, UG2 is 28 years old.

Gender: female.

Associate Degree programme/ Institution attended: UG2 had completed Associate Degree in Business (Business Management) provided by Hong Kong Community College.

She graduated in year 2009.

The Hong Kong Community College (HKCC), being the self-financed continuing education unit of the Hong Kong Polytechnic University (HK Poly U), offers Associate Degree (AD) programmes for senior secondary school leavers.

Further studies/  
Employment: UG2 is the youngest child in her family. Her elder brother and sister all did well academically. They went straight to universities after the A-Level examinations. UG2 felt that she was not so clever as her brother and sister. She worked hard but she could not get in due to her poor A-Level examination results. She enrolled in the AD programme since it provides her with a second-chance of getting into university.

With outstanding academic results during her AD studies, HK Poly U admitted UG2, to continue her studies for the bachelor degree programme in Investment Science.

Through the senior-year entry arrangement, UG2 enrolled in Year 2 of the three- year degree programme. She studied in HK Poly U for 2 years from 2009-2011 and attained her bachelor degree with a second-up honour honour.

UG2 was recruited by government upon her graduation from HK Poly U. She is working as an Assistant Officer at the Census and Statistics Department of Hong Kong Government.

UG2 has enrolled for professional examinations in statistics as she would like to enrich her job-related knowledge.

### 3. Biographic data of UG3:

Pseudonym: UG3

Date of interview: The interview was held on 2 November 2014.

Biographic data: At the time of interview, UG3 is 26 years old.

Gender: female.

Associate Degree programme/  
Institution attended: UG3 had completed the Associate Degree in Business Administration (General Management) provided by Community College of City University.

She graduated in year 2010.

The Community College of City University (CCCU), being the self-financed continuing education unit of the City University of Hong Kong, offers Associate Degree (AD) programmes for senior secondary school leavers.

Further studies/  
Employment: UG3 had acquired articulation opportunities to further study at an UGC-funded university.

The Hong Kong Polytechnic University (HK Poly U) admitted UG3, to continue her studies for the bachelor degree programme in Accounting.

Through the senior-year entry arrangement, UG3 enrolled in Year 2 of the three- year degree programme. She studied in HK Poly U for 2 years from 2010-2012 and attained her bachelor degree with a second-class honour.

UG3 worked in the accountancy field since she completed her bachelor degree programme at Poly U.

At the time of interview, UG3 has enrolled for the professional examinations of Accounting. She would like to become a Certified Public Accountant and thus need to pass all professional examinations with years of relevant experience in the accounting field.

#### 4. Biographic data of SF1:

Pseudonym: SF1

Date of interview: The interview was held on 1 December 2014.

Biographic data: At the time of interview, SF1 is 31 years old.

Gender: male

Associate Degree programme/  
Institution attended: SF1 had completed the Associate Degree in Business (Finance) programme provided by the HKU SPACE Community College.

He graduated in year 2008.

The HKU SPACE Community College, being the self-financed continuing education unit of the University of Hong Kong (HKU), offers Associate Degree (AD) and Higher Diploma (HD) programmes for senior secondary school leavers.

Further studies/  
Employment: SF1 pursued further study upon AD graduation. He opined that a bachelor degree would improve his career options. Also, a first degree is a pre-requisite for enrolment in professional examinations. As part of his career plan, SF1 wants to get a degree first, then take the professional examinations.

He had applied for UGC-funded bachelor degree programme but did not receive any offer. As such, he enrolled for a 2-year full-time self-financed top-up bachelor degree programme with a major in finance and investment from 2008-2010.

SF1 works in the banking and finance sector since he completed the top-up bachelor degree.

He did not see great differences in salary package between UGC-funded vs self-financed graduates in the bank he worked at. SF1 took the view that the remuneration in finance sector is largely related to sales performance and customers' satisfaction.

SF1 had enrolled for licensing examinations in securities trading and insurance sales as these are relevant to his job. He would like to study for a master degree in Finance but he often needs to work over-time. Thus, he did not proceed with his plan.

