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The Role of Teacher Identity on Using Formative Assessment to Support the Learning of Students with ASC in Mainstream Classes

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Abstract

At the centre of this study is the question of the role of teacher identity in how formative assessment (FA) methods are used to support the learning of students with Autism Spectrum Conditions (ASC) in mainstream classes. To address this question, a qualitative case study was conducted with 6 teachers, 6 teaching assistants and 4 students with ASC in two primary mainstream schools in England. In this case study, interviews, observations and documents were used as the data collection method, and consequently, the thematic inductive analysis method was employed in the analysis of the data.

Findings suggest that teacher identity is influenced by three main factors, and these factors directly and indirectly affect teachers' formative assessment practices while teaching students with ASC. The first category is personal factors; teachers are influenced by their biography, emotions, self-esteem and role conflict in forming their teacher identities. The second category is contextual factors that relate to policy, school context and school leadership and are part of school culture. These factors significantly affect and shape teachers' pedagogy and assessment practices. The last category is professional factors, including teaching experience, collaborations, pedagogical content knowledge, curriculum and assessment. From these findings, it is understood that teachers and teaching assistants recognise the importance of inclusive education and the use of formative assessment, and despite the many difficulties they encounter, teachers and TAs support the education of students with ASC in mainstream settings. Teachers consider formative assessment to be a flexible and effective way to reach the student with ASC and follow the learning journey.

Overall, this study demonstrates why teachers use formative assessment, the link between their identity and formative assessment, and how students with ASC respond to these methods. For this reason, the research findings are important in suggesting that teachers and teacher assistants should develop awareness of the power of their identity, inform parents about their supporting roles in the assessment process, inform the school leaders of how to prepare a more confident learning and teaching environment for teachers and students, and lastly, give an idea to policy makers about preparing an assessment policy that should include detailed information about formative assessment in a mainstream environment.

This thesis is dedicated to my kids; Emir Eymen & Kayra Yagiz who travelled with me in this long journey.

And...

To memory of my late father who always supported me to read more, think more, live more.

You could not see but

I DID IT DAD!

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List of Abbreviations

TI	Teacher Identity
FA	Formative Assessment
ASC	Autism Spectrum Conditions
SEND	Special Educational Needs and Disability
IE	Inclusive Education
TA	Teaching Assistant
PCK	Pedagogical Content Knowledge
AfL	Assessment for Learning
SA	Summative Assessment
SIT	Social Identity Theory
SCT	Sociocultural Theory

CHAPTER 1

INTRODUCTION

I think one of the most important things to do before starting to describe a research project is to explain the relationship between the researcher and the research. Thus, by revealing how this adventure has arisen, sense can be made of all the stages that are explained later. For me, the emergence of this research started with the day I chose teaching as a profession and continued through three stages. The first stage influenced why I conducted my research by focussing on students with Autism Spectrum Conditions (ASC) in mainstream classes, the second stage, sparked my interest in the association with this group of students and formative assessment (FA), and the last stage led me to including teacher identity (TI) in this whole process.

1.1 First Personal Inspiration: Why Students with ASC in Mainstream Classes?

When I started teaching at a mainstream primary school, my class had 15 students in total, including 3 students with Special Educational Needs and Disability (SEND). This number of students was an opportunity for me because I did not have any help in the classroom, and I originally thought that I could be more effective with fewer students. As time progressed, I realised that I was acting as if there were only 12 students in the classroom. I could not find the time to deal with my SEND students. I was just trying to prevent them from breaking the discipline in the classroom. The fact that I took only 10 hours of inclusive education (IE) at university, that I had no experience in practice, and that I could not get the necessary support in the school environment, prevented me from doing effective work with these children.

The following year (2008), another SEND student joined my class. This student had ASC and was non-verbal. Interestingly, many parents insistently stated that they did not want that child to be in this class and neurotypical children did not want to sit next to them. I did not understand why there was such a particular prejudice against a student with ASC because ASC was a new term in Turkey, and I was quite unfamiliar with it. There are many similar examples of SEND students in classrooms in many cities in Turkey and there are differences of opinion among teachers about the education of students with ASC in mainstream classes. Some think that SEND students have a right to study in the same class with neurotypical students, while others think it is just a waste of time and brings extra responsibilities. What was it about ASC that scared people and why were these children treated differently from other disability groups?

How did children with ASC receive an education in other countries and how were problems overcome? When I was doing my master's degree, in the UK, I came to the conclusion that teachers faced some difficulties when teaching SEND students in mainstream classes (Aslantas, 2017), but my research did not specifically cover students with ASC. The questions which I could not answer then, has led to my research being specifically focussed on students with ASC being educated in mainstream classes.

1.2 Second Personal Inspiration: Why Formative Assessment?

In my years as a student at university, I learned that there are many assessment methods and when these methods are used effectively, they play a key role in evaluating the academic achievements of students. However, when I started teaching, I experienced that the gap between theoretical knowledge and practical applications did not actually allow the use of many methods. For example, the fact that, within the Turkish educational system, a student with a SEND diagnosis cannot be assessed, marked as fail formal assessments or repeat a class has been a strong factor that prevents teachers from using the summative assessment (SA) method or similar methods with these students. This situation causes teachers to be divided into two groups. While one group of teachers keeps reports on their academic and social competence, without subjecting SEND students to any assessment method, the other group prefers assessment methods that are more flexible and follow the teaching and learning process. As I was among the second group of teachers, I followed the progress of SEND students using FA methods because I believed that assessment is an effective method for learning and improvement.

After a student with ASC joined my class, I developed the point of view that it is not ethical to evaluate them for a limited period of time, focusing on specific goals that leads to success or lack of success accordingly. There was a problem in the implementation of FA: there were many FA methods and there were many types of ASC, but the guidance of FA did not contain the necessary guidance on which method could be used for which students and how to implement them. This situation made me feel unsupported and I had to make decisions on my own. The difficulties I encountered triggered my desire to learn how to use FA methods to support students with ASC in mainstream classes, thus, adding a new dimension to my research.

1.3 Third Personal Inspiration: Why Teacher Identity?

When I started my PhD, I was certain that I would investigate how students with ASC in mainstream classes are evaluated using FA. However, as a result of months of reading and discussions, I was aware that there was a missing point in my research, but I could not find what exactly it was. I concur with Albert Szent-Gyorgyi (1957, p.57) who stated, "Research is to see what everybody else has seen, and to think what nobody else has thought". Therefore, while critically examining the literature, I tried to find the invisible behind what had been seen by looking more critically at my teaching years and the methods I used. Although I and my colleagues used the same methods, our presentation style was different. Since I believe that students can learn through and with their social environment, I shaped my teaching methods and made decisions to choose assessment methods accordingly. Other teachers preferred to use methods based on their impressions of students' behaviour.

In these circumstances, how do teachers determine their methods, what factors influence their choices and why do they differ when teaching students? All these questions showed me that all the experiences of teachers from the moment they are born until the day they enter the classroom made them unique, and therefore they had different approaches within the classroom. In other words, teachers have identities that are constantly evolving and changing, and this identity directly affects all kinds of communication with students (Keiler, 2018). Therefore, when I realised that the identity of the teacher has an undisputed role in how assessment and teaching methods are used, I saw that this was the missing part of my research. I, therefore, added this aspect to my final research.

1.4 Aims and Research Questions

The main purpose of this study is to examine the role of TI in how FA is used to support the learning of students with ASC studying in mainstream classes. TI is influenced by many factors, and it is obvious that this identity has an effect on the assessment methods used. However, the inclusion of issues such as how this effect occurs, and how it influences the use of FA methods, contributed to the development of the main research objective. Other objectives identified for this research are as follows:

- To understand the perspectives of teachers in mainstream education.
- To examine the attitudes of teachers towards students with ASC studying in mainstream classes.

- To understand the link between what and how FA methods are used in the educational processes of students with ASC and teachers' identity.

The main research question that addresses these goals is:

"What is the role of teacher identity on how formative assessment is used to support the learning of students with ASC?"

The sub-research questions are as follows:

1. What are teachers' perceptions of working in mainstream classes?
 - What are the barriers to progress?
 - What is the impact on teacher identity of teaching in mainstream classes?
2. How are children with ASC educated and supported in mainstream classes?
 - What are the barriers to progress?
 - What is the impact on teacher identity of teaching students with ASC?
3. How do personal, professional and contextual factors influence teacher identity?
 - To what extent does teachers' identity influence their practice, ability and perceptions when teaching students with ASC?
4. What do teachers know about the use of FA methods to support the learning of students with ASC?
 - What kind of FA methods are commonly preferred by teachers of students with ASC?
 - How do students with ASC respond to FA?
 - Are the assessment methods used by teachers to support students on the ASC any different to those used with other students?

1.5 Significance of the Research

This research, which brings together mainstream classes, students with ASC, FA, and TI, is important in many ways. When previous studies were examined, it was seen that each of these components was considered individually or in certain groupings, and they contributed to the literature in this respect. For instance, Black and Wiliam (1998, 1998a, 2002, 2003), two of the most important names in the FA field, investigated this issue together with teacher practices and other assessment methods; while Day (2006, 2007, 2011, 2014), one of the most well-known researchers of TI, researched TI together with teacher practices. Wilkinson (2010), on the other hand, pointed out that there is no study that associates students with ASC with FA

strategies, and drew attention to this in the literature. Aidonolopua-Read (2017) conducted a study on the use of FA with students on the ASC, but this study was conducted in a special school and did not mention the identity of the teacher. However, with this research, I bring together four different and important research topics and consider the interconnectivity of them all and the key role played by the identity of the teacher. The existing lack of knowledge about the impact of the identity of teachers who utilise FA when they encounter a complex situation, such as ASC in mainstream classes, demonstrates a large gap in the literature. In this respect, this research is important in that it brings a unique perspective and new knowledge to the literature.

This research is also very important in terms of reviewing assessment policies. The findings of this research are a resource that will enable policy makers to recognise the deficiencies of guidelines in the use of FA methods and school assessment policies. Thus, the tension between policy makers and policy practitioners will be reduced, contributing to a better-quality assessment process.

This research is also important in that it can be a guide for educators (teachers, TAs). Thanks to this research, teachers and TAs can become aware of all the factors that affect their teacher identities and understand how these factors also effect the methods they use. Therefore, they may gain a new critical perspective on their effective use of FA methods and the needs of students with ASC.

Finally, this research is important to me as a researcher and as a teacher. This research will give me a great opportunity, as a researcher, to be the voice of students with ASC, to illustrate the reality of inclusion classes, and to convey the role and impact of FA in the Assessment for Learning (AFL) process. I will also be able to highlight the invisible aspects of teachers, explain that all of their lives have an impact on the teaching methods they use, and emphasise the importance of TI. As a teacher, this research is also very emotionally important to me.

1.6 Structure of the Thesis

This research consists of eight chapters and each chapter is a continuation of the previous one. All stages of this research, which I call *a long journey*, are included in the figure below.

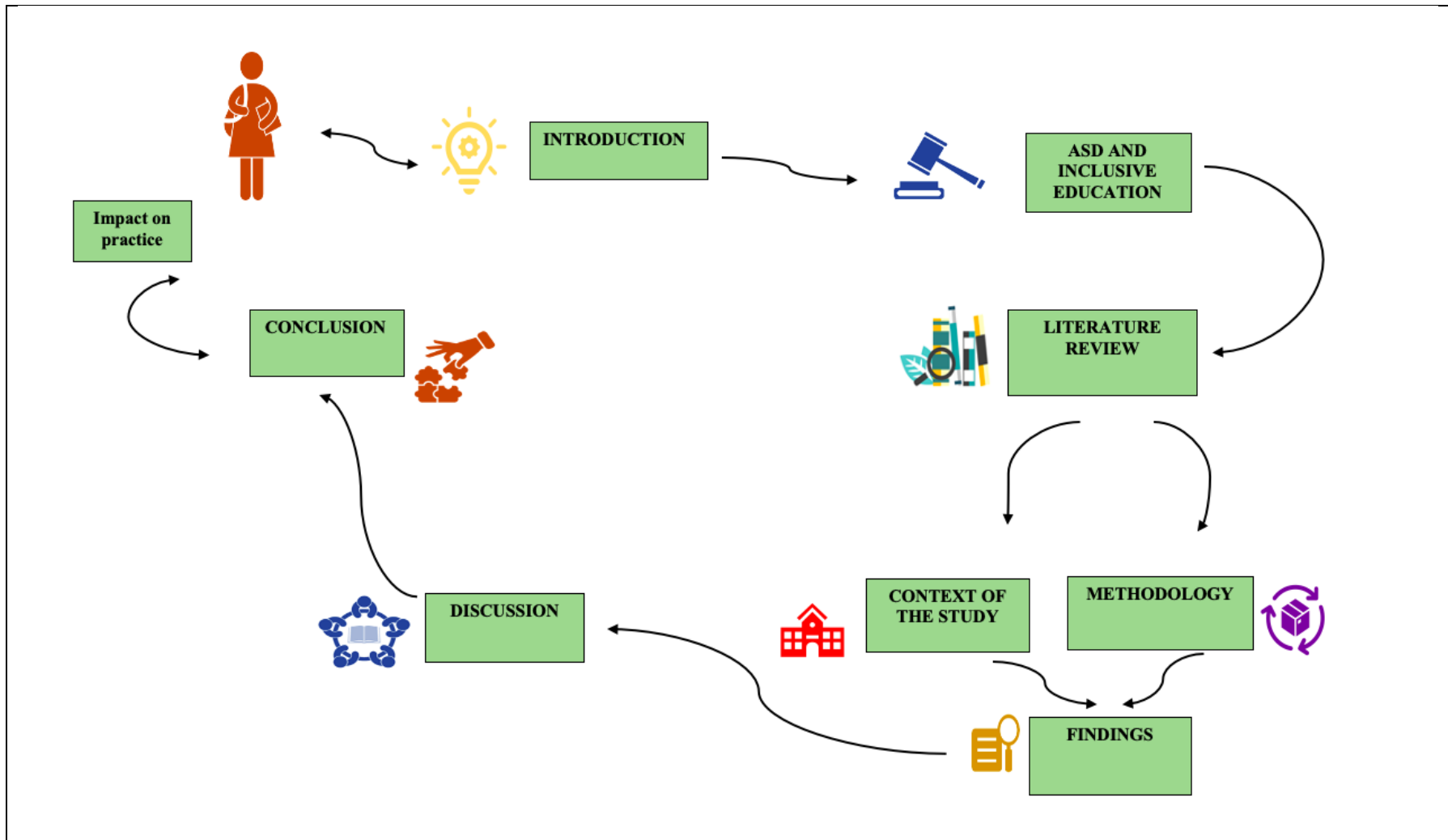


Figure 1.1 A Teacher's research journey

The introduction section, in which the research subject is outlined, and the role of the researcher explained, constitutes the first part of this study. In this section, the aims of the research have been stated and the research questions formed accordingly are included. In addition, why the research is important was comprehensively discussed.

In the second chapter of the study, the general characteristics of IE, the English IE system and the politics that shaped that will be explained within the framework of ASC. In this way, a background will be created for the topics that will be discussed in the literature review.

The third chapter is a literature review in which I present and summarise previous studies on the research subject and bring together all research topics that seem independent of each other. Within the literature review, recent and up to date research in the field will be provided, as well as historical, seminal research.

Within the methodology chapter, the fourth chapter, the researcher's ontological and epistemological approach, and therefore, detailed descriptions of the preferred research approach and methods are included. In addition, important points such as the ethical rules within which this study was conducted, the criteria for validity and reliability, and the analysis method used will be presented.

The next chapter is the findings chapter. It will be divided into two sections: context of the study and results. In first section, the schools where the research was conducted, the general structure of the classes and the participants will be introduced, so that a general idea about the research environment will be given. In the second section of this chapter, the results obtained from the analysis of the research data will be presented, and the attitudes of the participants to the subject will be exemplified by their statements, thus the voice of the participants will be heard.

In the discussion section, the research findings will be compared with the literature, and the research questions will be answered by addressing the different or compatible aspects of this research with the literature. This section will also present a multi-faceted perspective of researcher.

In the last part of the research, the conclusion, a short summary of the research will be made, and then the contribution of the research to literature and its practical applications will be

described. Finally, the limitations of this study will be discussed, and recommendations made for future research.

CHAPTER 2

THEORETICAL FRAMEWORK

Introduction

The theoretical framework is the "plan" that constitutes the philosophical, epistemological, methodological, and analytical structure of the whole thesis research. Eisenhart (1991) defined a theoretical framework as "a structure that guides research by relying on a formal theory/theory...constructed by using an established, coherent explanation of certain phenomena and relationships" (p. 205). Therefore, the theoretical framework consists of selected theories that support relevant considerations of how the research topic is understood by the researcher and how the roadmap is planned.

With each research topic, the theories are re-examined and blended other than by testing their suitability for new research topics and research method. In other words, theories also play a guiding role in the stages of data collection, analysis, interpretation, and presentation of results, as they guide the researcher on how to proceed. Kuada (2012) points out that "Theory provides the language, the concepts, and assumptions that help researchers make sense of the phenomenon that they seek to investigate. It enables to researchers to connect the issues they are investigating to the existing body of knowledge in the area" (p. 64).

However, due to the nature of some research and the scope of the research topic, a single theory may not be sufficient. In such cases, additional theories are needed so that the researcher can conduct more comprehensive research and the data can be analysed and presented in a more comprehensible way. Thus, the theoretical framework of the research is formed by bringing together more than one theory by the researcher.

In this study, while investigating the role of teacher identity on the formative assessment approaches used while supporting the learning processes of students with ASC in mainstream classes, three different theories, namely, Identity Theory (IT), Social Identity Theory (SIT) and Sociocultural Theory (SCT), were used. These theories have been applied in a way that will help us to understand and explain the different concepts of the research, the relationships between them and how they complement each other. Thus, all the stages from the data collection process to the presentation of the results were carried out within a plan, and both the researcher's roadmap was clarified, and a clearer research story was presented to the reader. In

this section, it is aimed to provide a basis for the other parts of the thesis by defining the above-mentioned three theoretical approaches that constitute the theoretical framework of the research.

2.1 Identity Theory

The constant interest in the concept of identity in recent years is based on the roles of individuals and their concerns for understanding, self-realization and acceptance in society. In general, it is seen that identity comes to the forefront as a concept that defines individuals in certain roles in society and as members of certain groups in society. However, when the concept of identity is examined in more detail, it is seen that individuals not only have the common features brought to them by their roles, but also exist as individuals with certain characteristics that make them unique from others. Therefore, it should be accepted that people have many identities in society (Burke & Stets, 2009) and these identities are shaped by being influenced by many internal and external factors.

Identity theory, which suggests the idea that forming a unique identity specific to individuals, was first brought to the literature by Stryker (1968). He focused on the idea that individuals can have different identity types, but the most important thing is to find the harmony between these identity types. In other words, IT focuses on the identity phenomenon, which makes individuals unique. In this study, while examining teacher identity and the factors affecting it, the predictions and purposes of IT were used, thus shedding light on the role of teacher identity on practices.

The primary purpose of IT is to determine how the factors affecting identity interact and how they are managed by individuals. Specifically, identity theorists focus on how identities relate to one another, as well as how identities relate to role performance or behaviour and emotions.

According to IT, identities define who a person is, based on their roles and personal characteristics. For example, a teacher's role as a teacher in the classroom is actually formed by the influence of his/her other identities as an individual. In other words, it is not possible to understand the identity of the teacher by separating the teacher from his private life, personal characteristics, and feelings and thoughts about them. At this point, IT helps to illuminate the unique and personal aspect of teacher identity, for IT refers not only to the types of identity required by one's roles in society, but also to the ways in which a person develops within a socio-historically marked stream of activity. This means that the individual teacher identity is

partly a product of the themes, beliefs, events, and feelings brought about by their subjective experiences of the past, present, and future. Thus, the concept of identity is associated with a person's biography, values, and ethics. Because this identity includes the aspects of individuals that are less sensitive to change than other identities, it contributes to defining the personal aspects that affect teachers' professional identities (Jenkins, 2008). For this reason, the factors that are considered in the present study and that are believed to shape teacher identity are clarified with the help of IT. However, in order for all the literature resources, data and findings to be presented in the future to find their place in IT, the key concepts of this theory should also be defined and its connection with teacher identity should be clarified.

2.1.1 Key Concepts in Identity Theory

Identity theory includes six important concepts. Each of these concepts is helpful in illuminating the concept of complex identity by guiding theorists in the process of formation and continuity of individuals' identities.

2.1.1.1 Identity

Making a clear and comprehensive definition of identity is the first and decisive concept of IT. Although many definitions on this subject are made in the relevant literature, the most general definition of identity can be described as the whole of the signs, qualities and characteristics that are unique to human beings as a social being, and the conditions that enable someone to be a certain person. In fact, according to Stryker (2002), identity is the whole meaning of a person's perceptions of the groups they belong to, the roles they acquire in the social environment and how they see themselves. From this point of view, a teacher's role as a teacher in society, being a member of the education community, and who they are in their individual life, is the meaning of their whole life.

2.1.1.2 Verification

Another important concept of IT, verification, is a situation where there is a parallel between how a person sees himself and how others see him (Burke & Stets, 2009). According to IT, a person being able to verify his identity and make this identity subjective, takes place around a cycle consisting of five stages. Since the basis of the current research is focused on teacher identity, this perceptual control identity cycle will be explained by giving examples from teachers.

- 1.** *Identity standard* is a meaning that teachers associate with their own identities.

2. *Perceptual input* is the perceptual input of meanings about the self in a situation, including how teachers see themselves and the feedback they receive from others.
3. *The comparator* is a process that compares the perceptual input meanings of the teachers with their internalized identities and the meanings they ascribe to them.
4. *Emotions* are the feelings that arise from the correspondence between the perceptual input obtained by teachers through the feedback they receive from their students and the standard meanings of identity. If the compatibility between the two concepts overlaps with each other, it causes positive emotions in teachers, and if it does not, it causes negative emotions.
5. *Output* is the last stage of the teachers' identity verification process. At this stage, positive behaviours are observed in teachers who have verified their identity with positive emotions, while negative behaviours are observed in those who show inconsistency in identity verification.

How does the identity verification process take place when it is thought that a teacher has more than one identity? The answer to this question was given by James (1890), together with the idea of multiple identities. According to James, individuals have multiple identities, and the authentication process occurs when multiple identities are activated and internalized. For example, if the teacher has the role of both teacher and mother, it may be possible to emerge both identities in a situation. Thus, activating the teacher identity makes it easier to revive the mother identity as well.

2.1.1.3 Salience

Considering the situation of the teacher mentioned above, in such cases where there are multiple identities (IT argues that everyone has multiple identities), the concept of salience comes to the fore. According to IT, salience refers to those identities that will become more prominent within many identity types. Stryker (1968, 2002) called this situation identity salience. For example, whichever of the personal, contextual, or professional identity types is more dominant and prominent in a teacher's classroom, is related to the teacher's commitment to that identity type. It is not surprising that a teacher who sees himself as a field expert and whose educator-evaluator aspect is dominant, conducts studies on this subject in the classroom. On the other hand, a teacher who has special education experience and who can identify the direction of being a mainstream teacher with his professional identity is also more likely to

want to work in these classes and to tend towards that. In other words, as the state of attachment to identity types feels complete, the identity becomes more prominent (Stryker, 2002).

2.1.1.4 Commitment

According to IT, commitment represents the bond that people establish with an identity in interactional and emotional dimensions (Stryker & Serpe, 1994). As a result of the individual having a certain identity, it is thought that the higher the number of people he interacts with and the prevalence of interaction with these people, the more the commitment to this identity increases (Adler & Adler, 1989). For example, because teachers frequently interact with their students, a bond forms between them regarding the role of the teacher and this identity. However, the positive or negative emotional dimensions of this bond are determined by the feedback they receive from the students. If teachers who have positive feelings about their identity confirm these thoughts with the feedback they receive from their students, an emotional bond with the teacher's identity is formed and they show a higher emotional commitment to this identity.

2.1.1.5 Centrality/Prominence

As stated before, according to IT, individuals have more than one type of identity, and in fact, the important thing is to ensure the harmony of these identities with each other. McCall and Simmons (1978), on the other hand, mention that there is a hierarchy of importance in the harmony of identities. These factors are the internal and external motivations of individuals, their commitment to identity type and the support provided by their subjective experiences. For example, other roles (writer, painter or athlete) that a teacher has outside of the teaching profession may be prominent and may have an important place in their identities. But the question of which of these roles is more central to the teacher's identity is all about which one the teacher internalizes and gives weight to. As a matter of fact, Stryker and Serpe (1994) focused on the relationship between salience and centrality/importance, emphasizing that although these concepts are theoretically different, they complement each other in IT.

2.1.1.6 Bases of Identities

The last concept that IT deals with concerns bases of identities. The foundations of IT support the formation of personal identity. People form their personal identities with all the features that describe them as a unique individual. However, personal identity is also a part of a process in which the individual conveys traces of himself while playing certain roles within the group. In fact, the identities that people internalize, and all the features of this identity guide their

behaviours (Burke & Stets, 2009). Therefore, the idea that teachers' behaviours in the classroom, including their formative assessment practices, bear traces of their personal identities, is one of the main ideas of this thesis.

2.2 Social Identity Theory

Social Identity Theory, developed by Henri Tajfel and John Turner in the mid-1970s, is a social psychology theory that deals with group membership, group processes, and intergroup relations. According to the theory, there is a tendency for people to break up into groups and see themselves as members of a group and behave accordingly. Thus, by making a positive assessment of themselves, people can identify with the group they belong to and complete themselves.

As can be understood from this definition, SIT offers a related but different theoretical framework regarding the shaping of individuals' identities within the group and their reflection on their behaviours. Accordingly, social identities are different from personal identities and are the sense of who we are as members of different social groups (Jetten et al., 2012). Being aware of social identities and seeing ourselves as part of a group affects our thoughts, emotions and behaviours (Postmes et al., 2005). SIT includes all the factors that help us understand and explore these effects.

Social identity theorists have focused on three closely related basic concepts while explaining this theory, which they believe is different from individuals' individual identities: social identity, social categorization, and social comparison. In fact, it is very difficult to deal with and explain these concepts one by one because all of these concepts are intertwined and follow a cyclical process.

As was done in the previous section, in this section, in order to provide a better understanding of SIT, the three concepts mentioned will be exemplified through teacher identity, so that the connection between current research and theory will be understood.

2.2.1 Social Categorization

While SIT defines the social categorization process as the first stage of social identity formation, it also assigns it a central role (Postmes et al., 2005). Accordingly, when people are perceived as members of a social group rather than as individuals, their social identities emerge. For example, a teacher divides himself and other people into groups according to some criteria

and locates his own characteristics in the teaching profession and is included in this group. For this reason, according to SIT, it is assumed that as a result of the social classification process, the teacher has many characteristics of the teacher group of which he is a member. For this reason, SIT emphasizes the importance of the social environment in the process of identity formation and argues that social categorization helps to understand the social environment and thus guides human behaviour (Tajfel, 1978b).