At present, SF1 has been promoted as the assistant Global Business Manager at an international bank.

## 5. Biographic data of SF2:

Pseudonym: SF2

Date of interview: The interview was held on 2 January 2015.

Biographic data: At the time of interview, SF2 is 30 years old.

Gender: male

Associate Degree programme/  
Institution attended: SF2 had completed the Associate Degree programme in Business (Marketing) provided by Hong Kong Community College.

He graduated in year 2008.

The Hong Kong Community College (HKCC), being the self-financed continuing education unit of the Hong Kong Polytechnic University (HK Poly U), offers Associate Degree (AD) programmes for senior secondary school leavers.

Further studies/  
Employment: SF2 has aspirations for university study as he cherished the campus life as well as the 'status symbol' of having a bachelor degree.

He longed for studying at an UGC-funded university. However, his GPA result was not very outstanding. He applied but did not receive any offer for articulation to government-funded bachelor degree programmes provided by the local universities.

To attain his bachelor degree. SF2 resorted to enrol in a 2-year full-time self-financed top-up bachelor degree in marketing and management from 2008-2010.

He expressed that the marketing concepts taught in the AD programme interested him. He wanted to learn more as the subject sound very fascinating to him.

SF2 started as a graduate trainee at an international advertising agency upon graduation from the top-up degree programme.

At present, he works as a Marketing Manager at a luxurious fashion house.

SF2 reflected that he really likes the field of marketing as he can learn a lot of new ideas and meet clients from all part of the worlds.

### **Biographic data of SF3:**

Pseudonym: SF3

Date of interview: The interview was held on 10 January 2015.

Biographic data: At the time of interview, SF3 is 30 years old.

Gender: female

Associate Degree programme/  
Institution attended: SF3 had completed Associate Degree in Business Administration (Financial Services) provided by Community College of City University.

She graduated in year 2009.

The Community College of City University (CCCU), being the self-financed continuing education unit of the City University of Hong Kong, offers Associate Degree (AD) programmes for senior secondary school leavers.

Further studies/  
Employment: SF3 went to work as a bank teller at a local bank upon her AD graduation.

SF3 did not apply for any full-time bachelor degree programme (UGC-funded or self-financed) due to family reason. Her parents had already retired. SF3 needs to work for self-subsistence.

After 1 year working, SF3 enrolled for an 18-months part-time self-financed bachelor degree programme in banking and finance jointly offered by the continuing education unit of a government funded university and a British university.

She opined that people with lower qualifications have less of a chance to develop their careers than those with higher qualifications. Thus, she worked to accumulate saving to enrol for a part-time degree programme so to enhance her competitive power in the job market.

She continued worked at the banking sector after obtaining her bachelor degree. Subsequently, she was promoted to the position of Relationship Manager at the same bank.

SF3 has been working at different branches of the bank. The inter-personal skills that she learnt from AD helps me to survive working in different departments Apart from the bachelor degree studies, SF3 also enrolled for the licensing examinations for securities trading and insurances sales as these financial activities are relevant to her job.



## Transcript of Interviewee

Date of Interview: 28 August 2014

Interviewee: UG1

Researcher: R

R: Please describe your reasons for pursuing further study. What motivated you?

UG1: "I don't think just an associate degree is good enough for career development. For good jobs, employers demand a degree as the minimum requirement. A degree is the basic level required to survive in Hong Kong."

"Also, I want to become a university student to fulfill my parents' expectations. Like many, my parents believe that a degree is a ticket for good job and high salary in Hong Kong. They are not well educated but they work hard to support my tuition fees and daily expenditures."

R: Do you think the AD programme is useful in helping students prepare for further study?

UG1: "The setting of the AD programme is very similar to degree studies in universities. I have the option to choose my specialism subjects and decide on my major. After lectures, there are tutorial classes. We use the same textbooks as the ones used in universities. AD students are quite prepared for university life."