2.2.2 Social Identification

According to Tajfel (1982), social identity is the part of an individual's self-perception that results from his knowledge of his membership in a social group/s, and the value and emotional significance he attributes to this membership. With this definition, Tajfel gives clues about how individuals' personal identities transform into social identities, because most of the research conducted in the field of defining social identity has tried to deal with the distinction between social identity and personal identity. However, identity theory argues that the behaviours, skills, attitudes, and thoughts of others are unique and therefore constitute our personal identity (Brown, 1988). Personality traits can survive in the social environment and can engage in self-completion efforts. However, there is a new type of identity that is formed by separating from personal identity in the social environment, and with this identity, individuals can perceive themselves as a member of a social group and as someone who has the characteristics of that group. The efforts of individuals to define themselves as a football player, a university student or a teacher are the result of this perception and adaptation process (Brehm & Kassin, 1993). In other words, an individual who defines himself socially as a teacher, creates his social identity because of all these definitions.

2.2.3 Social Comparison

The basic assumption of SIT is that people are motivated to make positive evaluations of themselves and thus raise their self-esteem, which also happens when people classify themselves and others (Turner, 1991). As a result of the classification process, the individual defines his/her social identity by being included in a meaningful group. Thus, individuals get to know themselves and gain confidence in the validity and applicability of their beliefs through social comparison. From this point of view, it can be said that the social comparison stage has a key role in the formation of a positive social identity.

When all the stages explained so far are evaluated, the link Tajfel established between social categorization, social identity and social comparison can be summarized as follows when

applied to teacher identity. Teachers determine their place in society with the social categorization stage. Thus, they place themselves in the teacher community and they can define their own social identity within this group. In order to stay in the teaching group and remain a part of this community, teachers strive for a positive self-acceptance of their profession. For this reason, they try to confront the teacher group by achieving satisfaction in their social selves through social comparisons. As a result of all these stages, as a part of the teacher community, they begin to acquire values specific to this group and to impose values and concepts on their identity. Thus, it is seen that teachers exhibit behaviours belonging to the teaching profession.

2.3 Sociocultural Theory

Lev Vygotsky's research in 1934 to understand the relationship between learning and social environment has been the source of inspiration for much research and theories in the field of cognitive development in the following years. However, the ideas derived from this study became the basis of what is now known as SCT. Vygotsky's SCT sees human development and children's learning as a social process that links cooperation with more knowledgeable individuals in society (Vygotsky, 1978). In this process, mental processes in the individual find their origins in social processes. So, "we are aware of ourselves, for we are aware of others, and in the same way as we know others; and this is as it is because in relation to ourselves, we are in the same position as others are to us" (Vygotsky 1978, 30), emphasizing that behaviour must exist socially before it becomes a part of the individual's internal behaviour.

Vygotsky's sociocultural approach has been a subject that is frequently emphasized, especially in the education and learning of children. According to Vygotsky (1978), learning carried out by the child takes place through social interaction, especially with teachers. The teacher can model behaviour and/or give verbal instructions to the child. Vygotsky refers to this as cooperative learning. The child tries to understand the actions or instructions provided by the teacher, then internalizes the information and uses it to guide or regulate his own performance. In fact, the reflections of the sociocultural approach in education can be considered from many perspectives, because education is a phenomenon that takes place in mutual interaction rather than being a one-sided concept. For this reason, the roles of the teacher, family, social environment and peers in the education of the child should be considered together within this concept.

Vygotsky defines this notion of togetherness as cooperation, is critical to understanding the real and potential development of the student. Vygotsky brought the concept of Zone of

Proximal Development (ZPD) to the literature in order to make these developments more understandable.

2.3.1 Zone of Proximal Development

Vygotsky introduced the concept of zone of proximal development to describe the difference between the actual development and potential development of the child. Accordingly, in actual development, the child presents independent problem-solving skills. If the child is engaged in an activity that is very difficult for him, he will be supported by an adult, or more talented peers to reach his potential developmental level.

When working within the ZPD, the teacher or a peer may need to create a structure for the student to acquire the skill that was initially slightly beyond their level. This structure, called scaffolding, provides a support system until the student completes the skill on their own. Thus, what the child can do cooperatively today, he can do alone tomorrow. Therefore, an effective type of teaching should be a process for maturation functions that precede and lead development (Vygotsky, 1962). Griffin and Cole (1984) tried to clarify the role of the teacher in this process during a teaching activity, and they found that the ZPD encompasses several task levels simultaneously, including both previous and subsequent steps. First, the teacher supports the child through social dialogue to help the child understand the new concept. Depending on the child's reaction, the teacher keeps the role flexible to ensure the child's participation in the activity. Finally, the teacher then assesses the amount of support needed for the child's self-regulation of the activity.

Vygotsky pointed out that teachers have a critical role in this process. The teacher can reduce the education process in many ways, making it suitable for the student and empowering the sociocultural education environment. For example, thanks to the play and objects used during teaching, children can interact with an object and express their ideas about it. Play is the source of the child's development and constitutes the ZPD as the child must act above his age and change his behaviour according to the rules of the game. During play, the child learns not only to regulate his behaviour, but also to recognize his movements and to understand that every object has a meaning.

All of the information explained above is important in terms of forming a basis for explaining the role of socio-cultural theory in children's learning, because how students learn, which factors affect the learning process of students with ASC, and ultimately the effect of teachers

and teacher identities in this process can be understood more clearly in line with the principles of socio-cultural theory. Therefore, a connection to be made between SCT and the learning of children with ASC will contribute to the clarification of the basis of this research.

2.3.2 Sociocultural Theory and ASC

As will be explained in detail in the literature, many children diagnosed with ASC spectrum conditions typically have problems in socialization and communication (Matson et al. 2014). Therefore, the ability to form social relationships needed to communicate with others is affected.

While neurotypical children need little motivation or guidance to play with their peers, children with ASC face significant barriers to equal access and benefit from peer play experiences. Without adequate outside support, they may close themselves off from the social environment and are deprived of coherent interactive play experiences that foster developmental growth and meaningful peer relationships (Wing & Gould, 1979). Whereas, Vygotsky emphasized the necessity of sociocultural learning theory, supporting the idea that people with disabilities should be included as active members of society through the use of different types of interventions to promote better social interaction and communication. Vygotsky's thesis on childhood development is this: "A child whose development is impeded by a defect is not simply a child less developed than his peers; rather he has developed differently...a child in each stage of his development, in each of his phases, represents a qualitative uniqueness, i.e., a specific organic and psychological structure; in precisely the same way a handicapped child represents a qualitatively different, unique type of development" (Vygotsky, 1993, p. 30).

As stated earlier, in Vygotsky's view, children are object-oriented and learn from interaction with the socio-cultural environment. In other words, children with ASC included in cooperative learning groups with the help of their teacher can improve many skills when they work with their peers. SCT is a concept based on the idea that a child's strengths and abilities should be tested and that these are different for each child.

Vygotsky was very aware of the limited social interactions experienced by children and youth with SEND and believed that many children with disabilities should be educated in mainstream schools rather than being segregated and then further separated from their natural interactions with their mainstream peers (Reiber & Carlton, 1993). Inclusive classes increase the opportunities for students with developmental disabilities to interact with students without

disabilities, improve their social skills, and maximize opportunities to meet and make friends with them.

For students with developmental disabilities, the opportunity to interact with and learn from neurotypical peers has been shown to be associated with measures of self-esteem, social skills, positive emotional and behavioural outcomes, and academic achievement (Alper & Ryndak, 1992). Therefore, it is very important to consider the social benefits of inclusion and the opportunities that inclusive classes provide for these interactions and to support children with ASC. However, the issue that should be emphasized here is what the role of teachers is in inclusive education environments recommended by SCT. Vygotsky always used the term talented teachers when talking about teachers in this process. The reason behind this is, of course, that it is necessary for students with ASC to receive a fair education with their peers and to have teachers who can use appropriate techniques to support their learning. Since sociocultural learning not only develops social skills directly, but also develops positive self-concepts through feedback and interactions. The interaction mentioned here is not just a one-sided concept that only the teacher undertakes and contributes to the development of the student. Similarly, it nurtures the identity of the teacher by contributing to the teacher's self-realization, professional satisfaction, and the formation of a positive self-perception in the student.

2.3.3 The Relationship of the Theoretical Framework with the Literature Review

The theoretical framework provides a basis for the literature review in this study. Each theory that constitutes the theoretical framework of this research, separately and as a whole, is a tool that helps to explain the effect of teacher identity on FA methods used in the process of supporting the learning of students with ASC. As is known, theories in qualitative research can be used as a framework to guide the study (Anfara & Mertz, 2015). Therefore, the literature review supporting this research and its relationship with theories can be summarized as follows:

1. The identity theory used in this study guided the researcher in examining the personal dimension of teacher identity and determining the related concepts. In this way, many personal dimensions of the teacher's identity, such as family, childhood, and student life were brought under the spotlight.
2. SIT, pioneered the research of social factors that help teachers to understand their identities within the teacher group.

3. The role of teachers in the teaching process, the scope of formative assessment, the place of inclusive classroom environments in the education of students with ASC, and the learning process of students with ASC have been examined in all aspects with the help of socio-cultural theory that guided the majority of the research.

In general, the three theories mentioned are supportive of each other and have determined the framework of the study by providing a basis for not only the identity of the teacher, but also the whole assessment process and the educational status of students with ASC.

2.3.4 The Relationship of the Theoretical Framework to the Methodological Choices and Data Analysis

While the theoretical framework gives direction to qualitative research, it forms the roadmap of the study by determining the research methods. In other words, the theoretical framework can also guide the research methods that the researcher chooses to use.

Currently, the use of theory in qualitative approaches,

1. clarifies epistemological trends,
2. defines the rationale behind methodological choices,
3. establishes theory as a result of research findings, and
4. includes a guide or frame.

The theories used in this study enable the adoption of qualitative research methods because of their closeness to a humanistic approach and their connection with the epistemological view of the researcher, allowing for deeper research. Among these methods, the case study method was preferred to examine the identity of the teacher, by considering more than one teacher, and to observe more closely the process of using FA between the teacher and the student. According to Hartley (1994, p.210) “The value of theory is key. Although case studies may begin with (in some situations) only rudimentary theory or a primitive framework, they need to develop theoretical frameworks by the end which inform and enrich the data and provide not only a sense of the uniqueness of the case but also what is of more general relevance and interest.”

The theories used played a decisive role in data collection techniques, while guiding what information should be accessed during the data collection process. In order to obtain more detailed information about the identity of the teacher, all the details regarding the points to be

considered in the observation form, including the content of the questions in the interviews, were clarified with the help of theoretical frameworks. Thus, it has been discovered that teacher identity is not a one-sided and fixed concept, many changes are effective in the learning process of students with ASC, and how effectively formative assessment methods can be used throughout this process. Additionally, during the analysis of the data, the guidance of the theoretical framework of the research was used. Sandelowski (1993) asserts that theories “include the disciplinary paradigms in the arts, sciences, and humanities that direct or inform both the inquiry process, including the presentation of findings, and the abstract schemas (including what is commonly referred to as concepts, conceptual models, and frameworks) describing, organizing, and interpreting the target phenomena that constitute the subject/object phenomena of individual research projects in a substantive area.” (p. 214)

This research has benefited from the guidance of the theoretical framework in understanding and interpreting different dimensions of teacher identity (identity theory, SIT), understanding the factors that affect the learning processes of students with ASC (SCT), and understanding the scope of FA applications (SCT)

CHAPTER 3

ASC AND INCLUSIVE EDUCATION

Introduction

Autism has been the subject of research for years and yet is difficult to understand and explain. This difficulty is even encountered when defining individuals with Autism Spectrum Condition (ASC) both in the literature and in society. Therefore, in order not to cause such confusion in this research, in this section the terminology of ASC will be explained, the term ASC to be used in this research and the reasons behind this choice. In parallel with this, a definition and a short history of ASC will be given in this section, giving the reader preliminary information about the general characteristics of autistic people that will contribute to the foundation of the intellectual dimension of the research. After this, the education of individuals with ASC, their place in inclusive education (IE) and the role of teachers in this education will be explained. This will contribute to the formation of an understanding of the role of teacher identity (TI) in how formative assessment (FA) is used to support the learning of students with ASC who are educated in mainstream classes, as well as TI, which will be discussed in detail in the next chapter.

3.1 Autism Spectrum Conditions in the Terminology

Having a clear and functional definition is crucial for indicating who or what is included in this term, as well as what has been removed (Schalock et al., 2010). At the same time, a better understanding of the individual needs of people among professionals depends on a correct and shared definition. Although there is a common understanding of the definition of ASC, there are still different opinions about the usage of terms, such as autism, autism spectrum, and autistic. As can be seen in the definitions, it is very difficult to distinguish between these terms. However, below are some detailed definitions of ASC that give us a more comprehensive understanding.

ASC is a neurodevelopmental condition with symptoms seen in early childhood, which usually has a lifelong effect, negatively affects the individual's social interaction and communication skills, and also can lead to limited attention and repeated behaviours (Leblanc et al., 2009; Suhrheinrich, 2011). In another definition, the Individuals with Disabilities Education Act (IDEA 2004) define autism as:

“A developmental disability significantly affecting verbal and non-verbal communication and social interaction, generally evident before age three that adversely affects a child’s educational performance.” (sec.300.8. (c)(1)(i))

The history of the definitions above started with the first use of the word ‘autism’ to describe a subset of schizophrenic patients who were especially withdrawn and self-absorbed (Wolf, 2004). Autism was also introduced as a term by Leo Kanner, a psychiatrist at John Hopkins University. In his article of 1943, he described the characteristics of 11 children who had excessive loneliness, echolalia, and obsessive desire for the protection of sameness, with some of them also having superior memory skills (Kanner, 1943).

In 1967, autism was thought to be caused by cold and unemotional mothers, termed *refrigerator mothers* by Bettelheim (1950) in the United States (US). In the following years this idea was refuted, and autism was seen as an early form of childhood schizophrenia. However, infantile autism was listed in The Diagnostic and Statistical Manual of Mental Disorders (DSM) -III for the first time, which was published in 1980. Thus, autism distinct from schizophrenia.

A revised version of the DSM-III-R, published in 1987, contains a more comprehensive definition of autistic disorder. In line with this, in order to be diagnosed with autistic disorder, a child needed to meet eight out of sixteen criteria outlined under three main areas, social interaction, communication and limited interests or activities. In DSM III-R, the requirement for autism to be formed in early childhood was abolished and Pervasive Development Disorder-Not Otherwise Specified (PDD-NOS) was added as a diagnostic definition.

Following this, Autism and Asperger Syndrome are identified in the DSM IV (1994) and the American Psychological Association (APA) under the heading of PDD, which includes autistic disorder, Asperger’s Syndrome, Rett’s syndrome, childhood disintegrative disorder, and PDD-Not Otherwise Specified (NOS), or atypical autism. However, in DSM 5 (2013) these terms have been replaced by the more comprehensive term, autism spectrum disorder (ASD).

However, the use of ASD or ASC, has been examined by the autism community and they have discussed the use of preferred or more appropriate language and terms for people with autism. According to the studies on this subject, some researchers prefer to use the medical term, ASD (Kite et al., 2013; Linton et al., 2014; Volkmar & Reichow, 2013), and some studies find it

more correct to use the term ASC (Dudas et al., 2017; Baron Cohen et al., 2012). Recently, there has been a movement in the UK and the US for use of the term ASC rather than ASD. Researchers, parents and autistic people support the idea that autism is not a kind of disorder, but is a condition (Baron Cohen et al., 2012) and representatives of these groups prefer to use this term.

Since I acknowledge that there are individuals with different characteristics in my research, and they have different needs and cognitive styles, I support Baron Cohen's (2012, 7.20 sec.) idea that ASC is "more respectful, more neutral, and less hard-hitting". Therefore, I will use ASC as a term that characterizes these people and expresses all the features of autism in the most neutral way.

3.2 Characteristics of People with ASC

In the DSM-5, the diagnostic criterion of ASC includes a series of symptoms and that in order to be diagnosed, people must exhibit some or all of them. These symptoms were grouped into two main areas: 1) Chronic disorder in social communication and interaction in different contexts and 2) Limited, recurrent behaviour patterns (American Psychiatric Association, 2013).

1. ***Chronic disorder in social communication and interaction in different contexts.*** All the following symptoms need to be seen (examples are illustrative and not exhaustive).
 - a. *Inability to establish a mutual social-emotional relationship:* people on the spectrum may exhibit unusual social behaviour and difficulties in communication, limitations in sharing interests and feelings, and difficulties in initiating social interaction.
 - b. *Lack of verbal, non-verbal communication skills:* People with ASC have difficulty establishing verbal and non-verbal communication skills like facial expressions, physical gestures and eye contact. Children with ASC tend to have delayed development of language and often exhibit language comprehension and usage at a level lower than their chronological age or are mostly non-verbal (Watson et al. 2011).
 - c. *Difficulty establishing and maintaining relationships:* Individuals with ASC have difficulty in regulating their behaviour in accordance with different social contexts, so face problems in making friends and sharing feelings with them.

These challenges experienced by children with ASC in social communication and interaction can lead to exclusion, loneliness and being considered asocial. As Power and Costley (2014, p.35) indicate, “children with ASC are most often excluded from the social world of their peers. They are socially and emotionally vulnerable. Although they may be aware of their differences, they may be unable to ‘read’ social cues or social situations.”

2. *Limited, recurrent behaviour patterns.* At least two of the following symptoms need to be seen (examples are illustrative, rather than exhaustive);

- a. *Stereotypical or repetitive motor behaviours, object use or speech:* people with ASC may like aligning toys, rotating/turning objects, have echolalia or use distinctive expressions.
- b. *The insistence in sameness, strict addiction to routines, verbal or non-verbal ritual behaviours:* individuals with ASC can overreact to minor changes in their routines, and therefore have difficulty in transitions. They may want to follow the same route or eat the same food every day.
- c. *Fixed interest and extreme focus:* people with ASC may have a very strong commitment or obsessive interest in abnormal or unusual objects. They may also have the problem of extreme focusing.
- d. *Overreacting or unresponsive to sensory stimuli:* individuals with ASC may not react to situations, such as feeling pain/heat but may overreact to some sounds and objects. In addition, they may show excessive desire to touch or smell an object.

While all or some of the features mentioned above can be seen simultaneously in individuals with ASC, some comorbid conditions, such as epilepsy, attention deficit hyperactivity disorder (ADHD), anxiety, and bipolar disorder may also accompany these features. Therefore, individuals with ASC must be supported with appropriate education programs in order to exist in society, or in other words, not to be overlooked. This leads me to the question of what kind of schools provide education for individuals with ASC?

3.3 Education of Students with ASC

ASC is a developmental disability that continues to increase in many countries of the world. For example, according to the Centres of Disease Control and Prevention (CDC), in 2020 approximately 1 in 54 children in the U.S. was diagnosed with an ASC, based on 2016 data. From the same data, of these children, 1 in 34 boys and 1 in 144 girls identified with ASC. In

other words, boys are four times more likely to be diagnosed with ASC than girls. There are around 700,000 people with ASC living in the UK, and when their families are included, this number reaches 2.8 million people. The rate of people diagnosed with ASC is one in 100 children (National Autistic Society, 2020). Additionally, in the UK, similar to the US, boys are four times more likely to be diagnosed with ASC than girls. However, these rates are the kind of data that continues to be investigated and debated. The figure below shows the prevalence rates of pupils with ASC (vertical axis) in each country of the UK in the school years (horizontal axis) 2010/11 to 2018/2019 from a study conducted by McConkey (2020).

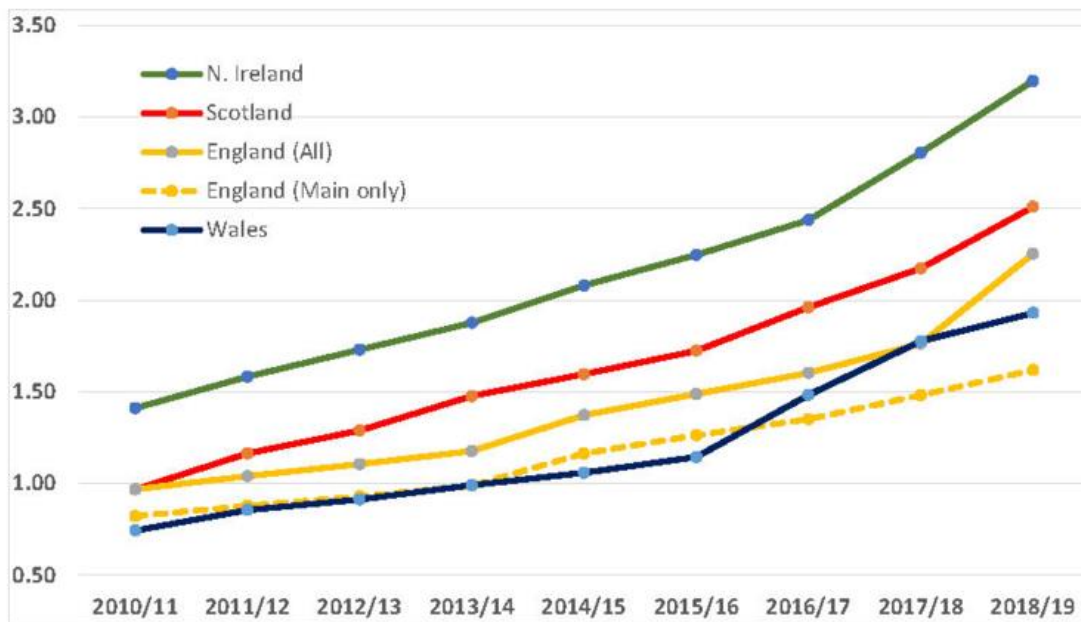


Figure 3.1 The prevalence rates of pupils with ASC in each country of the UK in the school years 2010/11 to 2018/2019 (McConkey 2020, p.137)

These data clearly show that ASC is an increasing trend in every country of the UK, and especially, the large increase between 2017/2018 and 2018/2019 in England focuses attention. In the same study, the prevalence rates of ASC in primary school pupils in each country of the UK in the school years 2010/11 to 2018/2019 were examined and the following findings were reached.

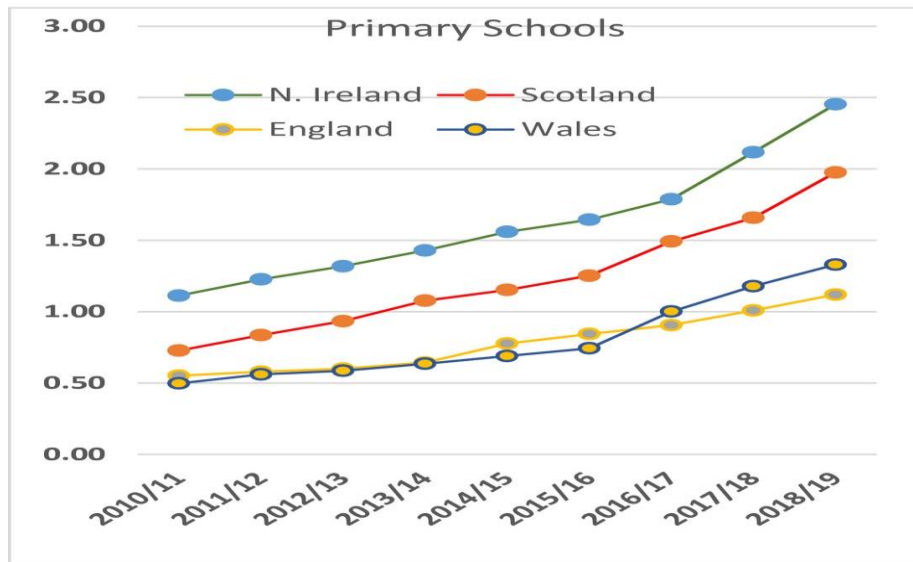


Figure 3.2 The prevalence rates of ASC in primary school pupils in each country of the UK in the school years 2010/11 to 2018/2019 (McConkey 2020, p.138)

Considering these data, the increase in the number of children attending primary school in England who received ASC diagnosis is parallel to the previous data. In other words, there is an increase in the number of students with ASC in primary schools in England. On the other hand, the table below shows numerically the state-funded primary schools in England and the distribution of students with special needs in these schools. According to the table, there are 16,786 primary schools in England and 897 of them have SEND Units. Among the 4.660.264 students, 25.169 students with ASC have SEN support and 17.325 students with ASC are educated with statement or EHCP in these schools. According to most recent Government report in 2021, the most common type of need among pupils with EHCP is ASC with 92.567 which means 30% of pupils with an EHCP.

Table 3.1 Number of Pupils with ASC (EHCP or SEN Support) by Primary Type of Need in Primary Schools (DfE, 2021)

Type of School	SEN Support		EHCP		All
	Number	%	Number	%	Number
State-funded primary schools	586.926	12.6	95.601	2.1	4.660.264
Number 16.786 SEN Units 897	ASC				
	25.169	4.4	17.325	27.8	42.494
Primary, Secondary and Special schools	1.083.083	12.2	325.618	3.7	8.911.887
	ASC				
	70.474		92.567	30	

Consequently, it is seen that children who have received ASC diagnosis can receive SEND support, or The Education, Health and Care Plan (EHCP). As a result of these plans that are decided according to the degree of ASC and the degree of support the student should receive, individual education plans (IEP) for these students are prepared and implemented during the teaching process.

The Education, Health and Care (EHCP) Plan

Additional systems have been put in place to support students with SEND, including those on the ASC in the UK. For instance, the EHCP, which has been implemented since September 2014, in order to provide appropriate educational opportunities to students who have been diagnosed with ASC in the UK and provides a framework through which appropriate support might be provided (National Autistic Society, 2020).

Some children with ASC have an EHCP before they start school, while others go through the assessment process once in school. Consequently, the Local Authority (LA) assesses the needs of the child for education, health and care, and the families benefit from this plan in terms of school selection, transportation, and health and support services. A list of schools for students is made by the LA and parents can choose accordingly. On the other hand, children who do not have an EHCP can apply to the same schools, although the responsibility to conduct research on this issue belongs to the parents (NAS,2020). In England there are different types of school that students with ASC can choose from.

Mainstream schools: Statistically most children with ASC and SEND attend mainstream schools in the UK (DfE 2018). Those with an EHCP may have extra support at school for a certain number of hours per week. In a report from January 2018, the number of special needs students educated in mainstream classes at all levels is 650,453. In the same year, the number of students with ASC who continued their education in inclusive classes at all levels was 108,403. This was made up of 42,494 students with ASC in primary schools and 35,706 students with ASC in secondary schools (Gov.uk, 2018). The progress in mainstream education in England and the increase in attendance may lead to a decrease in interest in special schools. Therefore, about 158 special schools were closed between 1998 and 2007 (Evans and Condron 2018).