"I got the chance to study subjects like philosophy, sociology, psychology etc., which could only be found in undergraduate courses at universities. At the start, I did not like these subjects as they were too abstract and theory-based. Gradually, I picked up the knowledge and became aware that these subjects helped me to develop a new way of thinking."

R: Do you think that the AD programme is useful in helping students prepare for employment?

UG1: "The College provided students with careers-counselling services. There were workshops that helped students prepare resumes for job applications and interviews. Also, some banks and big corporations came to the College to conduct recruitment talks. However, there were not many vacancies available. In particular, not many internship or summer jobs were provided".

R: Do you think that the AD curriculum is effective in enabling students to acquire basic competency in generic skills essential for further study and employment?

UG1: “The AD programme provided me with a good training in generic skills. The group project work required me to work with others to build up good communication skills. Often, there are no right away answers in textbooks to answer the case study questions. Thus, I need to conduct research to collect information. In retrospective view, such training in generic skills help a lot during my university study”.

R: How did you manage group projects or group assignments during your AD studies?

UG1: “Basically, I prefer individual assignment since I can control my own work. However, for complex problem-based learning projects, I would say that group work is better. For example, when working on a group basis, each member can share the workload and focus on the part that he/she can do best. You may also learn from others and get wider insight and ideas, which may be very different from your line of thinking”

R: Did you conduct any research during your AD studies? If so, how did you carry out the research tasks?

UG1: “We learnt about research skills during our English class. The computer course in Information Management also taught us how to use the Excel programme to analyse data. Actually, we did a lot of research works during our AD studies. Most often, we would browse the internet to find information. We might also make use of questionnaires or personal interviews to collect data if teachers required us to do so.”

R: In what ways did the AD programme help you enhance your problem-solving, analytical, and critical-thinking skills?

UG1: “A lot of case studies were included in our course-work. For example, in analysing the corporate strategies of a public listed company, we cannot just replicate all the information from the annual report. We need to decide which set of data to retain and how we can make use of this information to formulate our answers. Even worse, we are always running out of time to write-up the report.”

“Also, some teachers required us to study articles which imparted divergent views on some contemporary issues, for example, should Hong Kong build a new waste incinerator in an outlying island. We need to analyse the arguments of each opposing view. It is not a straightforward task as we needed to see things from different views.”

“Actually, learning how to think is very important. The training on thinking process helped me to survive in the work place. Our bosses always suggested new projects and required the staff to give ideas and prepare feasibility reports. I just tried to think and reflect quickly what I know.”

R: Do you think that the AD curriculum has enhanced your communication skills in English, Chinese and Putonghua?

UG1: “In every semester, we need to attend English classes. Teachers taught us grammar rules, vocabularies, and presentation skills, etc. The teaching was useful. We could ‘transfer’ what we learnt in English classes when doing report writing and presentations in other courses. In English classes, we also learned how to write resumes and personal statements. What we learnt was something very useful for job and university applications.”

“I did learn some Putonghua in AD studies. However, I did not use much Putonghua in my job.”

R: Do you think that the AD programme is effective in improving your skills in IT application?

UG1: “I studied Information Management course during my AD studies. The teaching of the computer concept and software skill was very useful. I learnt how to use the excel programme to do financial calculations and draw graphs. I also used the word programmes to prepare my assignments. I used what I had learnt in the IM course to do research and projects work in other courses.”

“I applied for the Information Management degree course in HKU largely due to the reason that I found the computer course in AD programme practical. I believe that the future economy would be technology-led. A lot of job opportunities exist.”

R: Do you think that the AD curriculum has enhanced your skills and enthusiasm for learning?

UG1: “Our teachers always use real life examples to explain theories and principles. I was taught how to look at things from different angles. For complex issues, I should not immediately jump to conclusions.”

“I needed to do a lot of projects and case studies during AD studies. I found that my analytical skill has improved. I needed to think how I can apply my knowledge learnt in the course to resolve the unfamiliar problems presented in the case. No model answer or marking scheme is available.”