Special Schools: These are especially for children with SEND. Some provide education only for students with ASC, while others provide education for students with emotional and behavioural difficulties, moderate and severe learning difficulties, or physical difficulties. In England, 3% of children with SEND attended special schools (DfE 2018), in Northern Ireland, this rate was 7.8% (DENI 2019) in Wales, 4.6% (Stats Wales, 2020), and in Scotland this figure was 3.5% (Scottish Government 2019).

Residential schools: These schools might be suitable for SEND children. Students can stay there overnight, and they have a 24-hour curriculum. In addition, residential schools usually provide accommodation over 52 weeks, while other schools may send students home on weekends or holidays.

Non-maintained schools: These schools may be mainstream, special or residential. None are provided by LAs, but the majority are run by charities on a strictly not for profit basis, although they are allowed to charge fees.

Independent schools: These are schools that are not in a LA. Some have been approved by the DfE to address the needs of children and young people with EHCP. These approved independent schools are known as ‘Section 41’ schools. Parents can register their children by paying their own expenses, or they can get advice from a LA about placing a child in an independent school that does not have ‘Section 41’ status.

If parents want to send their children to an independent school, the LA must first be sure that the school accepts the child. Since there are no independent schools on the school list that the

Secretary of State has endorsed, these schools do not have to accept students with ASC. The increasing interest and pervasion of the education of children with ASC and the fact that their families were given the opportunity to choose a school has led to a relative increase in the academic success of these students.

To sum up, among these types of school, according to Priory Education and Children's Service (2020), 71% of the students who have been diagnosed with ASC in England attend mainstream schools. The large number of mainstream schools makes the content of the teaching to students with ASC in these schools more critical.

3.4 Inclusive Education

3.4.1 Understanding of Inclusive Education

Whether children with SEND should receive education in the same class as their age-peers or with their peers who have same kind of disability, has been the subject of debate by families, teachers, and researchers for years. The widely accepted idea today is that these students should study together with mainstream students through inclusive programmes. However, research and discussions continue on what should be the purpose, content and methods of IE, and as a result, some definitions have been reached. The common view from these definitions is that IE is based on the idea that all children, regardless of differences or disability, should learn together in the same school and classroom (Schuelka, 2018; Haug, 2017; Hayes & Bulat, 2017). Thus, the process of adaptation for children with SEND starts in schools and classes and continues into their social lives, and in this way, they feel a belonging to the community.

However, because the concepts of acceptance and adaptation are only attributed to SEND students, and IE is only restricted to schools and classes, this definition separates SEND students from the process, and also prevents them being part of the general education provision. In order to enhance this definition, some additions and adjustments should be made. For instance, the former UK Government's document *Removing Barriers* includes this definition, "Inclusion is about much more than the type of school that children attend it is about the quality of their experience; how they are helped to learn, achieve and participate fully in the life..." (DfES, 2004, p.25). With a statement in support of this view, UNESCO (2005, p.13) made one of the most comprehensive and current definitions, "IE is a process of addressing and responding to the diversity of needs of all learners through increasing participation in learning, cultures and communities, and reducing exclusion from education and from within education."

In the mainstream environment, children with special needs may have some opportunities to develop in academic and social areas by being influenced by those without SEND in different ways, and at the same time, it is hoped that they gain many benefits that facilitate the adaptation to social life and involvement in the education process (Ayril et al., 2015). Guldberg (2010) describes inclusion as a process of identifying, understanding and eliminating barriers that prevent children from joining and belonging to education, which goes beyond education to cover the full experience of these children and their parents.

Considering the literature, the idea that students with special needs should be educated in general education classes is not a new idea. Changes in general and special education fields, the importance given to professionals working in the fields of psychology and sociology, and developments in the field of human rights have contributed to the formation of inclusion. This is closely related to basic human rights, because no individual wants to be separated or excluded. As Diane Richler (past president, Inclusion International, 2015) said, “Inclusion is not a strategy to help people fit into the systems and structures which exist in our societies; it is about transforming those systems and structures to make it better for everyone. Inclusion is about creating a better world for everyone.”

3.4.2 Students with ASC in the Mainstream

Due to the increase in the prevalence of ASC today, the incidence of children with ASC as mainstream students in general education classes has also increased. However, there are much earlier studies supporting the idea that these children should receive mainstream education. For instance, Kozloff (1973) stated that students with ASC can receive education in general education classes and be successful if teachers, curriculum and classes are sufficiently prepared. However, due to the majority of people who did not support this idea, until the 1990s, it was thought that children with ASC could only be educated in special schools or psychiatric clinics (Wilkinson, 2008). However, in parallel with the increasing level of knowledge about ASC, it was understood that many children with ASC could be educated in general education classes. In fact, as I mentioned in the previous section, there are different options in the education of children with ASC today and the debate on which education environment is better for the education of children with ASC is still ongoing. IE is becoming widespread in many countries, due to the fact that children with special needs have legal arrangements regarding their placement in general education classes.

There have been developing policies that support the education of students with ASC in general education classes in the UK for many years. The general policy of the state is to increase the participation rate of SEND students, including students with ASC, within these schools and to make inclusion a prevalent and usual process. Some of the important policies prepared and implemented for this purpose in the UK are presented in the figure below:

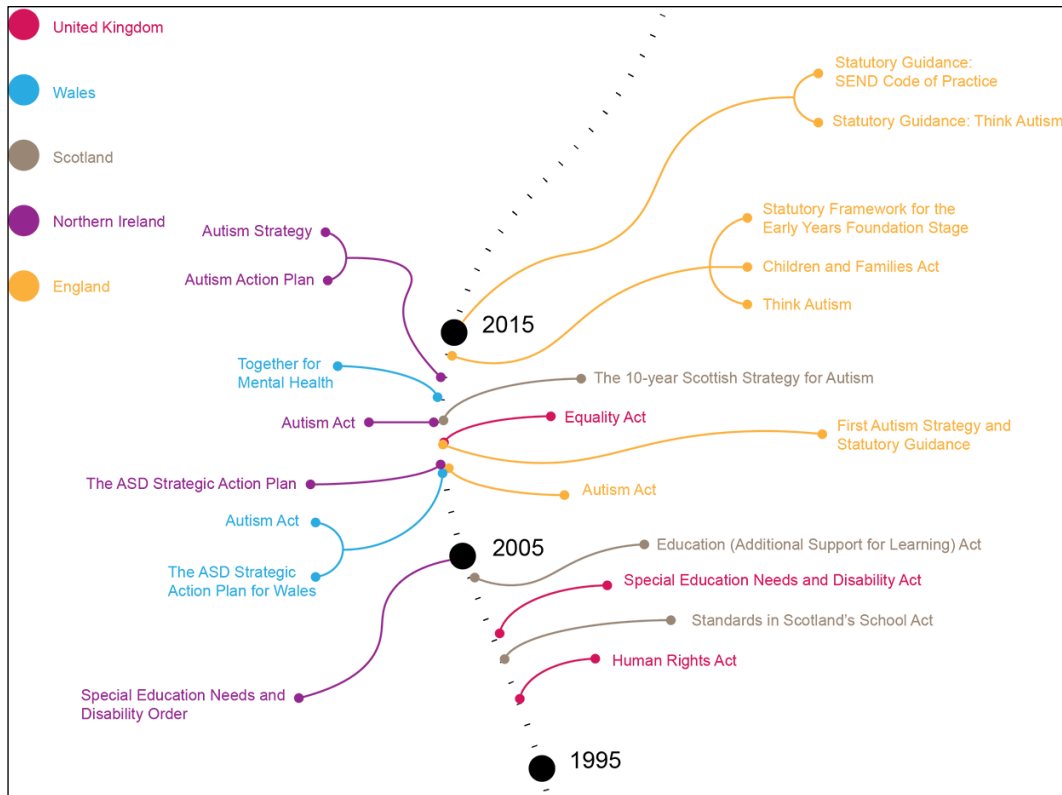


Figure 3.3 An overview of the SEND and ASC policies in the UK and its constituent countries (Roleska et al., 2018, p.8)

As can be seen in the figure, a number of policies have so far been implemented in the UK regarding the education of children with ASC. However, due to differences in educational governance of the four countries of the United Kingdom, these policies were not implemented in all of them. Since this research was conducted in England, it is more relevant to talk about the policies implemented in this country. Although many laws that were implemented before 2009 aimed to defend the rights of individuals with SEND, the policies were limited as they did not mention people with ASC. Therefore, the Autism Act in 2009 is the most important relevant law in England and Wales (Roleska et al., 2018). However, this act has been insufficient to provide the expected comprehensiveness, since it targets only adults with ASC rather than children with ASC. According to Roleska et al. (2018, p.9), the reason behind

children not being included in this act might be that “autistic children were at the time under protection of other documents, such as the SEND and Disability Act.”

The Children and Families Act (2014) addressed this issue of the Autism Act not including children and enabled the creation of a new autism strategy. With this strategy, called Think Autism, issues such as organising the educational environment of students with ASC and increasing the training to improve the knowledge and understanding of the teaching staff were discussed. For these reasons, the Children and Families Act and Think Autism were great steps taken in the UK in the detailed structuring of mainstream education for students with ASC. Following this, the Code of Practice (2015) was secured by laws that require individuals with ASC between the ages of 0-25 to have equal education rights with others. Thus, the rights of students with ASC in IE were clearly supported.

The reason for providing detailed information about the policies is to underline those factors that are important in the education of these students. Another element that draws attention to these policies, in which classroom conditions and equal educational opportunities are frequently emphasized, are teachers. As seen in the Think Autism strategy, informing the teachers who teach students with ASC was among the primary goals. In order for the IE given to these children to be successful, the teacher should have knowledge about the characteristics of individuals with ASC and the teaching methods and strategies used in the education of these children. This requirement highlights the role of teachers in the IE process for students with ASC and the importance of these roles.

3.4.3 Teachers’ Beliefs and Attitudes Towards ASC and Inclusive Education

Many social, emotional and mental health difficulties experienced by students with ASC cause them to have difficulties in fully becoming a part of society. However, it is their fundamental right to participate in education by studying in the same school settings as their peers. In this case, as stated above, the biggest duty belongs to the teachers in their schools, providing acceptance and support in the teaching-assessment process. However, what teachers think about the education of students with ASC, how they feel and how they shape their classroom practice has significant impact on this process. As a result of the literature reviews on this subject, it was found that three factors influenced the attitudes of teachers towards the education of students with ASC, especially IE practices: teacher-centred factors (knowledge, experience, training, preparation, emotions); student-centred factors (students’ behaviour, academic, social

and developmental level of children); environmental factors (classroom environment, supportive sources, collaboration).

When teacher-based factors are examined, it is seen that the first factor that comes to the fore is the knowledge and experience teachers have of ASC. As a result of a study examining the effects of educational professionals' past experiences and current knowledge of ASC on the teachers' attitude towards the inclusion of students with ASC, it has been observed that those who have more working experience and knowledge of children with ASC have a more positive attitude towards the inclusion of these students and they are more aware of effective teaching methods and strategies (Segall, 2004). In a similar study, Fleva and Khan (2015) examined the knowledge level and self-efficacy of teachers working in Greece and India and their attitudes towards the inclusion of students with ASC. The findings of the research showed that the knowledge level Greek teachers have of ASC is significantly higher than that of Indian teachers. Therefore, it was observed that Greek teachers had a significantly more positive attitude compared to Indian teachers in terms of their attitudes towards the inclusion of students with ASC.

Therefore, these teachers, who do not have sufficient information about ASC, stated in the same research, that they want to receive training and improve themselves in this way. Thus, they would be able to complete their training and be sufficiently equipped before starting to work with students with ASC. This is necessary, because it is seen that teachers who have feelings of inadequacy can develop negative attitudes towards these students and IE (McGregor & Campbell, 2001; Fleva & Khan, 2015). Emerson's (2016, p.106) assertion "is that teachers cannot know, in depth and detail, all of the implications of the disorders, which students frequently have, and therefore cannot reliably moderate their own behaviour within the deterministic paradigm and 'do the right thing' for every young person". Based on this idea that when teachers get training about ASC and have experience of working with children with ASC, they have detailed information about them, can be considered as a critical variable in improving teacher perceptions and increasing the efficiency of the services provided to children with ASC.

When the student-centred factors affecting the attitudes of the teachers are examined, it is seen that the behaviour of students with ASC in the classroom is an important factor. It is understood that teachers who want to maintain authority and maintain order in the classroom develop a negative attitude towards these students who have behaviours that will disrupt the class. For

instance, Emam and Farrell (2009) conducted interviews with the teachers, TAs, and SENCO of 17 students in mainstream schools between the ages of 7 and 16, in order to discover the tensions that teachers might encounter in schools. As a result of the research, it was observed that the tensions caused by weak social interaction and emotional understanding related to ASC caused negative interactions between teachers and students. The reason for this may be that some additional skills, such as behaviour management and avoiding crises, which have been added to the many responsibilities of teachers, causes them to develop a negative perspective towards students.

Rafferty and Griffin (2005) stated that the type and degree of disability is an important factor affecting attitudes towards the inclusion of students with ASC. In this study, it was found that the inclusion of children with emotional problems, ASC with cognitive impairment is less supported than the inclusion of children with ASC who have mild disability. Thus, this group of students may lack social and behavioural support during the learning process, as “learning, social and behaviour support are all mechanisms by which students can be supported to overcome challenges they face in the educational setting” (Costley et al., 2016, p.46). In the education chapter of their book, ‘We Belong’, in which they presented the research, Costley et al. (2016) reported on the experiences of adults with autism across the spectrum and that the participants who received adequate support in school were able to process the lessons better and complete their schooling, thereby displaying a more positive attitude towards their education.

The remaining factors affecting teacher attitudes, based on teaching practices, are collected under the heading of environmental factors. Teachers' intentional environmental factors are often expressed as their support from parents, teacher colleagues, and school leaders. In some studies, on this subject, it is emphasized that these people have an important role to play in the success of inclusive educational practices (Batu, 2013; Ünal & Ahmetoğlu, 2017). It is possible to ensure that successful IE affects children positively by considering all these components and by applying practice effectively. Therefore, class teachers who teach students with ASC are expected to manage this process in cooperation with the parents, school leaders, other teachers, and even neurotypical students and their parents. Ünal & Ahmetoğlu (2017) stated that teachers who are supported by other teachers and school management feel better equipped and confident, so they do not hesitate to work with these students.

Consequently, as a result of the literature review, it is seen that there are many factors that affect the identity of teachers and therefore shape their attitudes towards students with ASC. While these factors are defined by some teachers as causing excessive workload and difficulty, for other teachers they can be seen as factors that increase their determination to work. The main factor for achieving the effective and successful process of supporting the learning of students with ASC is how teachers handle and internalize these factors. In other words, teachers who are able to turn these into an advantage for their students and their professional identity can be satisfied with the change in their students at the end of the process. As Dr. Temple Grandin (2006, p.8) emphasises “Good teachers helped me to achieve success. I was able to overcome ASC because I had good teachers. Children with ASC need to have a structured day, and teachers who know how to be firm but gentle.”

Here, I have tried to explain the importance of the attitudes of the teachers towards their students with ASC and their role on teaching students with ASC in mainstream classes, but it is also important to explore the factors that influence the TI. The research studies that illuminate these ideas further are summarized in the next section.

CHAPTER 4

TEACHER IDENTITY AND FORMATIVE ASSESSMENT

4.1 Teacher Identity

The concept of teacher identity (TI) has become a rapidly growing field in the literature and is of great relevance to contemporary educational approaches. Many related areas of interest, such as what TI is, what factors it consists of and the process of its formation have been the focus for research. However, few studies have focused on the impact of TI on teachers' practices. In this research, TAs are included in my consideration of teacher identity, while examining how the identity of the teacher is formed and what makes up that identity. Thus, the effect of TI on formative assessment (FA) methods used to support the learning of students with ASC is investigated in a multi-dimensional way. As a result of the literature review, some definitions that I consider important are given in the table below. These have helped to shape my conception of TI for this thesis.

Table 4.1 Selected Definitions of Teacher Identity

Identity is a “process of building meaning based on a cultural attribute, or a set of cultural attributes, which are interrelated, and which prevail over other forms of meaning”	Castells (2007, p.2)
“The issue of the work done, the position held in society and the meaning attributed to it constitute a dimension (...) of the individual and collective identities”	Dubar (1998, p. 66)
“Identity references individual’s knowledge and naming of themselves...”	Clarke (2008, p. 8)
“The influence on teachers, how individuals see themselves, and how they enact their profession in their settings”	Varghese (2006, p.212)
“Identity can have greater impact on the nature of teachers’ work than new material technologies, namely the national curriculum, school design or the organisation of classes”	Lawn (2000, p.71)
“How teachers relate to their practice in the light of both social and individual perspectives”	Urzúa & Vásquez (2008, p.1935)
“As a label, really, for the collection of influences and effects from immediate contexts, prior constructs of self, social positioning, and	Olsen (2008, p.139)

<p>meaning systems (each itself a fluid influence and all together an ever-changing construct) that become intertwined inside the flow of activity as a teacher simultaneously reacts to and negotiates given contexts and human relationships at given moments”</p>	
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When the table is examined, it is seen that the definitions of TI have aspects that are different, as well as shared. Although some sources indicate that this differentiation originates from variations between countries and cultures (Kaya and Akdemir, 2016) it is clear that this is not the only difference. For example, in the first, third and fourth definitions, the concept of TI is based on psychological theories while in the second and fifth definitions, it is explained sociologically. These differences between the definitions have understanding of the underlying two identity theories. In the teacher identity research conducted by Yilmaz and Ilhan (2017), by adopting the social identity theory (Tajfel et al., 1979), teachers were evaluated by taking into account the social group they belonged to and the characteristics of this group. Therefore, teachers define, evaluate, and classify themselves within the teacher group and ultimately identify with this group. As a result of this identification, their “social identity” is formed. Naturally, their behaviour is shaped in accordance with the characteristics of this identity.

On the other hand, Lozana (2017) addresses TI through an individual and psychological dimension and explains the identity of the teacher by using identity theory (McCall & Simmons, 1978). According to this theory, TI can be explained through many personal aspects such as biography, past experiences, personality traits, preferences, and expectations. However, TI created under the influence of personality traits may continue to exist within the group in which he/she exists, or they may experience a strong discord. In this case, it could be suggested TI is neither a psychological nor a sociological concept, because teachers are not only members of a group, but also individuals who show individual differences, and their teaching practices are fed by these differences. The sixth and seventh definitions in Table 4.1 support this view. According to these definitions, TI as a whole, with its personal and social aspects, contains the features of all the parts that constitute it. Therefore, in this research, I will explain the formation of TI by blending the individual and psychological aspect of identity theory and the aspect of social identity theory that incorporates behaviour in a group. These theories also support the process of analysis, particularly analysing the effects of TI on FA methods and on the effects of students with ASC on the support process.

Taking into account the similar and different aspects of the definitions I have given in the table above, when I make a definition in line with the principles of both theoretical frameworks that shed light on my research, it can be said that *TI can be defined as the personal perception created by the experiences of a teacher together with the effects of social environment and professional demands. In other words, TI is self-formed as a result of the combination of personal, contextual and professional factors.* The figure below shows the conceptual framework for TI in this thesis based on the aspects discussed.

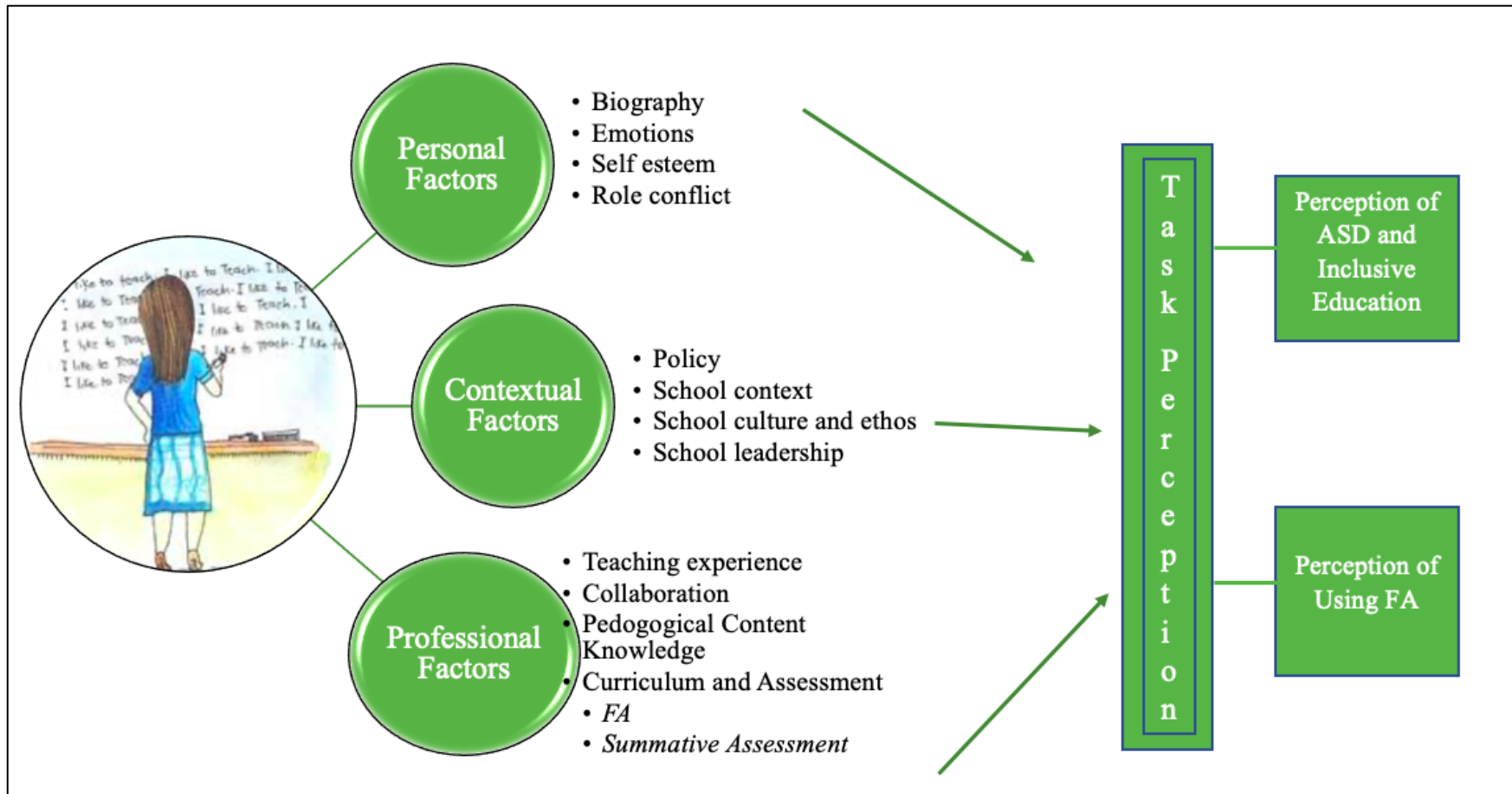


Figure 4.1 A conceptual framework for teacher identity

According to *Figure 4.1* above, TI consists of three basic strands namely personal factors, professional factors and contextual factors, and each strand is divided into several important sections. In this context, the aim of this part is to reach a comprehensive concept of how using FA methods by explaining main factors that affect the TI. In this way, the process of supporting the learning of students with ASC can be more clearly understood according to the stated conceptual framework.

4.1.1 Personal Factors

The first stage of TI formation is personal factors, a concept that includes many aspects such as the person's biography, expectations, feelings and roles in life. Personal factors concern the people who are in the school and outside the school (Day and Gu, 2014). The experiences gained with these people, the characteristic features of these experiences, the effort of self-knowledge and finding yourself, gives individuality to the teacher and makes them unique. As an individual, the teachers create professional feeling through their personal factors, developing their own methods and interacting with students. For these reasons, it is necessary to understand the factors that make up the personal factors of a teacher in order to be able to interpret the teacher's identity and their implementation of teaching methods.

4.1.1.1 Biography

Significant events that shape an individual's life constitute the biography. In this process, some events faced by teachers, their memories of the past and experiences they have had, affect the processes of being a teacher and teaching in a particular way. According to Freeman (2002), a teacher's personal history is an important factor in the creation and restructuring of their pedagogical knowledge. Therefore, the personal life stories of the teachers affect their motivation to start and continue in the profession, as they contribute to the shaping of their beliefs about themselves (Flores et al., 2009). In this case, it is not possible to make an absolute separation of the personal and the professional lives of the teachers.

It is possible that the students who grow up by observing their teachers for about 13,000 hours (Lortie, 1975) can perform their practices in accordance with these role models, or in other ways after they become teachers. In fact, Britzman (1986) argued that teachers adopt a style opposite to that which they experienced at school. However, it is understood that the school life of the teacher is not the only biographic factor affecting identity. Identity theory suggests that biographic factors such as "immediate family, significant others or extended family, apprenticeship of observation, atypical teaching episodes, policy context, teaching traditions,

cultural archetypes, and tacitly acquired understandings” (Sugrue, 1997, p.222) and these factors are accepted as important factors in the formation of the professional identity of teachers (Flores et al., 2009).

Teachers start the teaching profession with opinions and information acquired under the influence of the previously mentioned biographical factors, and this effect continues throughout their working life. It has been observed that teachers who want to practise their profession in a useful and meaningful way, and who have achieved positive gains in their personal lives have been working with ethical and moral purposes in education (Day et al., 2007). Many aspects, such as their communication with students, the practices they choose, and how devoted they are, are important to teachers.

On the other hand, the direction of teachers who have not had positive experiences in their biographies is important and enough to be a completely different subject of research. However, considering the responsibilities of teachers primarily to their students and then to their families, it is suggested that their personal beliefs and values affect teaching and play a decisive role in establishing students' identities. Therefore, what teachers get from their personal background, how they interpret this and how they use it in the classroom will remain the constant issue of the process of forming, continuing, and influencing the student. In other words, teacher biography influences the goals achieved in the classroom, with the outcomes being determined by the teachers.

4.1.1.2 Emotions

Researching the emotional components of TI contributes to a better understanding of TI and consequently the research of the teaching methods and techniques it affects. Because teachers recognize themselves through their feelings, and understand themselves in this way, they become unique individuals. However, some researchers see teachers as stable individuals and independent of their emotions. For example, Britzman (1991) described teachers as experts and self-taught individuals in an experimental study on teachers. However, Darling-Hammond et al. (2020) would suggest that the teacher is a person who is constantly learning and grows, develops and transforms through being influenced by many factors such as emotions, experiences and social environment.

Lasky (2005) explained the feelings of teachers as a changing entity as a result of their interactions with students, families, and colleagues, together with reflections on their teaching

practices. Indeed, Taylor (2020) points out that being able to relate to others includes talking, counselling, or empathy. It is usual for them to experience different emotions as a result of these relations and interactions, because the learning and teaching process is a complex structure that contains many emotions such as irritability, excitement, indecision, doubt, happiness, satisfaction and empathy. Not all teachers have the same skills in managing their feelings in this complex structure. Some teachers can balance the existing emotional confusion very well, while others are insufficient in this regard (Koenen et al., 2019; Thompson, 2008). However, teachers should be aware that these emotions start with them and then affect the emotions of the students. This complex situation must be dealt with, because emotions can affect teaching and learning positively or negatively (Glaser-Zikuda et al., 2018). For example, Hargreaves (1999) stated that when students show that they love and respect their teachers and enjoy learning, it is a kind of reward for teachers. In other words, teachers are satisfied with the feedback they receive from the students. From another point of view, love for children, the desire to help the student to learn and satisfaction with the work done is very important for the great majority of teachers (Hayes, 2003). The same research reached the conclusion that the students of these teachers experienced positive emotions and were happy during the education process.

Because emotions give us deeper insights into teachers' concerns, curiosities, or pleasures, examining emotions can contribute to a comprehensive understanding of TI (Yazan & Percy, 2016). Therefore, within the scope of this research, I considered emotions not only as personal and psychological qualities, but also their role in TI formation and their effects on how teaching methods are applied. From this perspective, the view comes to the fore that emotions are socially structured and internalized by experiences. In other words, “the experience and expression of emotions is dependent on learned convictions or rules, and that to the extent that cultures differ in the way they talk about and conceptualize emotions, how they are experienced and expressed will differ in different cultures as well” (Cornelius, 1996, p.188).

Emotions from experience add different dimensions to relationships with students, teachers and other individuals in the community. For instance, the feelings of teachers who teach in a mainstream classroom both determine the status of their communication and relationship with the students and lead their classroom practices. In other words, the feelings of teachers affect their behaviour, teaching, TI, and experience, and the student behaviour and learning (Taxer & Frenzel, 2015; Day, 2011). Therefore, it is of great importance for this research to investigate

how teachers deal with their emotional states and emotions, to question how they shape their identities in different emotional situations, to observe which identities they have in which situations, and to examine the effects of their emotions on the teaching methods they use, because TI is not a concept that can be considered independently of emotions.

4.1.1.3 Self-esteem

Self-esteem is the evaluation of the difference between the individual's self-image and his ideal self. In other words, the difference between how the individual perceives himself and the self he wants to be, gives us the level of self-esteem of that individual. It is inevitable that there is a difference between how the individual sees himself, that is, his current self-image, and the ideal self that he aspires to achieve (Kuzgun, 2002). However, in this process, it is important how the individual evaluates this difference and how this difference affects his emotional world.

The self develops in the environment where the individual is; the social environment is influenced by factors, such as social acceptance, family and entourage, physical image, achievements, and is even shaped within the framework of these factors. Often information about the person themselves is obtained from the social environment of the individual. The social constructivist approach, which is a theory that meticulously examines the effects of the social environment on self-esteem, learning and teaching, provides enlightening information about the self-formation process of individuals. According to this approach, learning is a concept that occurs within the dimensions of social context, culture and cooperation, and a person learns and develops through these dimensions, not only in his/her academic life, but also in his/her social life. Vygotsky mentions a two-stage developmental level in the development process. The individual first establishes a relationship with the social environment and creates this interpersonal level, and then s/he enters into a relationship with him/herself, which reveals the inner level (Bruner, 1997). Accordingly, it is argued that the inner levels of individuals who are satisfied and supported in their interpersonal relations, also develop in parallel with this and positive self-esteem is formed. Therefore, it can be said that when the social constructivist approach (Vygotsky,1978) is taken into consideration, the self can be developed as a result of the positive attitudes of a teacher coming from an environment that promotes healthy self-esteem.

In this process, the family environment is of primary importance. For instance, teachers who grow up in a democratic and sharing family environment become part of society as self-

esteemed, self-confident individuals (Sarı, 2007) and build their TI on this trust and respect. In other words, mother-father-child relationships and child-rearing methods have a strong influence on the development of the individual's self-esteem.

On the other hand, in the development of self, the school environment where the teacher is educated is the second element of importance. The self-esteem of the teachers who are able to express themselves freely during their student years, who are educated in non-oppressive, sharing, creative environments, are also affected in the same positive direction. Sari (2007) states that the successes achieved in student life, the feeling of being liked and approved, improve self-image, lead to positive professional identities of teachers who have an affirmative student history.

According to Gaspard (2010), people can improve their self-esteem with four sources. The first is destiny; we do not have the chance to choose our parents, where we were born, what race or gender we will be, but these factors affect our self-esteem. The second source is the family or other adults who are important to us in the early stages of our life. How we were trained at school and how we were treated; whether one of our parents, or neither, supported us; how they treated us, and how the family worked together, are important factors. In short, the most important people in the early stages of our lives shape what we think about ourselves then and now. The third source is our life experiences. The successes and failures we have experienced throughout life come together and affect how we feel about ourselves today. The last source is the perception of the first three sources mentioned above and is the most important source of self-esteem, because when we perceive these three sources positively, it generates positive self-esteem.

Considering the identity of the teacher, self-esteem is the state of appreciation arising from the fact that the teacher approves the self-concept that he has reached at the end of self-evaluation. The teacher may criticize himself or find himself positive. However, a person does not need to have superior qualifications to respect his own self, because self-esteem is a positive mood that allows him to be satisfied, to find himself to be positive, liked and loved, and to trust his essence without seeing himself as inferior or superior (Gaspard, 2010). Thus, this mood is an important structuring that affects the behaviour of the teacher in society, determines the reactions to events, and affects the causes and consequences of his behaviour. In short, self-esteem affects how an individual feels when teaching and how it feels to be a teacher. If the teacher's desires

match his self-perception, it means there is a positive self; thus, the teacher can feel himself alive, determined, conscious, important, competent, equipped and successful.

Returning to the topic of emotion, which I mentioned in the previous section, I have stated that the effect of teachers' emotions on their practices, behaviours and teaching process is considerably important. For this reason, it is clear that teachers who have developed positive self-esteem through positive experiences throughout their lives will contribute to a positive education process in the same way.

4.1.1.4 Role Conflict

Teachers play different roles: in school, in their social environment, in their families, and in their groups. Sometimes these roles are so complicated and intricate that teachers have trouble balancing all of them. Society already assigns multiple roles to the teacher, which leads to uncertainties in deciding which role to play and when. In cases where teachers do not easily understand exactly what is expected from them while doing their work, or when their thoughts are contrary to what is expected from them, “role uncertainty” arises (Bernardin, 2010). In other words, teachers, in accordance with the understanding of social identity, identify with their profession when they feel like part of the teacher group; however, teachers experience role ambiguity when they are not aware of what their colleagues, parents or school principals expect from them during the teaching process, or if the roles determined for the teacher are not clear. Since the teachers who have such problems do not display the desired behaviour, their performance decreases; a situation that makes them feel unsuccessful. Therefore, the self-confidence of the teacher decreases, and he is dissatisfied in his job. Those who experience such disadvantages will gradually turn away from work and become alienated, and failure causes them to feel useless. These negative developments disturb the morale of the person and thus decrease job satisfaction (Schmidt, 2007).

When individuals have more than one role and try to adapt these roles according to the groups to which they belong, they may encounter some problems, because employees need to meet different expectations in order to fulfil all these roles. In such cases, individuals may experience role conflicts (Ivancevich, 2010). Role conflict can be described as when the person who has to perform more than one role at the same time fits one of the role requirements more than the others (Şimşek et al., 2005). In other words, role conflict expresses the mismatch of expectations regarding a role and role obligation.

The emergence of multiple roles that the individual undertakes at the same time, and the complexity of the roles he/she has to do, cause role conflict in the person. Therefore, the behaviours that employees must demonstrate in one role while performing their duties, may be contradictory with the behaviour they should show in the other role. Role conflict, as can be understood from its definition, involves disputes with the tasks responsibilities required by the job, resources, rules, policies, and colleagues. Role conflict arises especially when people, such as colleagues at school and school administrators, meet with requests that go against their concept of the role, or when there is an inconsistency between their expectations and apparent reality (Daft, 2010).

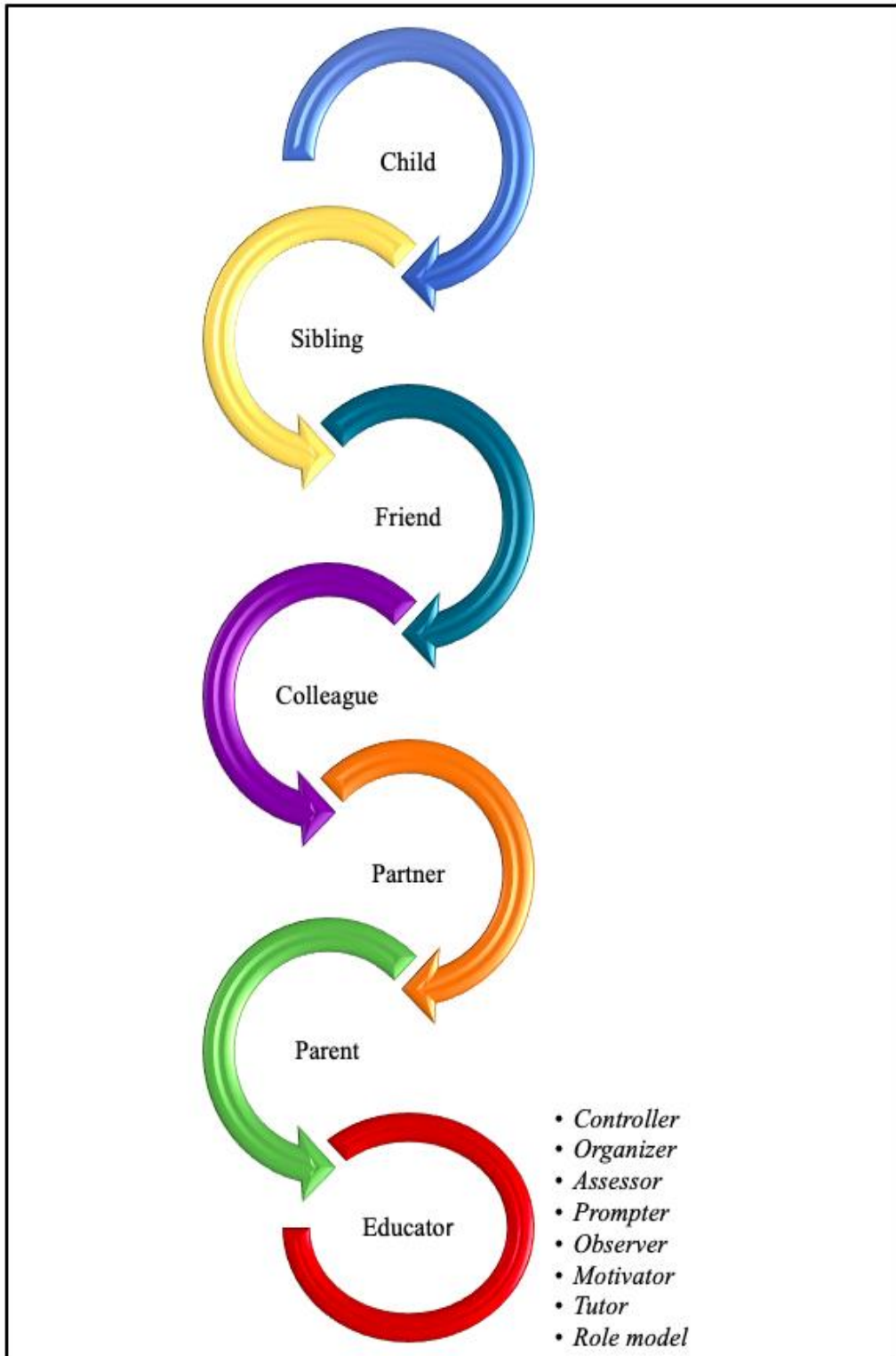


Figure 4.2 Teachers' role conflict

This figure illustrates the complexity of teachers' roles and shows that the teacher can have many positions at the same time. On the same day, she may have to go to her parents' meeting, attend her friend's birthday party and prepare a presentation for the next class. While teachers already have many sub-roles as teachers, they can also be friends in the social environment, spouses, mothers, fathers or children in their families. It is unavoidable that teachers who cannot balance their roles, who have mixed many roles, experience this conflict in the classroom and reflect it to their students.

As with role ambiguity, there are some negative consequences of role conflict, such as job dissatisfaction and professional burnout (Sabuncuoğlu, 2008, p.36). In the research conducted by Simsek et al. (2005), it was found that role conflict causes internal conflicts, increases interpersonal tension, decreases job satisfaction, and decreases commitment to the organization. In other studies, conducted at different times, it was determined that role conflict was statistically significant with burnout, and it was determined that teachers were faced with emotional exhaustion problems in cases of intensive role interaction (Ghorpade et al., 2011; Tunç & Kutanis, 2009). It cannot be expected that teachers who have lost their self-esteem or have a negative attitude towards the profession of teaching can support the students and contribute positively to their own identity development. It should be included in the education policies of schools to help such teachers both balance their roles and balance their different roles.

Roles and objectives should be clearly defined in order to reduce the role conflict and role ambiguity experienced by teachers and to support the teaching process. The concept of defining roles and goals is called "role clarity" by Bernardin (2010). Consequently, the goals of education should be determined, and the role of the teacher should be clearly stated in this process, without dictating what others can and cannot do, and without many different and often opposite expectations. Because, in most cases, practices contradict expectations (Sabuncuoğlu, 2008), as a result, teachers' role ambiguity and advanced role conflict become inevitable. Since the teachers have to both find satisfaction for their own needs and act in accordance with the expectations of the environment, it is only thanks to a positive self-concept that through the tension of their conflicts they maintain their adaptability.

Therefore, it has been advocated in some research that teachers who are able to make the transition between their roles and not allow these roles to negatively affect their teaching role and identity, can create an efficient working environment in the classroom and provide

effective training. Students who grow up in such a classroom develop their self-esteem, highlight their positive emotions, support their own learning, and through giving feedback to teachers contribute to the positive TI of a teacher who is then further able to maintain their adaptability.

4.1.2 Contextual Factors

Contextual factors constitute the second phase of the TI formation process within the scope of this research. This stage includes the influence of the working environments of teachers as pointed out by social identity theory, such as the cultural structure of schools, the characteristics of school leadership, and educational policies. It is important to consider these aspects when interpreting the findings of the research to understand the TI.

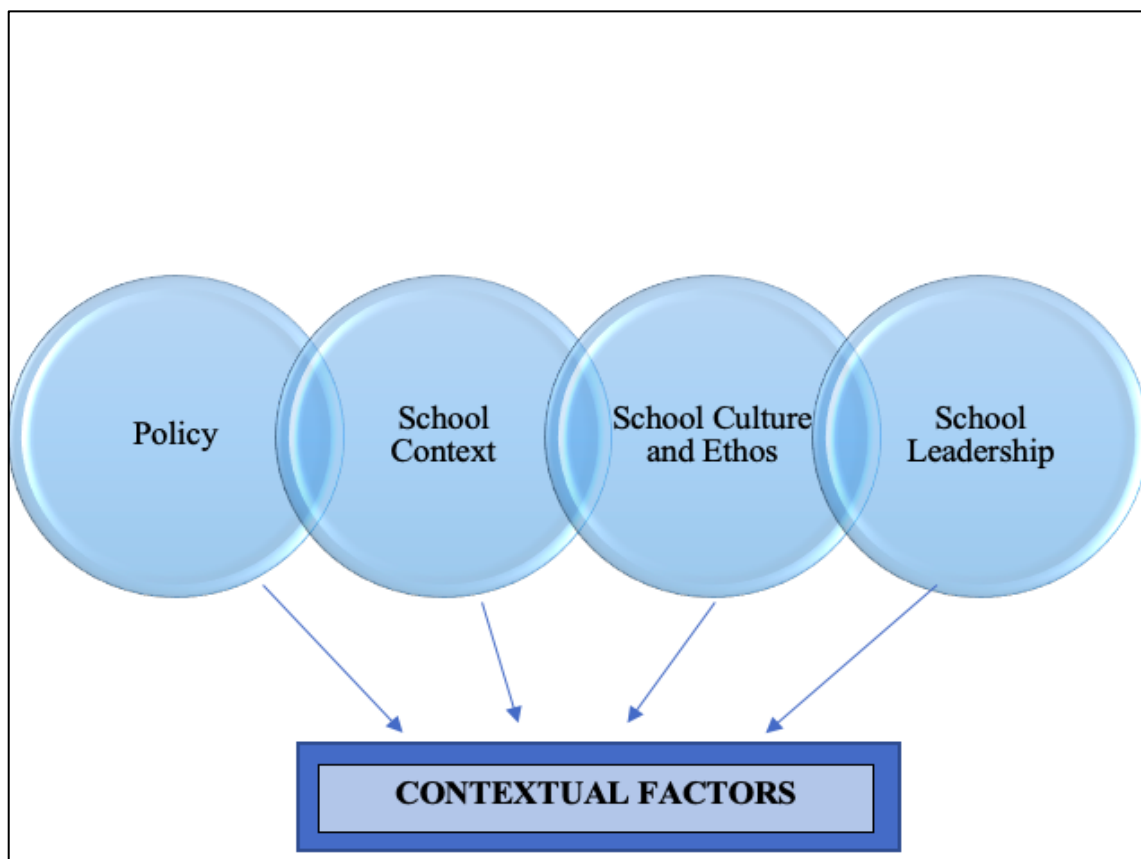


Figure 4.3 Contextual factors of teacher identity

4.1.2.1 Policy

Policy institutes the arrangements that reflect and meet the needs of society, and according to Day & Gu (2010) it is critical to the professional lives of teachers. Indeed, “in teacher accounts, policy is experienced as conflicting, coherent or reinforcing of values pursued” (Taylor, 2020, p. 8). For instance, while an enforced policy can be decisive for school culture and practices, it

also shapes TI and its role in the classroom. Political innovations and practices, expenditure for education and regulations meant for supporting teachers in education, play a concrete role in the personal expectations of teachers. Meeting teachers' expectations of understanding of them and support during the teaching process plays a key role in building a positive TI. Varghese et al. (2005, p.23) state that identity is connected to “social, cultural, and political context-interlocutors, institutional settings, and so on.”

Policies should aim to improve and regulate previous practices or be attempting to bring about new practice (Colebatch, 2002). When we look at the history of British education law (described in the previous section), we can see that many laws are intended to complement and improve the missing aspects of the previous laws. Similarly, many governments around the world identify certain gaps in the existing system and make some arrangements to fill them. The purpose of these regulations and educational policies is to shape the behaviour and practices of all components of the educational process and to include them “in a pattern of goal-directed actions” (Colebatch, 2002, p.85).

Grimmet et al. (2009) describe two groups that impact policy: policy makers and policy practitioners, with a strong interaction between these two groups. When the intentions of policy makers are taken into account and prejudices come into play, the regulations and laws introduced can be ignored by policy practitioners. For instance, a law introducing handwriting was made compulsory at primary level in 2007 in Turkey. However, the fact that the great majority of schoolbooks and reading books were written in print caused confusion among students and it was also very difficult for teachers to teach in literacy lessons. Because of this, principals and teachers in many schools have ignored this regulation and continue their education with print, which they believe is more comfortable for students to use. As policy makers realized that the handwriting regulations introduced were not implemented by practitioners, and with a new regulation introduced in 2016, “it was decided to provide literacy education in print” (MoNE, 2017). In other words, even if it is governments that make the policies, it is the practitioners who direct and make them effective. In the education process, where mutual interaction is in question, policies can survive to the extent that they can respond to needs (Colebatch, 2002). However, from another point of view, it may not be possible to determine the needs of all stakeholders in the education process (teacher, student, families, school administrators) and for all of the appropriate arrangements to run smoothly.

In order to achieve long-term goals, it may be necessary to act in cooperation with more institutions and organizations. For example, a number of courses and studies might be organized for a specific purpose, such as using FA methods to support the learning of teachers of children with ASC. Thus, before any policy is put into effect or during the pilot phase, the necessary infrastructure is present for the teachers to implement the policy. While such an application facilitates the teachers' adaptation process to the new policy, it also prevents unexpected outcomes of the process.

Cohen's (2010) study of teachers' professional identity conducted in the USA, indirectly shows that policies play an important role in the formation of teacher professional identity. It shows that failure to recognize the teacher's professional identity will cause serious uncertainties and decrease the teacher's commitment to work. In other words, not recognising may decrease the job motivation. In addition, the fact that teachers have little say in public education, and that they are not seen as important stakeholders in education policies (Brown, 2015), prevents the introduction and valuing of a professional recognition.

Lupton and Thomson (2015, p.12) analysed education policies and expected practices that affect TI and identified four main areas of contention:

1. Reform of the school system
2. Reforms to the teaching profession
3. Curriculum, pedagogy and assessment
4. Tackling educational inequality

Adaptations made in school systems cause teachers to partially change their roles in the school and behave in accordance with the new reform. Demonstrating appropriate behaviour creates a grounding for some of the characteristics of the existing TI (Lupton & Thomson, 2015). On the other hand, the reforms related to the teaching profession are processes that cover the definition of teaching, and how the teachers see themselves, and the application of change accordingly. Every arrangement carried out during the process is important in affecting the process of identity formation and the development of teachers.

On the other hand, teachers who are crushed under the intensive curriculum may have difficulties in implementing the necessary pedagogic behaviours, and problems can be experienced in evaluating and supporting the students in this way. This situation may be an

element that damages the supportive aspect of TI. However, the purpose of the arrangement made during the training process is protecting the students' and teachers' rights. For instance, policies to prevent educational inequalities propose arrangements to prevent unfair practices between educators and students alike. In both cases (educators and students) of inequality, TI might be trapped between an identity that tries to minimize these factors and a teacher education that only trains within the framework of policies. For this reason, it can be said that teachers, as policy practitioners, direct their practices by interpreting and blending existing and newly introduced policies within themselves. This transformation process “involves the translation of text into actions and abstractions of policy ideas into contextualized practices” (Ball et al., 2012, p.3).

4.1.2.2 School Context

School context can be defined as a concept that includes elements, such as the location and type of school, the number of students, the general condition of the classes, the ethnicity of the students and the languages they speak, the numbers of SEND students and of those taking free school meals. These elements have important effects on TI because professional identity, feelings and attitudes are shaped by these conditions.

For example, factors such as the school's location, number of students, and physical condition affect the working conditions of teachers. The feelings of a teacher who cannot get enough training materials in a small village school, who teaches in a school with low socio-economic status, and those who can benefit from many support services in the city centre and are supported by the families during the teaching process, cannot be the same. Therefore, teacher attitudes also may change. On the other hand, working in a multicultural school and being part of such a school culture where there are students of different ethnic origins and students with SEND can lead teachers to have feelings of equality, empathy or neutrality, while on the other hand, they can feel lonely by being out of balance, and outside of school culture. As stated in Ball (2012), being a part of the school environment affects and directs teacher practices.

When we look at England, it is seen that schools are classified as dependent on different variables, such as mainstream, special, city or county school, and also shaped by features such as socio-economic standing, ethnicity or location in the context of school. Considering the mainstream schools discussed within the scope of this research, it can be said that the schools create the context of the school by making physical and sociological arrangements for the education of these students, and of course teachers have developed appropriate roles for this

context. However, in mainstream schools, it is known that school context can contribute to problems, such as crowded classroom environments, lack of resources, and student attitudes (Harris & Chapman, 2004).

The number of SEND students taught in schools is another contextual factor that affects the working conditions and workload of teachers. The education of different types of SEND students in the same classroom environment by the same teacher is the most important part of the mainstream school context. Whether this has a compelling effect on TI depends on the “support services” factor of the school context. Having a sufficient number of TAs in the classes and sufficient resources may reduce negative attitudes by reducing the workload of the teacher.

Cosme and Trindade (2017) emphasize that the working environment and conditions are important enough to provide an effective teaching atmosphere for teachers, because when teachers enter school, they have to be familiar with the contexts and processes of the school (Wilkins et al., 2012). Therefore, these are factors that can significantly affect teachers' identity and classroom practice. Research shows that teachers in a positive organizational environment (defined as a place where teachers can work in collaboration with teachers and TAs and principal effectively and feel a part of this environment), achieve higher job satisfaction and are more productive in their jobs (Mulki et al., 2008). Their motivation levels, effectiveness in their jobs, organizational citizenship behaviours and organizational commitment increase, their behaviour becomes more ethical (Cosme & Trindade, 2017), negative behaviours in the organization decrease, higher quality organizational output is achieved (Weeks & Nantel, 1992), role conflicts and complexities decrease, and trust in the manager increases (Mulki et al., 2008).

Based on these studies (Cosme & Trindade, 2017; Weeks & Nantel, 1992; Mulki et al., 2008) it can be concluded that teachers are more committed to their workplace in a positive and healthy school environment. As Jacobson (2016) states teachers in unhealthy school environments are less committed to the school and their professional identity suffers as a result. Research conducted in educational organizations show that teachers are exposed to heavy workloads that create stress and tension, and they experience excessive stress or fatigue and are exposed to more pressure behaviour than those working in other professions (Erçetin et al., 2008). Therefore, the provision of a school environment that will be effective and support TI

positively depends on the existence of a school culture accepted by all the component members of the school.

4.1.2.3 School Culture and Ethos

Culture is knowledge, belief, art, morality, law, custom, and all the talents that a human being acquires as a member of society (Köse, 2003). More broadly, it covers all beliefs and ideals that are formed as a result of the relationship and interaction of people who form a society. With its educational dimension, Şişman (2011) defines school culture as a structure consisting of beliefs, values, norms and symbols shared jointly by the people who make up the school community; Butler and Dickson (2001) also express school culture as values and norms that guide teachers and TAs and students in the way of successful education and training in general.

The use of the concept of culture in defining school life began with Waller's book, *The Sociology of Teaching*, published in 1932. Waller points out that schools have their own identity, which is formed through the complex rituals of personal relationships, such as a series of traditions, customs, improper sanctions, and ethos principles. This identity consists of shared values, assumptions, norms, beliefs, traditions, celebrations, myths, interactions, events, rituals and expectations (Çelik, 2000) and is used as a synonym for many concepts, such as climate and values system (Glover & Coleman, 2005). Values and beliefs that make a school successful are usually shared by all members and remain active around common assumptions about what is happening in the environment. In this way, school culture helps administrators, teachers and students gain meaning in their lives and the world around them.