R: Did the AD programme provide you with a strong foundation for future learning and development?

UG1: “I have become more aware of my personal strengths and weakness as I always needed to work in groups during the AD programmes.”

“The AD programme has also helped me to develop logical thinking and research skills. I feel more confident to continue studies at

advanced level with more difficult contents.”

R: Do you feel, in learning these generic skills, you had sufficient practice in using them to apply them proficiently in a practical setting, either in academic study or at work? Give examples.

UG1: “I guess that I am quite adequately prepared for employment after the AD programme, though I immediately continued my further studies in a bachelor programme in HKU

“I would say that I become more mature after AD sties. I served as Student Ambassador in the Community College and was involved in a lot of extra-curricular activities. I needed to co-ordinate different activities and communicate with so many people, including students, teachers, and people outside the College, e.g., the companies or organizations that sponsored that events. Sometimes, I felt very tired. However, I really learnt how to work with others and control my time.”

“Throughout the AD programme, I was required to join teams and submit group projects or assignments in various subjects. I needed to work with a diverse group of people as team-mates vary in different subjects. From one group to another group, I gradually built up my experience in handling team works. Now, I feel more confident to express my view even if my team members hold different opinions from me. Since I had previously worked with team-mates who did not pay effort in group work and just stayed as a ‘free-rider’, I gained better skills to deal with people who failed to pay a fair share in group-based projects in my company.”

“Currently, I have enrolled in a master programme to study psychology since I am interested in this subject. Actually, the subject of psychology does not relate to my job. Yet. the AD programme has helped me to develop interest in learning new things.”

## Definition of Terms

This section defines the key terms used in this thesis, including: Associate Degree (AD); Community College; Education Bureau (EDB); Education Commission (EC); Higher Diploma (HD); Higher education; Joint Quality Review Committee (JQRC); self-financing sub-degree; and sub-degree.

*Associate Degree (AD)* is defined as a programme whose objective is to equip students with sufficient generic skills and specialized knowledge/skills to enable them to perform effectively at a para-professional level, further their studies at universities, and/or pursue professional studies and employment in an administrative/managerial position at the entry level.

*Community Colleges* are kinds of institutions introduced to Hong Kong in 2000 as part of the education reform orchestrated by Education Commission. The Community College provide learners with an alternative route to higher education, articulates (to a certain extent) with university programmes, and offers a variety of learning opportunities to assist individual learners in acquiring the skills and qualifications needed to enhance their employability.

*Education Bureau (EDB)* is a government entity headed by the [Secretary for Education](#) that is responsible for formulating, developing, and reviewing policies and legislation in respect of education, from pre-primary to tertiary level, and for overseeing the effective implementation of educational programmes in Hong Kong.

*Education Commission (EC)* is an organ set up in 1984 as a non-statutory body to advise the government on the overall development of education, in light of community needs.

**Higher Diploma (HD)** is an educational qualification that equips students with the necessary technical and professional knowledge and skills, via the blending of theoretical knowledge and practical application, to enable them to pursue a career in a specific field. A substantial proportion of HD curricula consists of specialized contents (e.g. learning related to concentrations, disciplines and professions, vocational skills, etc).

**Higher education** is in the context of this study, a sub-set of post-secondary education, and refers generally to degree and above qualifications.

**Joint Quality Review Committee (JQRC)** is an independent corporate quality assurance body established in August 2005 by the Heads of Universities Committee (HUCOM) of Hong Kong, constituted by the eight institutions under the aegis of the University Grants Committee (UGC). Its major function is to provide for peer review of the quality assurance processes of the self-financing sub-degree programmes of these institutions.

**Self-financing Sub-degree** is an academic programme at the sub-degree level, awarded in the post-secondary education sector, for which the institution receives no recurrent government funding.

**Sub-degree** is an academic qualification below the degree level; for example, Associate Degree (AD) or Higher Diploma (HD).