Similarly, Peterson and Deal (2002) argue that the culture they define as a set of shared values that link the employees in an organization affects and shapes the thoughts and feelings of teachers, students and school leaders. As a matter of fact, social identity theory also claims that teachers are connected to the teaching profession thanks to these values. As a result, there are various aspects of teachers' social expectations and values that include believing in the importance of development, being motivated to work, giving professional support to new teachers, sharing their thoughts with each other, believing that all students can learn, that previous experience are important in determining students' capacities, teamwork and working in collaboration, and being accepting of different colleagues and students.

Stating that a collaborative and effective school culture is necessary, because it supports learning skills, Stolp and Smith (1995) emphasize that a collaborative school culture creates an

effective learning environment for teachers and students. These researchers argue that collaborative school culture is associated with teachers' high level of cooperation and excessive interest in their profession. Gruenert (2005) argues that collaborative school culture is the most vital factor in student achievement. It is not expected that student success will be high in schools where cultures that do not attach importance to cooperation are dominant. However, collaborative culture being dominant in schools causes an increase in student success. Thus, collaborative educators explore ways to improve the performance of both school and students. Such teachers' activities in the classroom to support students' learning demonstrate the quality of teaching and the *school ethos*. The teachers in Rozema and Bush's (2005, p.3) research stated "we maintain ethos by understanding not only how to teach well, but by knowing why we teach the ways we do, and by sharing those reasons with those around us. In short, we follow best practice principles."

In the English context, the presence of multicultural schools and inclusive schools, which contain many different cultures, are the determining factors for the culture and ethos of schools. However, based on the fact that culture is complex and unique (Hargreaves, 1999, p.64), it can be said that each school has a different culture. Ofsted reports used in the evaluation of schools also examine the culture of schools. Based on the observation of all the components of the school, how the education is provided within the complex structure of the school culture is evaluated in these reports and the results are shared publicly. Of course, the culture of schools and the ethos of teachers and TAs are influenced by this open sharing and evaluation. School leaders shape the school culture by setting new targets in line with the results obtained from these reports. In other words, the school leader has important roles and duties in the formation, maintenance and development of school culture and ethos. The head teacher should ensure organizational socialization by taking advantage of the school culture. In fact, leading managers are expected to have a vision, to play roles that empower teachers, motivate, and increase student achievement (Devos et al., 2007).

In short, school culture and ethos can help teachers have positive feelings about their work and motivate students to learn. Positive school ethos is associated with high student motivation, teacher collaboration, and improved attitudes of teachers towards their profession (Barnett & McCormick, 2004). Creating and maintaining a positive school culture always leads to increased success and motivation among all stakeholders (Fiore, 2000). A culture in which everyone feels comfortable guides the formation of a creative learning environment, which has

a positive effect on student achievement. On the other hand, negative school ethos are observed in schools where bad behaviours are more intense, and as these behaviours increase, school culture is affected. Moreover, Macleod and Perepa (2020, p. 195) highlighted that “if teachers feel they are not recognised or accepted, it may affect their motivation towards work”. Therefore, we can say that there is a strong connection between ethos, behaviour, and culture.

School ethos and culture play a key role in providing a peaceful learning and teaching environment for all aspects of welfare and education in the school environment. Therefore, starting from the classes, increasing the interaction between all the people in education can create a school climate where students feel safe. The fact that students and teachers (because education is central to the interactions between these two main components) are part of such a school ethos and culture, affects their classroom practices by contributing to their mental health and well-being.

4.1.2.4 School Leadership

School leadership is directly related to the teaching process involving students, teachers, and the curriculum. A head teacher, the main leader in the school, is expected to encourage teachers to try new teaching strategies, develop staff quality and new programs, and change staff attitudes. In order to be able to accomplish all of these, they should be instructors as well as administrators (Taş, 2000). According to Leithwood et al. (2006, p.11) “leadership is all about organizational improvement; more specifically, it is all about establishing widely agreed upon and worthwhile directions for the organization and doing whatever it takes to prod and support people to move in those directions. Our generic definition of leadership – not just effective leadership – is very simple, then; it is about direction and influence. Stability is the goal of what is often called “management.” Improvement is the goal of leadership. It is clear that both are very important”.

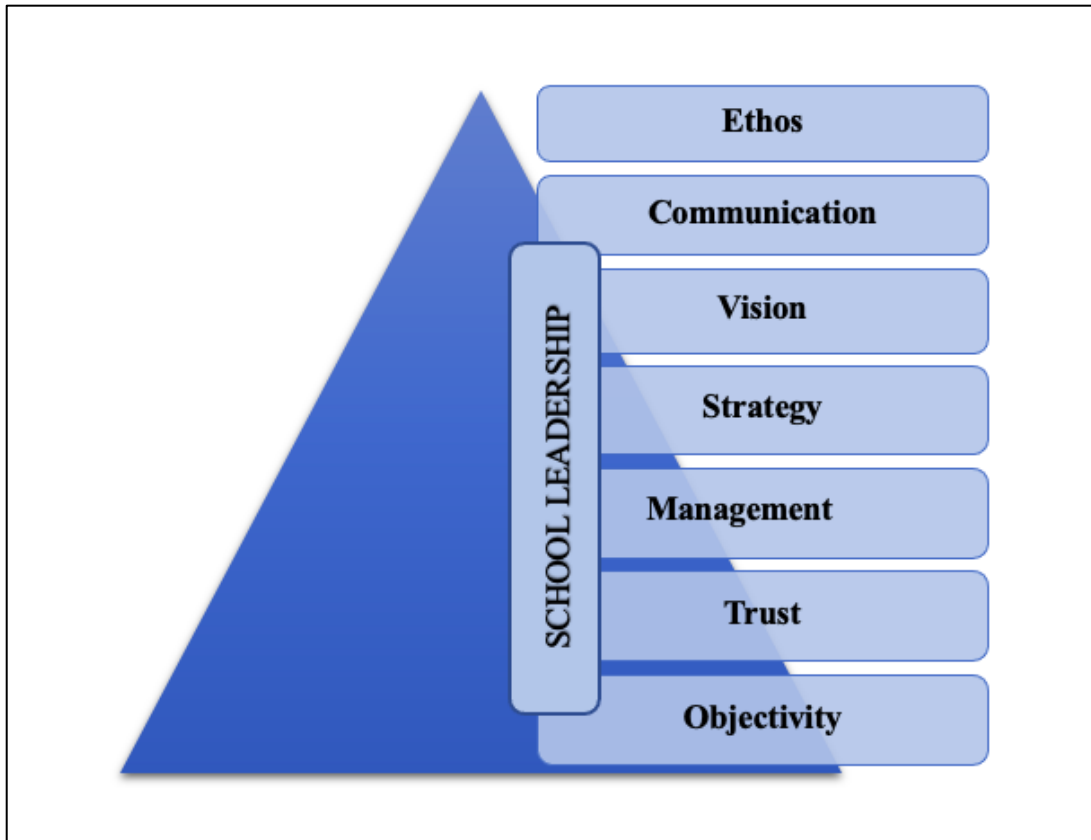


Figure 4.4 Key factors of school leadership (adopted from the definition of Leithwood et al., 2006)

Until 1988, in England, the concept of school leader included only head teachers. It was noticed that the first role of head teachers was teaching, so the decisions made by them, as part of a central system, are quite incomplete in responding to the needs of the school and staff. The support the head teachers received from the central organization that they are affiliated with, was not sufficient to meet the needs of the school.

With the 1988 Education Reform Act (ERA), all school heads ceased to be simply employees of the local education authority as through local management of schools (LMS) they were made responsible for the financial as well as educational health of their schools. Thus, the transition from management to leadership was achieved. In the following years, school responsibility was transferred to school leaders by disabling local governments, since school leaders shared the responsibility of schools together with local authorities. It has been defended in the 2010 White Paper, “a lesson taken from the best educational systems in the world is that they delegate the maximum possible power to the front line, while at the same time retaining high levels of accountability” (DfE, 2010, p.73).

Over time, school leadership has been ranked and formalized according to hierarchy by bringing people together for different task groups (Higham et al., 2007, p.20).

1. The senior leadership team: the Head Teacher, Deputy heads, Assistant Heads and, where there is a separate post, the Bursar or the School Business Manager.
2. The middle leadership team layer: Heads of Year or Key Stage Managers; Heads of Department (or Curriculum areas) and Advanced Skills Teachers (ASTs).
3. A range of leadership and management duties: Curriculum Coordinators; Collaboration Coordinators; SEND Coordinator (SENCO); Managers for Every Child Matters agenda or extended schools.

In all three categories, it is shown that school management should be carried out by a team and school leadership should consist of educators who support each other, so decisions about the school cannot be left to the will of a single person. According to Dinham (2016), the leaders of influential schools are people who are open to innovation, support personal development, develop positive relationships at school, create vision, mission and expectations, and contribute to the process of increasing the quality of education with their behaviour that instils a sense of responsibility. Because their interest in teaching activities positively affects student learning, the principals in these schools support the sense of justice by supporting teachers, providing resources (DfES, 2006; Harris, 2004).

The instructional leadership role of the head teacher is to contribute significantly to the success of teachers and students. Andrews et al. (2010) revealed leadership behaviours and impact of these behaviours on the students' academic achievement in a study in which the results of students' success were examined. The authors classified the strong, moderate and weak instructional leadership behaviours of head teachers and found that these leadership behaviours caused great impact on progress in students' academic achievements. In addition, in schools where teachers perceive head teachers as strong instructional leaders, it is observed that students' achievements in mathematics and reading are higher than in schools where the instructional leaders are perceived as medium and weak. Consequently, Stimson (2003, p.41-42) listed the benefits of working with a headteacher who is also the teaching leader in terms of teachers as follows:

1. They show that teachers are important for school.
2. They develop and increase teachers' skills.

3. They pay more attention to teachers' duties.
4. They give more independence and responsibility in teachers' work.
5. They are ready to recognise the work of teachers to provide consistent support.

It is of great importance for an instructional leader, who aims to make teachers effective in education and who thinks about their benefits, to prepare the necessary environment for them to develop and prove themselves, to create opportunities and to provide professional development for teachers, by employing teachers at school efficiently. At the end of these development activities, teachers and other staff are consistently informed about the changes and developments, their qualifications increase, and therefore “the school has the opportunity to offer more effective education” (Çelik, 2011, p.5), because administrators try to transfer their competencies to the class by providing effective guidance on the development of teachers' instructional skills (Çelik, 2000).

It can be said that such a working climate at school produces positive momentum for teachers and students and is dependent on the leadership ability of the principal (Töremen, 2004). The behaviours of school administrators, who are expected to be leaders in caring and sharing teachers' thoughts, trusting teachers' professional decisions, and involving them in school-related decision-making processes, can increase teachers' organizational commitment. Teachers with a high level of organizational commitment are likely to be more connected to their jobs and students, thus more inclined to form a positive teacher identity. On the other hand, Macleod and Perepa (2020) look at the relationship between teachers and school leaders in another perspective. According to them, teachers' thoughts of being unqualified and worthless and being in a hierarchy that discourages work cause difficulties in establishing relations with the school administration. This situation even causes teachers to hesitate to express their concerns about a child with a suspicion of ASC. Unfortunately, this situation is possible to see in some schools.

Sergiovanni (1998) emphasizes that administrators who are trying to be instructional leaders are ready to meet the needs of their own schools and to achieve shared goals by serving stakeholders. School administrators who exhibit this leadership approach establish a system of relations with teachers that supports the achievement of excellence in student achievement and endeavours to create positive environments, so that all students can learn (O'Donnell & White, 2005). In a school dominated by such a culture, teachers are expected to work in collaboration, their projects, entrepreneurship or mistakes are understood by the administrators, and they have

a say in the decisions that concern them, the school and the students. In the event that these expectations are fulfilled, it seems an inevitable result that a positive TI is formed and as a result, the success of students increases.

4.1.3 Professional Factors

According to Gu and Day (2007), the reasons for the emergence of teacher professional factors as a separate area of research include the realization of the importance of teachers' own social life, social value judgments, political ideas and general policies on teacher effectiveness and efficiency. Since the development of teaching identity is a dynamic process (Franzak, 2002), being a teacher or feeling like a teacher is part of an ongoing process, not a finished product or a result. During this process, teachers constantly encounter new information, while developing their teaching identity, by communicating with others, internalizing this information in their own way (Beauchamp & Thomas, 2009), and constantly restructuring their professional identities. In other words, the process of professional identity constitutes an endless cycle of transformation and change in teachers. According to Akkerman and Meijer (2011, p.135), teacher professional identity “should be defined as an ongoing process of negotiating and interrelating multiple I-positions in such a way that a more or less coherent and consistent sense of self is maintained throughout various participations and self-investments in one’s (working) life.”

In this part of the research, four main factors are discussed, which are thought to be covered by professional factors of TI, such as teaching experience and ethos (Day, 2007), collaboration (Beauchamp & Thomas, 2009), pedagogical content knowledge (PCK) (Nilsson& Nilsson, 2019), and curriculum and assessment (Hsieh, 2010). These factors, which affect the formation of professional identity, are handled and explained as a framework in order to understand how teachers integrate these effects and how they cope with tensions and contradictions in their careers (Beauchamp and Thomas, 2009). It is important to clarify the factors that create professional identity in order to understand the dimensions of teaching and to determine how teachers will teach and what attitudes need to change in the field of education (Beijaard et al., 2004).

4.1.3.1 Teaching Experience

Teachers associate their experiences with their knowledge and feelings and can adapt socially appropriate experiences to their identities (Beijaard et al., 2004). Since development of the professional identity of teachers is a continuing process throughout their working life, this

adaptation will be a part of this process. Regarding the belief that education experiences have a great influence on the formation of professional identity and the practices of teachers, there is some interesting and supportive research available in the literature on this subject. For instance, Flores and Day (2006) examine how 14 teachers in the first two years of their profession shaped their interactions between personal, professional and environmental factors in different school settings. The data collected reveals the importance of experiences in the formation, destruction and re-formation of identity. Initial professional teacher education, the first internship experience and classroom experiences shape professional identity by influencing current teaching experience and perspectives.

From the research of Flores and Day, we can conclude that teaching is a phenomenon that can be internalized over time. Because the relationship with students, the pleasure of success, the ambition for the profession and the desire to do better are the emotions gained over the years; it is these emotions that trigger the motivation to teach. Some research shows that new teachers recognize that teaching is only a profession in their first years of practice, but as they gain experience, their profession becomes a part of their identity. In the study conducted by Nias (1989) through interviews with primary school teachers in England, the participants stated that although they experienced extreme tiredness, inadequacy and uncertainty in the first year of their profession, they felt more confident and equipped by the effects of both gaining experience and confirming their competence with colleagues. Teachers who feel professionally competent become more active in the ongoing process and this positively contributes to their self-efficacy. Research on the relationship between self-efficacy and experience has shown a positive correlation, showing that teachers tend to trust themselves more about their careers (OECD, 2009).

In the first part of Nias' research, the teachers who participated did not consider the concepts of "being a teacher" and "self-awareness" both together, therefore keeping their personal identity separate from their TI. However, during the second part of a teachers' professional life, it is seen that the concepts of being a teacher and self are intertwined. For example, the majority of the participants stated that being a teacher in the classroom means being yourself. Based on this finding, it is possible to say that professional identity is not only developed in education faculties or in the first years of teaching, but it is a dynamic formation that continues as a 'life cycle' through teaching experiences. The fact that teachers spend more time with students in the classroom environment and that the profession is dominated by some skills, will affect

classroom practices and contribute to effective education. In this way, the professional identities of the teachers who feel more equipped will be shaped accordingly.

On the other hand, it is not possible to say that teaching experiences always contribute positively to the identity of the teacher. Some people who have been teaching for many years may experience some burnout, fatigue and sacrifice. For example, Karayel (2019) examined the job satisfaction and professional identity of 18 teachers who had been teaching for more than 20 years. Some of the participants stated that they were tired of repeating themselves and did not enjoy being in the classroom. According to this result, it is inevitable that teachers who have not been able to internalize their teaching profession and who have not been satisfied with their teaching, have faced burnout syndrome within the last few years of teaching. However, realization that teaching is a profession whose practitioners are constantly learning and developing in this way, would show that the years of practice become supporting experiences and there will be gains in the teacher's classroom performance.

Therefore, it is possible to say that in-class practices and classroom management practices are related to teaching experiences. Wolff et al. (2017) state that experienced teachers are much more effective than novice teachers in predicting classroom management events. This shows that teachers with years of experience have developed a better understanding of classroom management, enabling them to anticipate problems and adapt classroom management practices accordingly. However, when novice teachers are just starting out, they need time to develop their understanding of teaching during the transition or transformation periods.

In short, the teaching experience provides opportunities for all teachers to take on the role of a teacher and to have a sense of being a teacher (Krzywacki, 2009). Teachers have the opportunity to examine their professional identities intensely through experiences. The emotional experiences and teaching skills they have acquired in this way play an important role in their professional identity, self-efficacy, and self-development (Cattley, 2007).

4.1.3.2 Collaboration

Teachers work in collaboration with other teachers, school administrators and families during the education process, and this collaboration has a significant impact on student development. TI is linked to the school culture created by these interactions. "However, collaborating within the workplace is under-researched and underdeveloped" (Macleod & Perepa, 2020, p.195). As mentioned in the previous sections, teachers who teach in a positive school culture do not lose

their desire to teach. However, for motivation to teach to remain constant, school cultures dominated by cooperation and solidarity are required. In this regard, having a TA with whom the classroom responsibilities and experiences are shared, or being guided by more experienced teachers are important factors in terms of professional TI, because “teachers who worked in collaborative cultures were more likely to develop and to demonstrate positive attitudes towards teaching” (Flores & Day, 2006, p.230), students, school and even teaching activities.

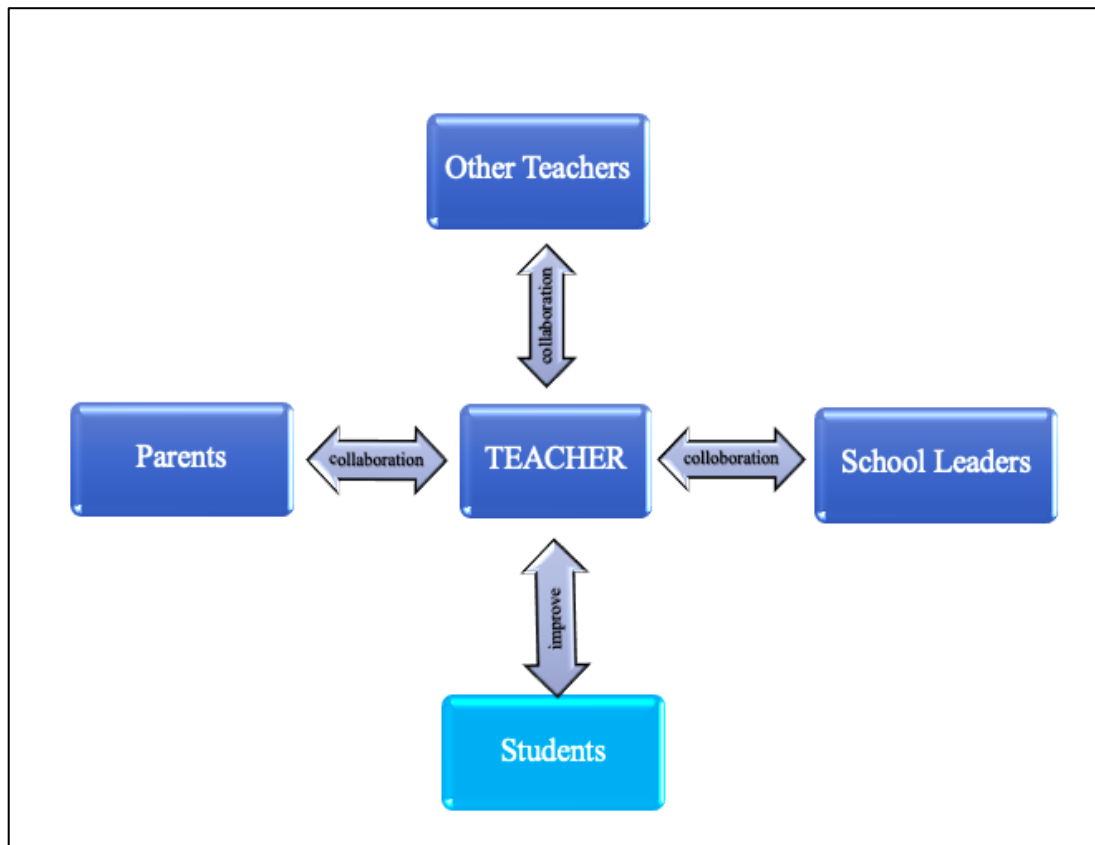


Figure 4.5 Collaboration system of teachers

When we look at the literature, we can see that the social theories of Vygotsky (1962) support cooperative education. For example, according to the social constructivist approach that forms the conceptual framework in the current research, information is acquired in a social environment and through interaction. Students cooperate with their peers and teachers while structuring the information. Teachers design and use their methods within this framework. Thus, effective and permanent education is realized. Vygotsky argues that learning stems from the exchange of ideas and interactions, so that collaboration must be used in the learning process. Vygotsky’s ideas were well received by many educators and researchers, so the collaborative practices movement started to appear in schools, particularly after the Individuals with Disabilities Education Act (IDEA) was introduced in the USA in 1973 (Pugach et al.,

2011). Within the framework of IDEA, meeting the learning needs of students with disabilities through special education and general education cooperation practices was attempted. Therefore, it was recommended that both general and special education teachers work in collaboration with each other in order to provide quality education to disabled students in the least restrictive environment.

In English mainstream schools, a collaborative school culture is created with the help of TAs, the SENCO, support staff and other teachers (often more experienced teachers) to support the learning of students with SEND. This approach, especially among teachers, plays a key role in creating an effective school culture. According to Mendez-Vilas (2006), teacher collaboration is carried out in 'formal' and 'informal' ways. If two or more teachers share their experiences, pedagogies, and knowledge to support the development of students, it is 'formal' and if they share resources or content in a natural conversation environment "informal" collaboration is accomplished. As a teacher, I think that the teacher who attempts to improve their students by building their professional identity should use both collaborative approaches. Thus, although it is not mandatory, working in cooperation becomes a part of effective and productive education. Because professional TI is socially influenced by the beliefs of others and the context of learning, it is established through interactions with others (Galman, 2009).

Teacher collaboration is actually a potential concept that can improve learning for both teachers and students (Williams, 2010). When teachers have the opportunity to collaborate professionally, they learn and teach by sharing different experiences, pedagogies and content (Goddard et al., 2007). A study by Goddard and Goddard (2007) concluded that 47 schools in a large urban school district were positively affected by teacher cooperation. Teachers stated that collaboration increased their knowledge and contributed to them seeing themselves as part of the school. This study also provided evidence of a direct link between teacher collaboration and student achievement for school development. In another study Taylor (2020, p.8) indicates that "teachers perceive their support for the professional growth of others within accounts of their own". Often this involves opportunities for collaboration, through coaching, team- work or organisational liaison between schools or across alliances. In other words, when an effective collaboration takes place, teachers' knowledge and experience become widespread and teaching is increased. Therefore, Williams (2010) states that teachers with various levels of experience, focusing on collectively improving student learning, are the most effective factors in increasing student success and effective education.

Looking at the subject from another perspective, it is possible to come across research that suggests that it takes time to develop and implement effective cooperation (ibid). Teachers who are consumed by daily tasks, limited resources and pressure to demonstrate teaching competence may not have time to collaborate with others. Although teacher collaboration is often encouraged in development plans, teachers are not satisfied with monitoring or researching (Goddard et al., 2007), so they simply reduce collaborative practices to sharing information on computers and hard copies to save time. However, the gains here are quite minor when compared to the positive contributions of collaborative work to teachers. As a result, a collaborative educational process contributes to the success of students, while developing the professional identity of teachers. David Truss's article in his blog entitled "Isolation vs. Collaboration", summed up this effect well:

“Teachers who collaborate, learn from each other. They will feed off of each other’s insights and enthusiasm and they will learn exponentially. If they participate in collaborative learning opportunities with peers and students, they will see exponential growth in student learning as well.” (David Truss, 12 July 2017)

4.1.3.3 Pedagogical Content Knowledge

Considering the qualifications of a good teacher, one of the features that comes to the fore is the content knowledge. However, strong content knowledge alone is not sufficient for effective teaching. Therefore, the question of how a teacher teaches, besides what he knows, has been the focus of much research in recent years. How the teacher reflects the knowledge of the content in the teaching requires various knowledge fields, such as knowledge of teaching strategies, pedagogical knowledge, and curricular knowledge. Therefore, being able to teach effectively is expected of a teacher with this knowledge, which is defined by Shulman as Pedagogical Content Knowledge (PCK) (1987). According to Shulman (1987, p.8) PCK is “... the blending of content and pedagogy into an understanding of how particular topics, problems, or issues are organized, represented, and adapted to the diverse interest and abilities of learners, and presented for instruction.”

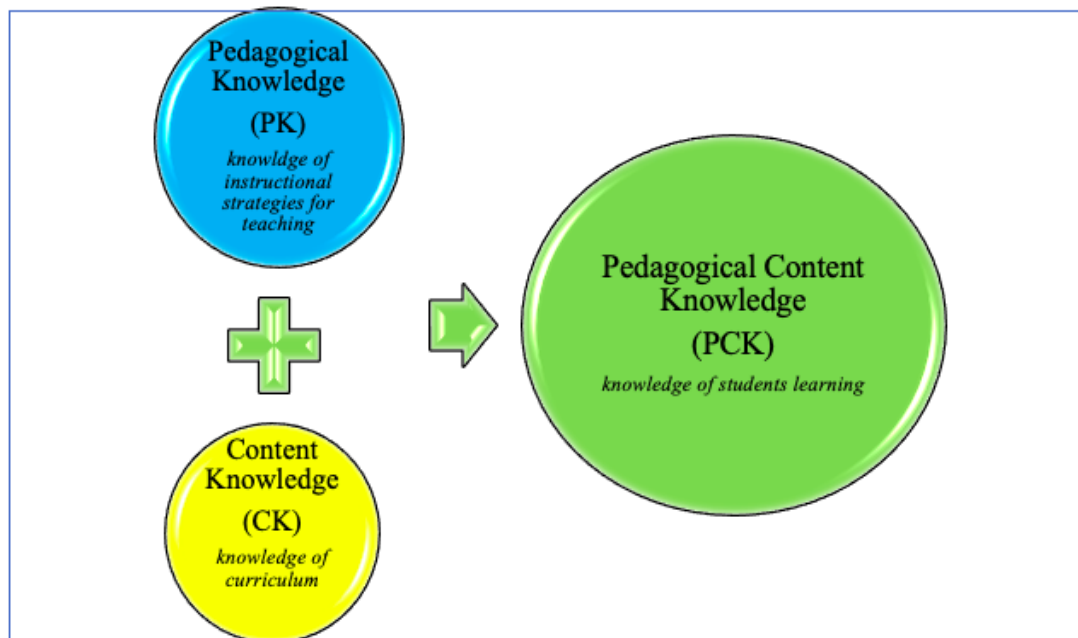


Figure 4.6. Pedagogical content knowledge in teaching (Adapted from Shulman's PCK model)

PCK, which we can describe as a synthesis of content knowledge (CK) and pedagogical knowledge (PK), refers to one aspect of teachers' professional expertise. In other words, the fact that the teacher only knows the content of the subject is not sufficient for the success of the teacher in teaching. For example, Yeo (2008) stated that if a teacher does not fully know the mathematical concepts taught, it is not possible to explain the concept of mathematics. In this case, the teacher cannot be expected to teach this lesson and bring it to his students. On the other hand, it is also not always possible for teachers who know the content of the subject to be able to fully teach these concepts to their students, because the teachers must have the ability to explain the subject in accordance with the needs and levels of the students in order for the desired goals to be reached and the teaching to be effective. Therefore, when the PCK of the teachers is low, they are more likely to emphasize the extent of their studies rather than the process of the students (Black & Wiliam, 1998). In other words, when teachers focus on the amount and outcome of their work in their assessment, AoL is implemented instead of AfL in education. However, teachers should focus on descriptive and supportive feedback that allows students to take control of their learning by identifying the strengths and weaknesses of their work. Thus, the learning process will be supported, and the assessment will be carried out for this purpose.

Grossman (1990) states that PCK consists of four basic components: the teachers' different levels of knowledge and attitudes about the subject to be taught to students, their knowledge

of students' readiness, an integrated curriculum knowledge that can establish a connection between the subjects, and teaching strategies (how, what level, when, and for whom) that should be used in order to perform the education in the most effective way. Therefore, the teacher should be able to develop new methods in classroom teaching activities in order for students to gain knowledge and skills (Segall, 2004). While developing these methods, by considering the socio-cultural structure of the learning environment, student readiness and learning styles arising from individual differences should be determined and subject content could be arranged according to different student groups (Veal & MaKinster, 1998).

It should be noted that teachers who have succeeded in this are generally accepted as equipped teachers and have very good general pedagogical approaches, such as individual learning, effective questioning, and sufficient waiting time in their classrooms. The PCK approach, which requires not only knowledge of the student, but also following of the learning process during the teaching, serves the same purpose as the concept of AfL. This is because both methods aim at structuring the information of the student and ensuring that the teacher supports them in this venture. When the teacher becomes a part of the student's learning journey, rather than being the leader, assesses the students based on this purpose and determines the new road map, consequently, so continuous learning will take place and the professional identity of the teacher will develop positively.

In conclusion, the common point of much research is that by developing their PCK, teachers' teaching practices and assessments can be effectively used to support students' learning.

4.1.3.4 Curriculum and Assessment

Marsh (2010, p.93) defined curriculum as “an interrelated set of plans and experiences which a student completes under the guidance of the school”. Teachers integrate their practices for achievement into the curriculum with the features they bring from their professional identities and present them to the student. Therefore, it is possible to say that the scope of the concept of curriculum is evaluated from a wider perspective, depending on the relationship of the individual and the social environment with education and it is related to more complex processes. Any changes to the curriculum can make this complex structure more confusing, or on the contrary, solve existing implementation problems.

Miel (1946) highlighted the important role that the teacher will play in the implementation of the curriculum, as it is teachers whose interaction with students are featured the most in the

educational context of his book "Changing the Curriculum: A Social Process". He drew attention to the types and modifications of the curriculum applied to achieve better teachers and better schools, and consequently, a more democratic and more qualified understanding of education. In a sense, he showed the relationship between content and changes in curriculum, linking by teachers' role. Curriculum change often results from external influences, such as political, economic or social forces. This puts the government in a position where it needs to make an appropriate policy and then enable teachers to implement curriculum reforms. Therefore, teachers may face changes that they believe are not for the benefit of their students and themselves but are imposed on them.

The new curriculum, which was implemented in England in 2015, was created as an example of the school systems of some countries (Hong Kong, US, Singapore, Canada) that performed best in the fields of science and mathematics. However, this was found to be content heavy by many academics and teachers, and even the news headlined "Pupils begin 'tough' new national curriculum" (Hannah Richardson, BBC News education reporter, 1 September 2014). In Richardson's interviews with teachers, many stated that the new curriculum contained too much detail and heavy information for young children that may cause problems in practice. The fact that the curriculum was to be applied in all local authority, primary and secondary schools meant ignoring the differences in school ethos and culture.

Therefore, when it comes to resources, it is important for curriculum developers and policy makers to understand the diversity of schools before introducing a new curriculum, because some schools may not have the necessary resources to implement it. Rogan and Grayson (2003) emphasize that those responsible for curriculum change activities need to understand what resources are available and the degree of resources needed to support the change. Curriculum developers should ask themselves the following questions. "What happens when change occurs? What are the roles and values of change? What really motivates people to change and what are the consequences of change to students and the general society?" (Ornstein & Hunkins 2009, p.253).

In the same study, Rogan and Grayson (2003), when examining the effects of curriculum change in terms of teachers, made some interesting findings that curriculum change could affect teachers' teaching methods, context and even their self-confidence. For instance, they stated that some science teachers in the study chose only the subjects they could teach in the curriculum and ignored those they could not, because of a lack in their subject knowledge.

The inadequacies of the teachers in their subject knowledge affect both the intensity given to the teaching of the subjects and the selection and use of versatile teaching methods suitable for the chosen subject. This may cause teachers to feel inadequate, negatively affecting their self-esteem. However, this preferred escapist and self-preservation motive may lead to the problem of reacting to the changing nature of knowledge by completely rejecting the changes in the curriculum. However, education is a process that will continue only with the teachers who are willing to development. In this process, teachers who are one of the main components of the education system can shape their professional identity by adapting to the changes, and thus, can blend the content with pedagogy that can contribute to their students' understanding.

The curriculum is a dynamic interaction between content, pedagogy, and evaluation, with evaluation in this interaction being a measure of whether students learn what is taught in the curriculum. Teachers can learn by using methods to assess how much the current curriculum has been learned, which points are being missed, and what complementary studies are required. There are two types of assessment methods commonly used in schools: Summative Assessment (SA) and FA. Both FA and SA are an integral part of good education and are key elements that shape the nature of the curriculum. These assessment methods and the comparison of the methods will be explained in the following sections, however, the relationship between the assessment and TI will be based on the FA concept because of the aims of the current research which aims to investigate the role of the present TI on their FA methods.

4.2 Formative Assessment

4.2.1 Assessment for Learning

Before explaining formative assessment, there is a need to clarify the confusion between assessment for learning and formative assessment in the literature. Nowadays, some academics prefer using the term AfL instead of FA (Black et al., 2003; Black & Wiliam, 2006; Broadfoot, 2008; Heitink et al. 2016; Lee, 2006; Moss & Brookhart, 2009; Stiggins, 2007; Hegeman, 2020). AfL was first used by Mittler (1973) for class placement, however, the same term in the sense of FA, was first used by Elton (1982). The fact that agreement has not been reached among academics today (Kingston and Nash, 2011) has resulted in many different definitions appearing in the literature.

While AfL aims to be an approach to combine assessment and learning in the learning and teaching process, it acknowledges that FA is effective in the process of structuring knowledge

and academic progress of students. The Assessment Reform Group (ARG, 2002a, p.2-3) defined AfL in a sentence:

“Assessment for Learning is the process of seeking and interpreting evidence for use by learners and their teachers to decide where the learners are in their learning, where they need to go and how best to get there.”

It is understood from this definition, that AfL is a process that takes place as a result of the joint effort of the teacher and the student; the mutual interaction and communication in this process also affects the quality and efficiency of the learning. The ARG (2002, p.2) has determined 10 principles to make this definition clearer and more understandable and to emphasize the effects of AfL:

1. “is part of effective planning
2. focuses on how pupils learn
3. is central to classroom practice
4. is a key professional skill
5. is sensitive and constructive
6. fosters motivation
7. promotes understanding of goals and criteria
8. helps learners know how to improve
9. develops the capacity for peer and self-assessment
10. recognises the achievements of all learners.”

When considering these features, AfL can be defined as a process that evaluates the extent to which students reach their individual potential or to what extent they meet their learning objectives, and in this way, it supports the learning of students. FA is an assessment method used in this process that measures and supports the learning process through various methods. Therefore, these two concepts coexist and are both be central to this research.

4.2.2 Definition of Formative Assessment

Leahy and Wiliam (2015) state that the definition of FA differs from the other methods in four areas. The first is how much time should elapse between teaching and feedback, the second is whether the assessed students benefit from this process or not, or how much the teachers use the evidence they have obtained from current students for future students. The third area states

that students should actively participate in the FA process, and fourth, it is also a matter of discussion whether FA is a method that changes teaching. Teachers should consider these four main areas when implementing FA methods. These principles can guide teachers by showing what points are important and which points to focus on. Nicol and MacFarlane-Dick (2006) support this opinion. According to them, a theoretical description, of which there are no instances, can provide a limited opportunity to help teachers use the theories in their daily teaching practice.

One of the problems in defining FA is closely related to this issue. Although many researchers have expressed their opinion on this subject, there is little information about how FA is “designed, developed, embedded and... implemented by teachers” (Ayala et al. 2008, p.316). Therefore, as a researcher, I think that the fact that researchers and practitioners have different definitions of a concept that can be practical, such as FA, would lead to confusion in the literature. However, to be more useful and beneficial for both research communities and schools, a comprehensive and common definition is required (Rynes et al., 2007).

According to an early definition of FA by Black and Wiliam (1998, p.2), two important researchers in the area of FA, “*Assessment’ refers to all those activities undertaken by teachers, and by the students in assessing themselves, which provide information to be used as feedback to modify the teaching and learning activities in which they are engaged. Such assessment becomes ‘FA’ when the evidence is actually used to adapt the teaching to meet the needs.*” Black and Wiliam, have identified 3 elements of FA in this definition: 1) teacher training is a significant part of FA and 2) student reactions can be used as feedback. This view is also supported by Gipps (1994, p.7) “*FA is used essentially to feedback into the teaching and learning process.*” and 3) the information given by the teacher and given to the teacher can be used as feedback. In 2003, Black and Wiliam made this definition more comprehensive and specific and stated that FA supports student learning through feedback from self and peer assessment. However, they also stated that these methods can be formative only when they are used for teaching adaptations to meet the learning needs of students.

Consequently, the common conclusion reached by international researchers in the last two decades is that assessment and evaluation methods influence learning (Biggs & Watkins, 1996) increasing the level and quality of students’ learning when measurement and evaluation activities are used appropriately (Clarke, 2008; Black & Wiliam, 2002). Many researchers also support this view by suggesting that FA enhances the level and quality of student learning

(Stiggins, 2007; Black & Wiliam, 1998a, 1998; Torrance & Pryor, 1998; Clarke, 2008; Black et al., 2003; Harlen, 2003). However, FA serves this purpose much better when used to provide feedback to learners about their learning progress, as well as guiding teachers in the learning progress of students and the best next steps to be taken. Teachers decide how to develop their teaching according to the learning needs of their students, while students can understand both positive and negative aspects of feedback they receive and direct their work accordingly (Cowie, 2001; Brookhart, 2001). Thus, the learning process is supportive and meaningful and permanent information can be achieved. In conclusion, it would not be wrong to say that teachers using the FA methods have an extremely important role in classroom assessment practices made to support and develop learning. As I mentioned earlier, FA is part of AfL and a methodical approach. According to Costley et al. (2014), better student results can be achieved through methodical assessment and continuous improvement processes.

How do students and teachers use FA in such a continual improvement process? In what way do they give feedback to each other? While looking for answers to these questions, I encountered another definition and type of FA: *Informal FA*. Ruiz-Primo (2011, p.15) has defined informal FA as follows:

“(a) oral evidence (e.g., students’ questions and responses, listening to what they say in small groups, having conversations with students), (b) written evidence (e.g., notes in science notebooks), (c) graphic evidence (e.g., drawing, graphs, drawing concept maps), (d) practical evidence (e.g., observation of students conducting an experiment and measure the mass of an object), and (e) non-verbal evidence (e.g., body language, body orientation)”.

All the evidence described in this definition and the term informal FA, are very important in terms of the research topic, because students with ASC who are the focus of this research have problems in communicating with other people and socializing. Thus, informal FA is closely related to finding all clues of how students with ASC respond to FA during the AfL process. However, students’ responses cannot be explained by only examining formal FA methods, but another helpful method is needed, especially when observing students on the ASC. At this point, informal FA helps to clarify the many uncertainties encountered in this research. It means that responding verbally to FA methods applied by teachers is not the only way these students can give feedback, but the researcher can use one or more of the other evidence types that are

mentioned above. For these reasons, informal FA evidence will also be examined in the context of this research.

When all these components and features are reviewed again, effective FA includes many criteria, such as sharing the purpose of learning with students, providing feedback to correct mistakes in time, helping students to find out where they are lacking understanding by reviewing their own development, thus increasing motivation and self-confidence and activating students in the FA process. These are features that are crucial for effective learning and development and can be included by using appropriate measurement techniques (ARG, 2002; Leahy & Wiliam, 2015). It can be said that these criteria can be used as methods under the formative evaluation framework. The most important consideration in this context is that FA must be integrated and continually present in teaching (Torrance & Pryor, 1998).

For this purpose, FA techniques have been explained in this study as a series of assessment methods used to support the learning of students with ASC and all of them are considered to be part of the AFL process.

4.2.2.1 Types of Formative Assessment

Black et al. (2003) have identified four main elements for the implementation of FA:

- Questioning
- Feedback
- Self-assessment and peer assessment
- Formative use of summative assessment

Florez and Sammons' (2013) literature review examined 33 articles about FA, which were published between 1998 and 2010 and found that at least one of these four elements, which were accepted as characteristics of the FA, was examined in the articles. Hodgson and Pyle (2010) emphasized that speech, questioning, feedback, self and peer assessment are important and main elements of FA, and the formative use of SA can be used as supportive of learning and teaching.

Questioning

Questioning is one of the main elements of FA (Hodgson & Pyle, 2010). Teachers can spend one-third of teaching time asking questions of the students. For instance, according to Borich (2014), 50 or more questions in a day can be asked in a typical primary or secondary school classroom. Moreover, sometimes 80 per cent of the whole of school time can be divided into questions and answers. Such intense focus on a single strategy demonstrates both its appropriateness and perceived effectiveness. However, all questions are not effective. In other words, all questions do not actively involve students in the learning process because most teachers do not make a plan to use classroom dialogues, which include questioning to help students' learning (Black et al. 2003).

Teachers can use questions for many different purposes. For instance, they ask questions to students to terminate wrong behaviour, or to bring the students' attention back to the classroom. In addition, it can contribute to the students' critical thinking skills by using follow up and supportive questions. The common purpose of all implementations is to promote and contribute to the students' learning. Thanks to quality questioning and objective questions, students can be kept active in the learning process continuously (McMillan, 2014).

Similarly, in the implementation of FA, questioning is also a method used to learn the students' needs and support their understanding and learning. This might be possible if the questions are effective and determine the depth of students' knowledge. McMillan (2014) identified some key and important characteristics of good questions to be used in FA. However, I will explain and adapt these features by considering the students who have ASC and who are the focus group of this study.

1. *In order to understand the purpose of the question, it must be clearly stated.* Because students with ASC have difficulty understanding closed expressions or idiomatic language, they should be asked in very clear language and short sentences. Chin and Osborne (2008) support the idea that short and direct questions should be formed in terms of students' understanding of the task.
2. *Questions should be matched with the learning objectives.* Students should be supported with appropriate questions for the behaviours that teachers want to teach. This may contribute to the likelihood of promoting the expected behaviour of students with ASC.

3. *Students should be given enough time to answer.* Waiting time in the questions asked to students is also very important in terms of FA implementation (Webb & Jones, 2009). Research shows that most of the teachers wait less than a second after asking questions, and if students do not answer, they ask another question or give the answer themselves. However, the difficulties experienced by students with ASC may make it difficult for them to think and respond like their neuro-typical peers. Therefore, this should be encouraged by giving enough time, instead of rushing them to answer the questions.
4. *Suitable feedback should be given to the student's answer.* The responses to the students' answers are important in terms of collecting valid information on student development. Because of the attitude of the teachers, the relationship between students and communication will reveal whether students want to respond. Ideally, each student's response should be met with meaningful and honest feedback.
Feedback is part of the ongoing determination and tells the student how much progress has been made. Considering that students give not only verbal reactions, but also non-verbal feedback through body language (informal FA), being close to the students and observing verbal expression should be kept in mind. Thus, by providing appropriate feedback to students with ASC, the learning process can be made effective.
5. *Closed-ended questions should be used.* These kinds of questions are those that are answered in a single word such as yes/no (i.e. 'Is it a cat?'). Another type of closed-ended question is the true/false question, or limited option. These types of questions are very common in schools. Although it is thought to be not very useful in FA in supporting the learning of students, it is known that closed-ended questions can be used effectively to communicate with students with ASC. They should be included in the FA process by asking the questions that will enable students with ASC to answer yes/no, or to choose between two or three options.
6. *Repetition should be provided in asking the question.* Learning can be reinforced by repeating questions about the topic or behaviour to be taught. Emoji cards or pictures can be used frequently for this purpose.

To sum up, questions have an important role in the effective use of FA, especially to support the learning of students with ASC. While asking questions to this group of students, the teacher should be attentive in ensuring that the questions have the above characteristics.

Feedback

One of the main applications of teachers of FA is to gather information about how students' learning develops during the teaching process. Teachers use this information to follow and record students' learning processes and, in this way, they pay close attention to certain aspects of the development of students' understanding and skills (Erickson, 2007). Thus, they can show the students their learning journey. This information, which is given by the teacher about the student's performance during the process, is called feedback (McMillan, 2014).

Feedback is one of the most preferred methods in FA. It was defined by Sadler (1989, p.120) as "information about how successfully something has been or is being done". He mentions in the same research that useful feedback includes three features: "first, students need to know the aim behind doing a certain task; second they need to be aware of the extent to which they have achieved those aims; and finally, they need to understand what actions to take in future lessons and activities to improve" (p.121). Hodgson and Pyle (2010) concluded that in the literature review of 39 studies in Australia, New Zealand, Asia-Pacific and the United States, there were two types of feedback with the above-mentioned three characteristics. First is the feedback that is given to the teachers from students (the students can use verbal, written or body language to respond) and the second is the feedback given to the students from teachers (students' learning is encouraged by being given feedback on their verbal and body language).

Interpretation is central to the communication and formative feedback between the teacher and the student. However, in environments such as mainstream classes, where this may be difficult to do, teachers can give up on interpreting the students' responses and face problems in understanding students' behaviours. Nevertheless, it should not be forgotten that "specific success-related feedback feeds into the positive cycle of conscious learning and augments use-dependent plasticity, created through the repetition of tasks" (Emerson & Holroyd, 2019, p.2).

Therefore, in order to give feedback reliably and to benefit from feedback, students should not only know what good performance is, but they should also know how other students perform and see the gap between them as a measure of their own performance (Sadler, 1989). Therefore, the characteristics of effective feedback are listed as follows (Brookhart, 2013; Ruiz-Primo, 2011):

- It aims at achieving specific objectives by using appropriate evaluation criteria.
- It allows students to play an active role in the process of using and producing feedback.

- It aims to increase the self-regulation, self-efficacy and focus of the students.
- Describes the student's work, not the student.
- It is given on time.
- It is given according to the level of the student.
- It can be used by the student and leads to behavioural changes in the student.
- Considers the student's response to feedback (Will it decrease or increase the student's effort?).
- It is honest and true.
- It is positive but not exaggerated.

Considering all these features, it will be seen that it is equally important to provide accurate, effective feedback to students with ASC and have a supportive-sympathetic TI. For this reason, teachers should be aware of which formative feedback methods and equipment need to be used to support the learning of students with ASC, especially when computers and interactive whiteboards are widely used in education, as opportunities will be created for students with ASC to respond to visual clues and feedback (Bushell, 2006) and these resources can be used more effectively to provide feedback from students. When it is matched with communication difficulties, using more media resources to attract students' attention and adapting the places they find attractive to the characteristics of the course, makes it possible to use FA with this group of students and enable communication to take place in more than one way.

Peer Assessment and Self-Assessment

While self-assessment means students evaluate their own learning (Bushell, 2006), peer assessment is defined as the assessment of peers in a group (Logan, 2009). With self and peer assessment, students participate in the assessment process by deciding on the quality, degree and value of both their and other students' performances or learning products. According to Logan (2009), while students evaluate their peers, they have an idea about their own performances. Getting feedback from different perspectives through a peer assessment process allows students to see the differences between their peers and them and increases their awareness about themselves. This helps students organize their own learning, thereby facilitating their future learning.

Since self-assessment and peer assessment have advantages that support each other, these evaluation methods are often used together in education. Researchers state that self-assessment

and peer assessment have strengths, such as motivating and actively engaging students, performing effective learning, supporting students to take responsibility and control of their learning, and also enabling them to better configure their learning (Bushell, 2006). Bushell also states that peer assessment processes contribute to the development of students' responsibilities, reasoning and autonomy skills.

However, unsurprisingly, questions about the reliability of a form of assessment at the discretion of the student have attracted the attention of some researchers. Dunlosky et al. (2013) state that the way to reduce this limitation is to explain to students the importance of these processes in learning, to include more of these types of assessment approaches in teaching and to give students appropriate criteria for assessment, so that less concern can be given about the reliability of the scores. From the point of view of students with ASC, it is very difficult for this group of students to use self and peer assessment with an objective perspective. In this case, the teacher should lead the students by using their interest, give more direction, and follow the assessment process of the student with ASC.

However, besides the limitations of self-assessment and peer-assessment practices, the positive features, such as motivating students with ASC cannot be ignored, making them aware of their learning, and improving the quality of their learning processes and products. Moreover, these types of assessment contribute not only to students, but also provide an objective attitude for teachers in their professional lives as they gain experience in their use of assessment techniques to support learning. For these reasons, giving more frequent access to self- and peer-assessment practices in the measurement and evaluation process, and investigating the results will contribute significantly to the identity of the teacher.

Summative Assessment

Summative assessment is another assessment method used to evaluate students' learning. According to McMillan (2014), SA is the monitoring and recording of teachers' competencies for grading students, reporting their situation to their families, placing them in certain programmes, rewarding, setting the grade average for entry to a university or a job, and assessing the performance of teachers in recent times.

The evaluation of students' learning is usually an intentional action of teachers. This is done only after the students take the exam, do homework or perform in class and then their success is measured by giving a letter or a numerical grade (Snowman & McCown, 2015). In this way

it authenticates the performance of students at the end of a course or a unit (McMillan, 2014). In other words, it is designed to determine to what extent teaching objectives are achieved and is primarily used to grade students or to certify their competence.

Techniques used in SA are determined according to teaching objectives, but include tests made by teachers, evaluations of various performance types (i.e., laboratory practical, verbal reports, etc.) and product evaluations (i.e., assignments, drawings, research reports, etc.). These different sources of information about student success can be collected systematically in a product file where the successes and developments of the students can be seen and summarized. Therefore, it has been pointed out that the most common assessment method used in schools today is SA (Adediwura, 2012; CERI, 2008). However, in recent years the constructivist approach often takes place in education and teachers prefer to use more formative methods to support the learning of students rather than measure their learning. This is why teachers often refer to FA in the classroom to assess students' learning needs and they interactively assess the development and understanding of students in order to organize teaching accordingly (CERI, 2008).

4.2.2.2 Formative Assessment and Students with SEND

The application and effectiveness of the FA methods mentioned in the previous section are shaped by the differences between the teachers who apply these methods and the students to whom they are applied. Therefore, before presenting the literature review on the evaluation and support of students with ASC using FA methods, it is necessary to examine the evaluation of students with SEND, which demands a broader framework. For this reason, in this section, the learning needs of students with SEND, the role of FA methods to meet these needs, and possible problems and solutions that may be encountered during this process will be discussed.

Recent statistics show that in mainstream schools, there are an average of four SEND students in each class (DfE, 2021). In classrooms where children with special educational needs are included, it is of great importance to determine the learning needs of these children and to develop appropriate teaching methods. In order to determine the needs of students with SEND, we first need to understand how they might be categorised. The term SEND in relation to children, is described in law in the Children and Families Act (2014, p.20) “A child or young person has special educational needs if he or she has a learning difficulty or disability which calls for special educational provision to be made for him or her”. Following this definition, the concept of SEND is divided into four areas: Communication and Interaction; Cognition and

Learning; Social, Emotional, and Mental Health Difficulties (SEMH); and Sensory and/or Physical Needs (CoP, 2015).

Studies show that a child with SEND can be diagnosed with developmental delay in any one of these areas, or perhaps face difficulties in many areas. These four areas also highlighted by the Code of Practice help to classify some of the students' needs, while at the same time playing a guiding role in possible strategies and interventions. However, although they might fall within the same classification, each student's strengths and needs differ. Children do not always show all of the possible symptoms, with some children being only mildly affected by a particular condition, while others may need a lot of support. That is, students with SEND may present themselves in various ways and behave very differently in class, even if they share the same label or diagnosis.

For this reason, teaching methods that are prepared by taking into account the individual interests, needs and diversity of children with SEND are of great importance. In other words, it is important to understand how to teach children with a diagnosis of SEND, because every child's needs are different, and the impact of these needs on learning and the challenges they may face can vary. Children may experience both academic and social barriers due to their SEND, so they cannot reach their personal potential. Without appropriate support or adjustment, these barriers can manifest as anxiety, separation, and frustration, and sometimes result in challenging behaviour in school (school phobia, yelling in class, outbursts of anger, physically harming oneself or others) (Watts, 2021). For this reason, after the learning needs of students with SEND are determined, the appropriate teaching and assessment methods are decided.

Research shows that teachers' behaviour and practice have the greatest impact on the academic and social outcomes of children with SEND (Efthymiou & Kington, 2017). Teachers can support students with SEND in the classroom by applying many methods in different ways, as an extension of their own identity. As a result of many studies on this subject, some basic strategies have been determined to meet the learning needs of students with SEND (Warnes et al., 2021; Watts, 2021; The Education Endowment Fund, 2020).

1. Creating a positive and supportive environment for all students without exception
2. Build a continuing, holistic understanding of students and their needs
3. Continuous assessment

When these three strategies, which have been determined from a common understanding in the literature, are considered one by one, it can be said that formative evaluation is a concept that covers all these strategies. Black et al. (2003) have made a definition that includes all of the above strategies, stating that FA has the characteristics of identifying students' learning needs, developing and applying appropriate methods for these needs, and evaluating students' individual development in the process. Therefore, considering the learning and evaluation processes of students with SEND within the framework of the concept of FA, would be an appropriate approach to the purpose and scope of this study.

Use of Formative Assessment for Students with SEND

It is a popular idea in recent years that the flexible and adaptable nature of FA is an important form of support and evaluation for students with special needs. It is known that teaching strategies based on strict rules are less effective, especially since they do not allow students with SEND to express themselves and show what stage they are at in inclusive classroom environments (Efthymiou & Kington, 2017; Davis et al., 2004; Schuelka, 2018). Therefore, it is a key role for teachers to support SEN in the classroom by adapting the learning environment and teaching practices to best meet the needs of students with SEND, to identify and use appropriate teaching methods, and to reduce the barriers faced by these students.

Although there is limited research on students with SEND and the use of FA in the learning process, the common argument of these studies is that the methods to be used should be more subjective, create continuity, and be changeable-adaptable (Brookhart, 2020; Moss & Brookhart, 2009; Yan et al., 2021). The method that is successful for one semester may not have the same effect in the next semester, or the same method may not be as effective even on different students with the same diagnosis. Aiming to highlight this sensitivity of the learning process, the National Center on Universal Design for Learning (CAST, 2012) has defined three principles of universal design for learning (UDL):

- Principle I: Provide multiple representations (the “what” of learning)
- Principle II: Provide multiple means of action and expression (“how” of learning)
- Principle III: Provide multiple means of engagement (“the reason” for learning)

In the light of these principles, it can be said that FA is an effective and well-designed form of assessment that supports universal and inclusive learning, and therefore it is suitable for the different learning needs of students with SEND (Thompson et al., 2004).

There is a wide range of guidance on what an effective and well-designed FA method might look like. These techniques, which will be explained in the next section, are listed by Schuelka, (2018) and Thompson et al. (2004) who consider students with SEND, but in a generalized manner. Considering the effect of teacher knowledge and approaches on their practices, it can be said that the criteria specified in these guidelines can be adapted to the individual needs of students with SEND by a teacher who is well-equipped with SEND and FA appropriate techniques. According to Marion et al. (2006) the first condition of effective education and assessment is knowing that most students with disabilities are not low-performing students. Finding strategies to provide FA effectively, involving all students, including students with disabilities is not a “recipe” to be applied when a certain categorical label emerges, or a “recipe” that applies only to students with disabilities. All low-performing students need high-quality FA practices to help them be more successful.

Therefore, an effective FA to be used in teaching students with SEND should have the following features:

1. Because each student is unique, it is important to consider the needs of individual students when making assessment decisions. Ongoing FA will support teachers in identifying concerns and individual needs as part of the first phase of the SEND identification process and stepwise approach. In this regard, Houston and Thompson (2017) state that some sample evaluation practices can be applied by blending them with formative evaluation methods.
 - standardized reading, spelling or maths tests
 - cognitive abilities
 - profiling tools (e.g., speech, language, and communication needs)
 - small step assessments aligned with the national curriculum
 - scanners for specific learning difficulties
 - student attitude surveys
2. Effective assessment in school starts with everyone having a clear understanding of the purpose, and confidence in using various types of assessment. Through observation,

questioning and marking, the teacher plans the next practice by witnessing the student's developmental stages.

3. Consider all evidence to be used for FA, including photographic, video and audio evidence.
4. Give appropriate verbal feedback to students who may struggle with language.
5. Consider the most effective way to 'mark' work when the student is unable to read the written comments.
6. Teach students with SEND self and peer assessment skills.
7. Provide opportunities for students to share their thoughts, ideas, and opinions through their preferred form of communication (e.g., signs, symbols).

The effort invested in learning while using all these methods is important, and FA is a strategy that must be implemented with the student in every classroom (Black & Wiliam, 1998). In this process, besides the development of the teachers' experience, of course the students also develop. In fact, according to Brookhart & Lazarus (2017), students with learning disabilities are the group that makes the most use of FA methods. FA allows these students to take control of their own learning. By doing self-assessment and completing a specific assessment example, students can instantly see if they need guidance. Even if they do not verbalize this awareness, FA gives each student the opportunity to speak without them necessarily doing so.

However, of course, the difficulties that an assessment method, which is thought to be so successful and effective, will bring to the education process of students with SEND cannot be ignored. The difficulty with FA lies in the fact that every student learns differently. It is impossible to predict how a child will react to a particular lesson, which means teachers must be prepared to use a variety of FA strategies. According to surveys, studies, and studies reviewed by Black and Wiliam (1998), educators as a whole seem blocked or apathetic about assessment. Various student needs, especially in mainstream classes, are seen as a major obstacle for teachers to use many methods and make adjustments in accordance with the individual needs of students (Detailed explanations on this subject will be made in the following sections). However, the primary condition for bringing a possible solution to all problems, such as time, knowledge, responsibility, and effort is not to use FA as a tool for "closing the learning gap between students with SEND and those with normal development" (Egeland & Riese, 2020, p.103), but instead, FA should be used as a bridge to activate

students with SEND by making them a part of the learning process and learning environment, thereby improving relationships between teachers and students in the classroom.

4.2.2.3 Formative Assessment and Students with ASC

Studies on the need for students with SEND to be supported with different teaching methods have revealed that FA is effective in playing an important role in this support process. When it comes to students with ASC, which is the focus of the research, the existing literature provides a more limited amount of information. The low number of studies, especially involving students with ASC and FA, reveals the importance of the present study. For this reason, this part of the research will discuss subjects, such as, what the learning needs of students with ASC might be, in which situations they learn differently, and how formative assessment can be used in the education of students in this group. In the light of this information, this part of the research aims to answer the following question:

What is the role of formative assessment in supporting the learning of students with ASC?

According to the information obtained as a result of the literature review carried out so far, ASC is a combination of social communication deficiencies and limited interests and routines. The SEND Code of Practice (2015) describes the broad area of need of Communication and Interaction to include children and young people with ASC. However, the situation of children with ASC in this classification should not be confused with the concept of learning disability because learning disability is defined as an important difficulty in any academic field. However, ASC is not exactly a learning disability, although ASC can affect learning and sometimes cause learning difficulties. Children with ASC have a different and special way of learning. When this way of learning is achieved effectively, children with ASC can be successful in academic life.

Although ASC shows different characteristics within itself, studies show that children with ASC tend to prefer one learning style such as tactile, visual, auditory and kinesthetics over others while trying to make sense of the world and absorb new information (Schriber et al., 2014; Baron-Cohen, 2009). In other words, the fact that children with ASC have learning difficulties in standard education does not mean that they do not have special abilities. A child's refusal to study indicates either a lack of interest in the field or a fear of failure. With the right education, children with learning difficulties can reveal their hitherto unnoticed talents and become successful individuals by being encouraged to broaden their interests (Robinson,

2004). While children enjoy progress in their area of interest, it is possible to make progress, albeit slowly, in areas where they are lacking simple learning methods. For this reason, educational approaches determined in accordance with the needs and learning styles of children are very important for their personal development.

As mentioned in detail in the previous sections, formative assessment methods are appropriate assessment methods for the education of students with SEND. Teachers can structure the information, adapt it to the individual learning needs of the student, and monitor the whole process (Aidonolopua-Read, 2017). Similarly, formative assessment methods can be used effectively to support the learning processes of students with ASC. In her study with students with ASC, Aidonolopua-Read (2017) stated that formative assessment also had a positive effect on the success of students with ASC, and that students could use many methods effectively. In this study, it was seen that visual learning styles were emphasized especially, because of the students' learning needs. With the right approach and educational process in visual learning, many communication problems can be easily overcome, and children can make more effort with their increasing desire to learn (Darling-Hammond et al., 2020).

Aidonolopua-Read (2020) mentioned the existence of some useful methods that can support the learning processes of students with ASC and touched on some strategies that can be considered in the use of formative assessment.

- Sensory overload should be avoided. Thus, unexpected occurrences can be prevented from distracting students with ASC.
- The use of images can greatly support the easier and more effective learning of students with ASC. Students with ASC learn better with pictures and demonstrations. Providing visual clues and written instructions as much as possible, enables the learning process to be effective, and it is an appropriate approach to the needs of individuals with ASC.
- Keeping the language concrete and simple makes it easier for students with ASC to understand. Limiting long verbal instructions by giving more concrete and short instructions instead is very important in the communicative cycle.
- Teaching social skills directly will likely help students with communication problems feel part of the learning environment.

The functionality of all the instructional approaches and auxiliary guidelines mentioned so far largely depends on the teachers' approach. Teachers who are adequately equipped to deal with

the learning needs of individuals with ASC and the use of formative assessment methods can most likely support students with ASC in the AfL process.

The literature review conducted so far in this part of the research shows that students with ASC have different learning needs than their peers, and teachers have a very important role in determining and meeting these needs. Assessment methods frequently used in schools during the AfL process support learning when combined with teacher identity and their pedagogical practices. Teachers use FA methods in formal and informal ways during this process (Ruiz-Primo, 2011; Leahy & Wiliam, 2015).

In a study conducted by Black and Wiliam (2004), it was stated that FA could enable significant learning outcomes, while another study, by Smith and Gorard (2005), has determined that FA has negative effects in some cases, for some students. When the reasons for this difference between the two research studies mentioned are examined, it is seen that the main problem is not the FA approach, but how the FA is handled and presented. The ability of teachers to blend their content knowledge of FA with pedagogical approaches and present it by adapting it to students' needs, increases the effectiveness of FA methods. In this case, the fact that FA serves and contributes to the AfL process is emphasized when the teachers are the main drivers of this process.

The Teaching and Learning in 2020 Review Group (2006) has identified five AfL core strategies in personalized teaching and learning visions:

- Using various activities to obtain evidence of learning
- Providing students with evaluative feedback
- Sharing learning intentions with students
- Encouraging students to make self-assessments
- Encouraging participation in group work and peer reviews

When these strategies are taken into consideration, the concept of “inclusive assessment” is encountered that involves all students and includes all of them in the process. The European Agency for Development in Special Needs Education (EADSNE, 2009, p.1) defined it as “an approach to assessment in mainstream settings, where policy and practice are designed to promote the learning of all pupils as far as possible.” The purpose of this assessment is to ensure that there are policies and procedures to support and develop the participation and

inclusion of all students. EADSNE carried out a two-stage, three-year project exploring assessment in inclusive environments, involving experts from 25 European countries. Considering FA as a method used in inclusive assessment, the agency was of the opinion that this method could be applied to all students, including SEND students. However, there were some difficulties in how FA could be applied, because “Students with profound difficulties do not need different assessment systems, but only different methods/tools of assessment” (EADSNE, 2009, p.4).

However, I can tell from the literature and from my own experience that there is no specific guidance for teachers about how to apply or change this approach for SEND students and therefore many FA techniques can present potential challenges for ASC students who often struggle with social interaction and self-assessment.

The EADSNE (2009) study also noted that some FA approaches, such as individual observations and portfolios, are particularly suitable assessment methods for SEND students, including some individuals with ASC. Considering this finding of the agency, it can be seen that it is beneficial to observe the efforts of students with ASC in the learning process and to keep records in order to create a flexible assessment environment. It can also be regarded as an appropriate approach to AfL and inclusive assessment in one-to-one interactions, as it provides opportunities to express the views of students with ASC with communication and socialization problems, in accordance with their individual learning styles. Porter (2008) states that the active involvement of students in the learning and evaluation process is labelled as 'good practice' in IE.

On the other hand, it is not possible to say that all FA methods are similarly suitable for students with ASC. As mentioned before, the important thing is how to use that method rather than the usual method used. The approaches, such as self-assessment, which are used to allow students with ASC to reflect on their own work, are shown as the “only concern area” in AfL (EADSNE, 2009, p.6). This FA technique can be a problem for many students with ASC who have subjective thinking and self-criticism difficulties (Aidonopoulou-Read, 2017). Therefore, the application of FA methods in the AfL process requires careful observation, adaptation, and implementation to meet the needs of ASC students. Therefore, in order to ensure that these students are evaluated appropriately and supportively for their individual learning needs, it is of great necessity to provide teachers with training and guidance services where they can obtain clearer information.

While there are a number of government initiatives to improve the education conditions of students with ASC in England, there is a limited number of practical applications regarding the equity evaluation of these students, although the idea of equal educational opportunities and subjective assessment practices for all students is supported (Wilkinson, 2010). The same research draws attention to the fact that the evaluation methods used for students with ASC are very general and partly left to the discretion of the teachers, so suffer from the policy gap. It is stated that the closure of this gap is possible only by establishing appropriate and up-to-date guidance programs by the relevant authorities, making them easily accessible to schools, and through teachers receiving training in accordance with these policies.

Although teachers are trained to use FA methods, education is realized through the internalization and implementation of all that is taught. At this point, the identity of the teacher shapes and guides the assessment methods to be applied. In this inner journey of the teacher, all the factors affecting the formation of TI emerge as teacher 'attitudes'. In the next section, teachers' perceptions about the use of FA will be explained. Thus, it will provide a theoretical basis for the current research to support the research data.

4.2.2.4 Teachers' Perceptions of Using Formative Assessment

The most commonly used evaluation method employed by teachers today is SA (Hoover & Abrams 2013). However, this method, which is based on the evaluation of student outcomes only, has begun to lose its validity in recent years. Teachers' perspectives on FA methods and their use in the classroom play an important role in changing the existing understanding.

Teachers who are practitioners of FA in schools have a great influence on the perceived importance and effectiveness of AfL. According to the literature, a large number of teachers have positive attitudes towards the use of FA in classrooms (Husain, 2013; Bennett, 2015; Alover, 2016) and research shows that teachers who have been educated about FA view it positively. For example, Kippers et al. (2016) suggested that teachers with knowledge of FA want to use it in their lessons to create a more efficient educational environment. This is because FA gives teachers the opportunity to see where teachers and students have made mistakes, where students have not understood or developed skills and how they can fix them. Similarly, a report by the OECD (2005) states that FA gives information about what students learn, where they are lacking, and how they can overcome these deficiencies. In fact, Bell and Cowie (2001) argue that through such assessments, teachers receive feedback, thus, they understand their negative and positive aspects and can direct their work accordingly.

In a period in which I taught primary school year 4 students, I realized that a method that I believed was very effective for some students would not work for another student. In order to support the student's development, I made some changes in my method and applied them again. When I realized that the progress of the student was noticeably accelerated, I recognized that my method was effective, and I shaped my actions accordingly. In other words, in the assessment process, I not only evaluated the development of students, but also evaluated my own teaching method. In this way, the opportunity arose to learn by experiencing FA as a part of the AfL process and I found that it is very useful in teacher development and professional identity. Therefore, for the AfL process to be effective, it is necessary to first clearly define the purpose of the method used by the teachers.

Similarly, Alover (2016) showed that year 7 and 8 core teachers clearly understood the definition of FA practices. The teachers agreed that a positive school climate can impact the effectiveness of FA practices and expressed confidence that their use of FA practices aided closing the achievement gap and contributed to student academic success on the Smarter Balanced English Language Arts assessment.

It is known that FA has made it possible for students to learn by doing, enhancing the quality of learning and helping them to learn effectively. In lessons in which students are actively involved, teachers are more effective in terms of orientation and can play a more supportive role. In this context, Harlen (2003) states that pupils are constantly active in FAs and teachers can review work and correct mistakes; in this way, more effective learning takes place. Indeed, this view is supported by many researchers such as Black and Wiliam (1998a 2002), Clarke (2008), Brookhart (2001), and Harlen (2003), who all suggest that FA increases the learning level and quality and actualizes effective learning.

Brink and Bartz (2017), Trumbull and Lash (2013) and Aslantas (2016) state that in this assessment and learning process, in which students are actively involved, when teachers place the individual differences of the students at the forefront of their focus, they are better able to provide a more objective assessment. In this way, evaluation is based on the process rather than the product and therefore, students are able to develop their creativity. When the students with ASC constitute the sample of the studies, this situation becomes more important. Considering the characteristics of students with ASC that are different from their peers, a fairer assessment can be made. Thus, rather than equality in the evaluation of students in mainstream classes, an equity application can be realized where justice for all pupils is at the forefront.

Viau (2015) discussed teachers' responsibilities in this regard from another perspective and stated that a teacher who wants assessment practices to motivate students will face some challenges. There may be people around them who see evaluation methods as merely measures of student achievement, which may reduce the motivation of the teacher. Teachers who aim to make the assessment a tool that improves the motivation of students can be perceived as being idealistic and trying to change the current evaluation system. This is because evaluation in education is often understood as seeking ways to achieve higher grades, rather than to improve student learning (Buldu, 2010). Encountering similar situations may damage the teacher's identity and cause some disruptions in the practice. However, FA is a kind of learning journey in AfL, rather than an instant phenomenon, and the identities of the teachers who lead these processes are shaped by their lives. Therefore, as in all aspects of education, only adequately supported teachers in the field of assessment can implement an effective practice.

There is some research about challenges that teachers face during the implementation of FA in their classrooms. According to Husain (2013), the majority of teachers understand the main concepts of FA, although some of the teachers have misconceptions of FA, such as thinking that it is an event rather than a process, whereas Husain (2013) proposes that FA is actually a day-to-day process to give students and teachers a stream of information for the next steps in learning. The findings also indicate the challenges that teachers perceive in implementing FA. For instance, in this study, many teachers noted difficulties in utilizing self- and peer assessment within their classrooms.

In other research, Bennett (2011) interviewed ten teachers and the key results showed that they used many FA strategies with their students, yet they were unfamiliar with backward design theory and did not use peer feedback or self-assessment as strategies. Other challenges are that teachers find FA time-consuming, labour intensive and having a perceived low reliability. Bennet (2011) describes FA as a method that requires much time and effort from teachers and that information collected through FA has rather short-term validity and demonstrates students' progress in a particular lesson only.

The results obtained from all these studies show that teachers do not have negative opinions about using FA methods, although they do face some challenges, as mentioned above and their identity depends on a complex relationship with students' performances as well as their own (Wilkins et al., 2016). Therefore, they need support to turn this complex relationship into effective identity and assessment practices (Mahlo, 2017).

Summary

The purpose of this review is to examine the factors that affect the formation of the teachers' identity, the educational conditions in classes that include students with ASC, and the FA methods used. Connections between these issues will be explored in order to explain the role and importance of the identity of teachers. It is clear from the research reviewed that teacher identity is not a concept that can only be addressed within its professional dimension but is a complex concept that is influenced by teachers' experiences, roles, beliefs, values and environmental factors. However, due to the complex nature of ASC and associated research, it is difficult to research in conjunction with additional complex fields, for example teacher identity. Considering teachers' perspectives on the education of students with ASC without taking into account identity and ignoring the effects of their identities on teaching techniques leads to many questions remaining unanswered in the literature. For this reason, FA methods provide a bridge between ASC and TI by explaining the reasons behind teachers' practices and perceptions. In other words, teachers' identities shape their classroom practices, and it is clear that FA methods can be used both as teaching and assessment methods. The feedback given as a reflection of the interaction between the teacher and the student gives the opportunity to both teachers and students to evaluate their roles in the teaching and learning process.

As a result of the literature review, it can be clearly seen that the fields of FA, ASC and teacher identity are varied and continue to be studied and analysed separately. However, although the discussions on these issues are still ongoing, the lack of studies on the role of teacher identity on the use of FA methods to support the learning of students with ASC makes it necessary to highlight this important gap in the literature.

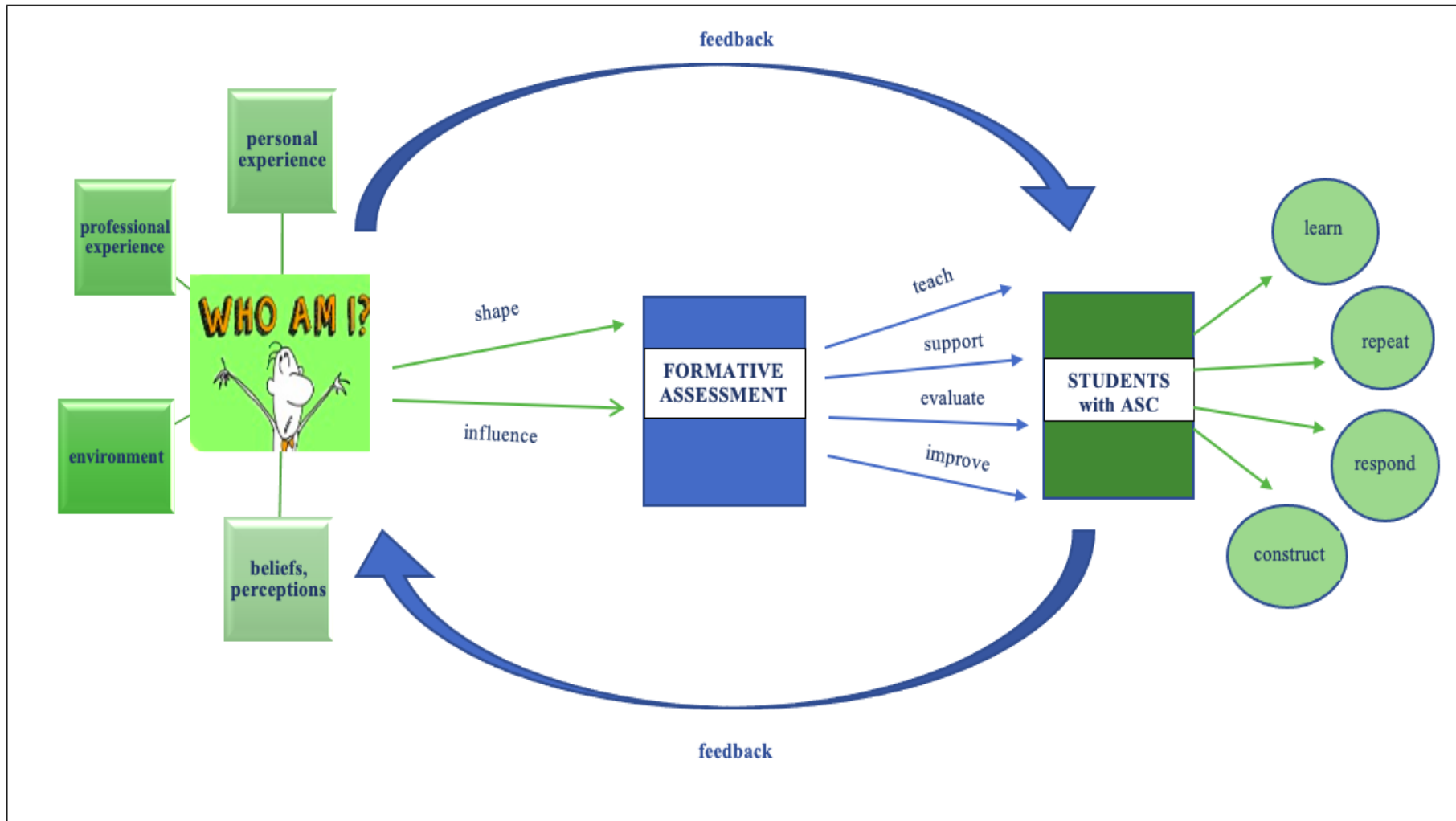


Figure 4.7 The link between teacher identity, formative assessment, and students with ASC

CHAPTER 5

RESEARCH METHODOLOGY

Introduction

This chapter will present the research approaches and methods used to investigate the role of teacher identity (TI) on using formative assessment (FA) methods for students with ASC in mainstream classes. From this chapter through to the conclusion, I will use the third term 'staff' to make it clearer that I meant teachers and TA when referring together. First, the ontological and epistemological assumptions that form the basis of this research will be presented, then the data collection methods and process of the research will be explained. Finally, after the ethical issues encountered during the research and possible solutions are discussed, the chapter will end with an explanation of the data analysis procedures.

5.1 Ontology

Willis et al. (2007) define ontology as the nature of reality and emphasizes that ontological assumptions are a view of how a person perceives the world. For centuries, many people and researchers have also discussed this issue, put forward different opinions, and even divided into groups. The focus of these debates has been whether reality should be perceived objectively or subjectively. When the theories in the field of teaching and learning are examined, it is seen that these views are classified as objectivist and constructivist (subjectivism). The explanations of these two different views regarding perception, knowing, understanding and learning, differ considerably. Therefore, Bryman (2016, p.34) defines objectivism as “an ontological position that asserts that social phenomena and their meanings have an existence that is independent of social actors,” while subjectivism is an “ontological position, which asserts that social phenomena and their meanings are continually being accomplished by social actors”.

These definitions of whether reality is objective or subjective have formed the basis of the construction of different paradigms and the formation of roadmaps of research adopted by researchers. According to Lincoln and Guba (1985), a paradigm is a systematic set of beliefs accompanying methods. According to this definition, my ontological assumption is that an absolute reality cannot be attained in human observation, but people will try to follow the truth due to their nature. Therefore, the ontological assumption that forms the basis of this work is compatible with social constructivism. Social constructivism requires people to take a critical

stand against their understanding and knowledge of the world. This stance argues that individuals understand the world through life experiences and depend on culture for their behaviour patterns, traditions and habits (Crotty, 1998; Creswell, 2009).

Social constructivism reflects the ontological point of view of this research, because TI is a concept formed in a social environment, so takes on the effects of past experiences and the effects of culture. Vygotsky's ideas about learning were developed when he was working as a teacher in a school and can generally be seen as the product of his experiences. The main subject of Vygotsky's socio-cultural theory is that the cognitive development of the child is difficult to understand without establishing a connection with the social world in which they live. The basic view of this approach is that teachers should encourage learners and give them the opportunity to use the content of the lessons by structuring the reflective discussion of meanings. Therefore, teacher behaviours developed within the framework of the constructivist approach are supported by FA methods and contribute to the learning processes of students with ASC.

A teacher who adopts a constructivist approach is not an absolute authority in learning environments, but a person who supports students in discovering, learning and making sense of new information and guides them through realizing their mistakes and deficiencies (Şimşek, 2004). These characteristics, emphasized by Şimşek, underline the use of assessment as a learning tool in supporting students with ASC in mainstream classes and the supporting role of teachers in this situation, because it should not be forgotten that according to the constructivist approach, every component of education is valuable, important, and must be achieved. In line with this view, in order to support a rich process in learning environments (classrooms) based on constructivism, the use of various learning methods and strategies that support students' learning and reconstructing information in their minds is emphasized (Jackson, 2006). Thus, the developmental processes of the students are supported and every individual who is learning, is prepared for life.

For all these reasons, with a social constructivist approach, as in this study, it is possible to gain an understanding of the identities of teachers who teach students with ASC in inclusive classes and a better understanding of their role in the use of FA methods.

5.2 Epistemology

Willis et al. (2007) state that epistemologies express what we know and how we can know the truth, and according to Pallas, “epistemologies are central to the production and consumption of educational research,” (2001, p.6). Two epistemological assumptions that are widely accepted in the world can be mentioned on this subject: positivism and interpretivism. In explaining positivism, Newby (2010) stated that the truth is a concept waiting to be discovered, and in this case, researchers can discover it using various methods. However, according to interpretivism, reality can be interpreted in different ways and the way everyone reaches it is different. When it comes to the research in question, ontological assumptions during the research process led to epistemological assumptions. These assumptions have methodological implications for the selection of data collection techniques. They guide the formulation of research questions, the choice of research techniques, data collection, analysis, and how to answer research questions.

In order to create a map of the research and answer research questions, the epistemology in this study is interpretivism. It is possible to understand TI by examining and interpreting all the factors affecting it, to develop an understanding of the TI's role in how FA methods are used within this understanding and discuss the effect of all these relational situations on the learning of students with ASC.

5.3 The Interpretivist Research Paradigm and the Role of Teacher Identity in Using Formative Assessment for Students with ASC in Mainstream Classes

I have always believed that it is sacred to seek the truth, to find it, and to spend time with it. I have learned from my experience that there are many different realities in different areas of life. For example, I believe in the existence of a single god, that this is an absolute truth, and that God creates humans and the universe. However, I also accept that other people may perceive God differently. I think the reason that God gives people minds and logic is to support them to seek and find the truth. As stated in the Qur'an, "...and no question do they bring to you, but we bring you the truth and the best explanation" (Noble Qur'an, 25:33). There is truth in all circumstances for human beings, and there is an explanation for each. Therefore, my religion influences the way I approach research and the research paradigm I adopt, because the researcher's identity and beliefs add to the study to make the research data more meaningful. Since I believe that educational research encompasses complex human aspects, I felt that I needed to benefit from a more subjective paradigm to make a more detailed interpretation,

especially when examining the role of teachers' identities and the process of influencing these identities in students' learning lives.

This paradigm should support my belief that there are many realities for different aspects, because a single reality ignores human values, other aspects of human behaviour and beliefs. Therefore, before I began to investigate the process of assessing the learning of students with ASC, using FA methods and the role of teachers' identities in this process, I needed to address some questions:

- What are the FA methods that are used to support the learning of students with ASC? Can I say that there is only one truth for these methods and their effective use?
- Can I reduce the factors affecting TI formation to a single reality?
- What about the individual differences of students with ASC? Should I think that all the students are the same?

I continued to keep questioning myself while searching for answers to these questions. In such research involving many such agents, I encountered a paradigm that allowed me to examine the individual differences, perspectives, and experiences of the participants: interpretivism. According to interpretivism, the role of the researcher should be to listen to the voice of the participants, to understand what they say, and to see the social world from their point of view. When we think about the problems of students with ASC in social interaction and communication, I believe that research should be aimed to make their voices heard. The first and foremost aim of the researcher should be to address the world and events from their perspective. The researcher should be able to turn some facilities of the interpretivism paradigm into opportunities while realizing this goal. In this environment, I can closely monitor the student and teacher behaviours and interpret the reasons underlying their reactions through the study.

Interpretive research can also help to raise relevant research questions and issues related to research. Evaluating the collected data from an empathic and multi-faceted perspective can help to find comprehensive answers to the research questions. This inductive approach will help me to understand the role of TI on the methods used in the development of students with ASC and will help to prepare the ground for further research on this topic. When I questioned the interconnection and contribution of the interpretivist paradigm to my research, I reviewed

a set of universal principles developed by Klein and Myers (1999) and used these principles to guide the study. The way in which these principles are applied to my research is outlined below:

Natural research: Social events should be studied in their natural environment. Since interpretive research assumes that social events are involved and cannot be separated from the social context, such events need to be examined in the natural settings of the participants. Therefore, I had the opportunity to observe both the student and the teacher in their natural environment by conducting my research in a mainstream class where the students with ASC were studying.

Researchers as a tool: Researchers are often placed in the social context in which they work and are considered to be part of the data collection tools, because they need to use their observational skills, trust in participants, and ability to obtain the right information. At the same time, researchers should be fully aware of their personal biases and not allow them to interfere with their ability to demonstrate the facts fairly and accurately. Therefore, the fact that the research took place in an inclusive class and the teachers were observed in this environment brings the personal experiences of the researcher into play. However, as a researcher, since I am aware of my prejudices and attitudes, I am cautious not to take a biased perspective on this issue.

Interpretive analysis: Observations should be interpreted through the eyes of established participants in the social context. In other words, just examining teachers and students from the observer's perspective and therefore recording their behaviour would not take into account the perspective of the participants. That is why here there is a focus on the stories of the participants through interviewing the teachers, so as not to leave the voice of the participants in the shadow of my interpretations.

Revealing the voice of participants: Documenting and analysing the verbal and non-verbal communications of the participants is an integral component of interpretive analysis. In my opinion, the research should ensure that the story of the participants is viewed through the eyes of a person, not a machine, and it must show the emotions and experiences of the participant so that the reader can understand and connect with that person. At this point, the interpretive paradigm is a support, especially in interpreting the body language of students on the ASC and the verbal and non-verbal feedback of teachers.

Transient nature: Interpretive research is often not only the search for specific answers, but about understanding the dynamic social processes that occur over time or "make sense" with others. Therefore, this type of research requires long-term research in the field of study to examine all aspects of the subject. Contrary to what some researchers see as a disadvantage of undertaking long-term examinations, I can benefit from the interpretive paradigm in that I have the opportunity to get to know and explore the students and teachers more closely, rather than collecting surface information that only offers generalities. Although it is suggested that researchers cannot use excessive amounts of data effectively, I believe that having too little data can lead to false and early assumptions.

As a result, I believe that the interpretive paradigm is the most appropriate method for this research since it offers an understanding of where subjectivity and personal differences are taken into consideration, as it takes on different aspects from all the participants and components of study.

5.4 Research Design

5.4.1 Qualitative Research

Creswell (2003, p.4) defines qualitative research as “a means for exploring and understanding the meaning individuals or groups ascribe to a social or human problem.” In this definition, as Creswell emphasizes, the purpose of qualitative research is to understand how people construct and form their social worlds and try to interpret how they perceive the social world in which they live. Therefore, in this research, I aim for a more in-depth study using a qualitative research technique to understand the different attitudes and perceptions of people, which is an opportunity afforded by an interpretation from an epistemological perspective. Thus, I will be able to understand the subjects that have many dimensions, both socially and personally, such as TI, ASC and FA, along with the perceptions of teachers and students. Among many types of qualitative research, I have determined that the case study method would support research in this subject in the most effective way.

5.4.2 Why Case Study

The case study methodology is a research design used by many researchers to conduct in-depth and multi-faceted research. Yin (2003, p.18) defines a case study as “... an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not evident; and in which

multiple sources of evidence are used.” In another definition Creswell (2013, p.97) suggests that a case study “...explores a real-life, contemporary bounded system (a case) or multiple bounded systems (cases) over time, through detailed, in-depth data collection involving multiple sources of information... and reports a case description and case themes.”

In both definitions by Yin and Creswell, some universal concepts such as *depth*, *real-life context*, and *multiple sources of evidence* have been mentioned. *In-depth* means that all aspects of a research subject can be examined in many ways, allowing the researcher to obtain comprehensive and versatile information. The places where the researcher can get this information most comfortably and naturally are, of course, *the real lives* and *real-life places* of the participants. Thus, the researched subject can be examined by making connections with the environment, and more accurate interpretations can be made.

Another important concept that Yin and Creswell point out is a need for “*multiple sources of evidence*.” Collecting evidence by using many sources per this concept, provides the researcher with the ability to understand the participants from multiple perspectives. In other words, the case study uses many different sources to help the researcher look for answers to “why” and “how” questions (Yin, 2003), and thus differs from other approaches in the information acquired. I can explain these differences and some of the features of the case study by combining them with my current research and researcher identity.

First, a case study is a methodology that is very suitable for seeking answers to why and how questions (ibid). According to this, my question of "what is the role of TI on the use of FA to support the learning of students with ASC?" is exploratory (what), because in the literature no study has been found that examines these specific issues. The present research is primarily intended to fill this gap in the literature. Exploratory research may be a pilot application for subsequent examination utilising the purposes and characteristics of the case study and may contribute to the literature in this way. On the other hand, my research is descriptive of the natural phenomena that emerge in the data obtained, for example, to define which FA methods teachers use, and is explanatory (why) as it examines research data both superficially and in depth, for instance, as it investigates why teachers often use some particular FA methods. As Merriam and Tisdell (2014, p.42) emphasize, "researchers are interested in insight, discovery, and interpretation rather than hypothesis testing." This study is also heuristic, as Merriam and Tisdell (2014) point out, because in this research, where the role of TI is examined, unexpected

aspects of the relationship between teacher and student can be observed and explained by the researcher's ability to interpret intuitively.

Second, the case study's ability to reduce research to a particular theme, area, and individuals (Yin, 2003) allows for limiting the research area by reducing the research subject to specific topics, such as “TI, ASC, inclusive class, and FA,” but also enables the research to be deep and broad. Restriction of the research area and sample enables the researcher to carry out more specific research. The participants in the study consisted of teachers, TAs, and students with ASC and the implementation of the study in the mainstream classes allowed for observation and communication with the teachers and students in their natural environments and during daily routines.

Third, the fact that the participants of the study have similar or different characteristics gives the case study a multifaceted dimension. Swanborn (2010, p.3) comments that case study research “collects information by studying the aspects of those people who are/were involved in the same case and their relationships”. The fact that the participant teachers in the research come from different cultural, economic, and educational backgrounds, but do the same work in the same environment, and that the participant students are affected by ASC to different degrees allows for the examination and interpretation of factors that constitute and affect TI in many ways. The same advantage is valid when considering the influence of students with ASC on TI.

Another advantage of a case study is that it enables exploration of the role of TI on students' learning and development and allows the researcher to spend more time with them in the classroom environment to observe daily routines, and to witness different moods and emotional positions of both teachers and students. Over time I understood how they reacted, and in some cases, even sensed how they would respond. This feature of the case study has given me the ability to see, think, and interpret in many ways. In other words, with a case study, "I explore in-depth a program, an event, an activity, a process, or one or more individuals" (Creswell 2003, p.15).

On the other hand, the case study has some weaknesses that have been accepted by many researchers. Cohen et al. (2017, p.379) summarise these in three points:

- “The results of the research may not be generalizable

- The feelings of researchers may affect the study, and it may prevent objective research; hence they may be selective, biased, personal, and subjective
- A long time to be spent on research”.

These three fundamental limitations mentioned above are problems that can be encountered in almost all case study research. As Wang (2017, p.2) mentions, “In many cases, generalization is not a central goal of qualitative research. When generalization of a qualitative study needs to be evaluated, researchers may analyse the differences and similarities between the groups of informants and a wider population, and between the research site and other sites.” Therefore, considering the aims of the present research and its contribution to literature, it is clear that the researcher does not intend to make any generalizations.

Perhaps subjectivity is one of the common problems that most qualitative researchers face. The researcher may add his/her feelings, thoughts, and prejudices to the research. For this reason, it is quite common that the researcher cannot be objective in the data collection process, interpretation of data, and evaluation of the results obtained. However, in research, where humans and their real-life situations are investigated, interactions with the participants and a developing closeness to them are usual and typical for the researcher. Especially in such research on the role and effect of TI, it was not possible for me to both distance myself from the participants and the environment and to understand and interpret their behaviours. I have also stated that I have taken a more subjective attitude rather than an objective approach to my epistemological and ontological perspectives.

Nevertheless, I should be careful not to allow my prejudices, feelings, experiences, and TI damage the aims of my research and to influence the research results. The fact that I did not know the research environment and the participants before beginning the research, supported my effort.

Another limitation that has been accepted and criticized by many researchers and writers is that too much time is spent on the case study. In fact, as with other problems, this is an issue that can be seen in all qualitative research methods. That the researcher spends a lot of time with the participants in the research environment and develops a connection with them during the long period of data collection may prevent them from interpreting the data correctly and impartially. My research was conducted with teachers, TAs, and students with ASC in the classroom environment within a three-month period.

In summary, I believe that the case study is the most appropriate method that can be used in this study to answer the question of the role of TI in using FA to support the learning of students with ASC, as it fulfils all the criteria to be carried out while conducting a case study and adopts the principle of minimizing the problems that can be met.

5.4.3 What is The Case in This Study?

Case study is discussed in the literature describing research approaches as a method of dealing with specific people, events or situations. Stake (2005) makes the point that "a case is a noun, a thing, an entity; it is seldom a verb, a participle, a functioning" (p,4). In fact, Stake (2005) also stated that the researcher plays the role of biographer by focusing on a certain stage of the participants' lives in their case study research. However, these cases can be handled in different ways in different studies and take different forms. For instance, in recent years, the opinion that the case study can cover a process (Grant et al., 2020) that includes certain people and situations is also a result of the different ways these cases are handled.

Starting from the point of view of Stake's characterization of the researcher as a biographer, in this study, I focused on the different factors from their lives that affect the teachers' use of formative assessment and the formation processes of their identities. Thus, I observed how feedback was mutual between teacher and students, based on each teacher's individual background and assessment methods. However, although I have examined the teachers and students one by one and analysed the connection of their personal stories with FA, I have not considered the participants as a separate case in this study. Instead, I focused on the formative assessment process in which the teacher and student are involved, and the teachers' identity formation process. That is, the cases in this study are processes which involve specific persons and events arising from teacher identity and support for students with ASC, via formative assessment methods in mainstream settings.

Swanborn (2010) stated that a case study gathers information by examining the characteristics and relationships of people involved in the same case. Based on this, it is possible to say that factors, such as teachers' relationships in their past personal lives, the effects they have on the classroom environment and the reflection of their identities on students, are involved in a process, and this can be investigated with a case study. In support of this idea, Seawright (2016) also believes that the use of process monitoring and causal process observations in qualitative research increases the effectiveness of research. Therefore, in this study, the identity formation of teachers was examined, the effect of their identities on formative assessment methods was

questioned, their role on the learning of students with ASC was investigated, and a more comprehensive and versatile research study was aimed for, by considering this whole process as the case of the research.

5.4.4 Data Collection Methods

In this research, the triangulation method was used to contribute to the validity and reliability of the study, to collect data by gaining a multifaceted perspective, and to find the most comprehensive answers to the research questions. According to Cohen and Manion (2000, p.254), triangulation is an "attempt to map out, or explain more fully, the richness and complexity of human behaviour by studying it from more than one standpoint." For this purpose, I decided to carry out my research in three stages. The first stage of the study consists of first teacher interviews, with the second stage being the observations, and the last stage the follow-up interviews. Related documents will also be used to support the research findings.

5.4.4.1 Interviews

Interviews with staff constitute the first and last phases of this research, which consists of three phases in total. Understanding the factors affecting the identity of teachers, learning the teachers' perspective on using FA methods, mainstream education, and teaching students with ASC in mainstream classrooms, means learning about it from people involved in this work. For this purpose, two different interview forms have been prepared.

Developing the interview schedules

The first list of questions was compiled to learn of the teachers' perceptions of teaching in mainstream classes, especially teaching students with ASC, and the contents of FA methods. For this purpose, I benefited from a literature review and my own experiences in order to determine the scope of the interview questions I wanted to create. By identifying the gaps in the literature, together with my own teaching experience, the questions that remained unanswered were identified. Twelve open-ended questions were prepared for the first interviews of the research.

While preparing the questions for the second interview, I paid attention to my observations and to the information that I could not obtain in the first interview. For this reason, the content of the second interview mainly consisted of ten questions to better understand the factors affecting the identity of the teachers. During the preparation of the questions, I tried to comply with some of the principles recommended by Simsek et al. (2005) as follows:

1. First of all, I prepared the interview questions in such a way to ensure that they were clearly understood by all staff.
2. Rather than asking the questions directly, I aimed to ask indirect questions that required more explanation, so the answers would be given in the most detailed way.
3. By phrasing all the interview questions in an open-ended way, I hoped to get more detailed information and avoid receiving short, yes/no answers.
4. I made sure that the staff were not guided in their answers, so the questions were about the staff' perspectives and thoughts. This opened the door to an impartial, natural and deeper investigation.
5. By paying attention to the fact that each question had a purpose, any possible confusion and subject deviation was prevented.
6. Alternative statements for situations where more explanation might be needed were prepared. In this way, the answers of the staff were richer and deeper than otherwise.

In addition to these features, before the pilot study, both interview forms were discussed in detail with my supervisors, and all of the interview questions were reorganized in accordance with these recommendations, especially their advice on how to address the staff. Thus, the pilot application part of the interview phase was started.

Piloting the interview schedule

Yin (2014, p.96) suggests that “a pilot case study will help you to refine your data collection plans for both the content of the data and the procedures to be followed.” In other words, piloting the interviews helps to understand how well the interview questions are understood by the participants and to what extent the study is suitable for the purpose and questions of the research. In addition, the pilot interview is a valuable resource that helps gauge how long each interview will take and where changes to questions should be made. For these reasons, I decided to do pilot interviews testing each interview question. Since I would carry out my research in England, I thought that doing my pilot study in the same country would give me an advantage both in terms of the time and purpose of the research. Participants who are familiar with the English education system and who are teaching in this system could better understand the content of the questions and give more relevant answers.

Turner (2010) suggests that the participants in the pilot study should have similar criteria to the participants in the main study. The staff of the present study were expected to meet the following criteria:

- Being a teacher or TA
- Working in a mainstream school in England
- Having at least one student with ASC in her/his classroom.

I started the search for participants for pilot interviews, aiming to ensure that they met these criteria. However, the fact that I do not know many people in England, especially in schools, who met my research criteria, forced me to look further afield for participants. Although I wrote posts on various web pages asking for participants for a pilot study, I did not get a positive response, so I decided to meet with the teachers at my son's school, and finally a reception class teacher and TA agreed to be participants for the pilot.

The meetings with the class teacher and TA took approximately 35 minutes each and were held in the school (classroom and staff room). During the interviews, I noticed that there were some similarities between four of the questions that forced staff to repeat themselves. I solved this problem by removing one of these interview questions and emphasised the specific issue of interest in the others. The staff wanted me to clarify another question, which I did to prevent any possible confusion that might occur in the interviews. Following these changes to the questions, both interview schedules took their final form. Thus, the piloting of the interview schedule part of my research was completed (Appendix 8).

Conducting the teacher interviews

While obtaining the necessary ethical approvals, preparing the interview questions, and conducting a pilot application, I also continued my search for staff that fit the research criteria. First, I requested a list of public schools with students with ASC from the Nottinghamshire Autism Team. According to this list, I prepared a new file by accessing the number of SEND students at the schools at www.gov.uk. In this file, I have listed the schools from greater numbers of SEND students to fewer using the data that I have obtained from the official website of the government. In the next step, I prepared a letter explaining my research in detail and the criteria of the participants and contacted the headteachers via e-mail. As a result of searches lasting about 4 months, I was given the opportunity to conduct research in two mainstream primary schools in Nottingham. This process and eventually being admitted to schools seemed to be the result of *hard work and persistence* because all the processes, from being able to communicate with the headteachers, to being able to make an appointment for a pre-interview

and to gain their trust and be accepted into their schools, were very difficult and attempts were frequently rejected.

As a result, the data collection process in schools was carried out between September 2019 and December 2019. A total of 16 participants (6 teachers, 6 TAs and 4 students with ASC) from both schools volunteered to be included in my study. Details, such as the characteristics of the participants and the description of the schools will be explained in more detail in the *Context of the Study Chapter*. However, it would be useful to state that both research schools are under the same academic trust in terms of creating background information. This was a great advantage to me for comparing the practices of both schools that are expected to have the same mission and vision, as well as the reflections on teacher identities on classroom practices. This research lasted for 12 weeks with 4 classes in two different research schools. During this period, two classes in each school were visited every week and the data collection process was completed. Because of the availability of participants and at the request of the school, I visited both schools on the same two days a week throughout.

Since the teacher interviews were the first phase of my research, during the first week I got to know the school and classroom environment and began forming relationships with teachers, TAs, and students. The next week I started the first teacher interviews. Although one TA agreed to participate in research, she decided that she did not want to be interviewed because she felt uncomfortable about FA and was concerned that she could not help me, so there was one less interview than previously anticipated.

Before the interviews, the information sheet was re-submitted to participants to review the content and method of the study, and consent forms were signed (Appendix 1 to 7). The participants were reminded that they had the right to withdraw from the research at any time, and that their names would be anonymous if they were participants. A copy of the interview questions was given to the staff, and they were told that the interviews would be recorded with the computer, smartphone and voice recorders. Thus, the staff briefly looked at the questions before the interview and became familiar with the general structure of the questions. In my data collection, a priority was to make participants feel comfortable and not to force them in any way. After obtaining consent forms from staff, interviews were conducted at the places and on the dates indicated in the table below, according to the requests of the teachers. The names of the participants were changed to pseudonyms in this table and thesis. First interviews lasted about forty minutes per participant and second interviews about thirty minutes.

Table 5.1 Interviews Scales with Staff

Teachers	Interview date		Place	
	First	Second	First	Second
MARIA (T)	17.10.2019	02.12.2019	Classroom	Staff room
OLIVIA (TA)	16.10.2019	05.12.2019	Staff room	Classroom
MEGHAN (T)	14.10.2019	11.12.2019	Staff room	Classroom
RACHEL (TA)	13.10.2019	13.12.2019	Classroom	Classroom
HARRY (TA)	15.10.2019	04.12.2019	Staff room	Classroom
TERESA (TA)	18.10.2019	09.12.2019	Interview room	Interview room
ALISON (T)	14.10.2019	10.12.2019	Interview room	Classroom
BRAD (T)	21.10.2019	02.12.2019	IT class	IT class
HELENA (T)	15.10.2019	05.12.2019	Staff room	Classroom
BETTY (T)	17.10.2019	09.12.2019	Classroom	Classroom
FRANCESCA (TA)	13.10.2019	02.12.2019	Staff room	Staff room

To conduct a quality interview, semi-structured interviews should have some common features, which are suggested by Kvale (1996, p.145). I have used these criteria outlined below with comments, as a guide during the interviews.

1. “The extent of spontaneous, rich, specific, and relevant answers from the interviewee” (ibid). I encouraged the participants to feel comfortable while answering the questions and allowed them to respond at the length and in the manner they wanted. When they did not understand the question, I supported them by providing necessary explanations. I added guiding questions to the answers that were out of the scope of the aim, to encourage the participant return to the topic.

2. “The shorter the interviewer’s questions and the longer the subjects’ answers, the better” (ibid). To get better answers, I tried to keep my questions rather short so that the staff did not have any confusion about them and were able to answer all the questions. In cases where more detailed answers were needed, I supported the questions with sub-questions, by adding short, but purposeful questions.

3. “The follow-up questions should ask participants to clarify the meanings of the relevant aspects of the answers” (ibid). In some interviews, it was observed that the staff left the subject

or did not respond adequately. In these cases, further questions were asked, so that they could give more relevant answers or give more details.

4. “The ideal interview is, to a large extent, interpreted throughout the interview” (ibid). I interpreted the information that I had acquired during the interviews and added or removed some questions accordingly, which was made easier by the flexibility of the semi-structured interview technique.

5. “The interviewer attempts to verify his or her interpretations of the subject’s answers in the course of the interview” (ibid). To meet this criterion, I asked the staff for further clarification. Thus, I had the opportunity to check my interpretations.

6. “The interview is ‘self-communicating’- it is a story contained in itself that hardly requires much extra description and explanation” (ibid). The fact that the interviews with the staff were in a natural environment enabling them to express themselves more easily without feeling under pressure was enough to meet this criterion.

Of course, the relationships that I built with the participants also had an effect on meeting these criteria. Spending time with participants in the school environment as a researcher and participant in the classroom (my participation will be described in more detail in the section ‘conducting the observation’), and having established relationships with them, provided the opportunity to build trust. Therefore, teachers' efforts to convey all their knowledge and experience were visible. As Jacob and Furgerson (2012) point out, having a good relationship with the participants enabled them to provide better and more comprehensive answers.

5.4.4.2 Observation

Developing the observation schedule

Two types of observation techniques, structured and unstructured observation, which are accepted by many researchers and authors, were used in the observation process (Mulhall 2003). Structured observation is generally used in the positivist approach, and in this method, categories are carefully defined, such as which information is collected from whom, how, and how often. The researcher needs to know which aspects of the research situation are related to the research objectives, in order to develop a specific plan before starting to collect data. Thus, a systematic explanation can be provided. According to Mulhall (2003, p.306), the second observation method is unstructured observation, which “is based within the

interpretive/constructivist paradigm that acknowledges the importance of context and the construction of knowledge between researcher and researched.” There is no pre-planned information in this type of observation. The researcher observes and notes everything in the research environment. Therefore, it may cause difficulties in the analysis phase, as a result of too much data.

In order to prevent these difficulties and to make an observation that would allow me to record all of the important details, but also more systematically, I created a structured observation schedule by blending the information that I gained from the first interviews with unstructured observation. Therefore, although it is not given much space in the literature, I find it appropriate to include this plan and the observation form used in the semi-structured observation category. With this method, I was able to mark on the form, which teacher used which FA method, how often the students with ASC respond to these methods and note my observations about the effects of TI and the questions arising.

In this study, classroom observations were conducted to determine the FA methods and techniques used by staff to support the learning of students on the spectrum, to learn the responses of the students, and to examine the role of teacher approaches in this communication. According to Dündar (2008), it is impossible to observe and record all events in the class. Therefore, before starting the observation, the scope of what should be observed should be clearly defined. For these reasons, it was necessary to run a pilot observation to test the functionality of the observation form and whether the researcher's objectives were met.

Piloting the observation schedule

Before using the draft observation schedule, I went to the schools and joined the classes to have the opportunity to get to know the classroom environment and school culture and meet the participants in their context. I completed the pilot study in four days by observing each class for one day, so I could observe the FA methods used in the classroom, teachers' usage of FA methods, and the students with ASC responses, as well as taking various notes. In these notes, I made additions to the observation form that I prepared earlier. For instance, although teachers did not talk about the application of the self-assessment method in the classroom during the first interviews, I observed that adapted self-assessment forms were used for students with ASC, and I added this concept to the form.

It was helpful that I could note the attitudes and behaviours of the teachers or the relations between students and teachers in a space that had been left blank in the form. However, during the pilot study I realised that there was no place on the form for recording the informal conversation with staff during lesson time, or at break time. To remedy this, before starting the main class observations, I created a new section on the observation form, to make such records. After these corrections, the draft observation form was finalized. To prepare such a systematic, comprehensive and multi-dimensional form gave me the advantage of saving time and avoiding a large amount of complex data (McLeod, 2015). Thus, I have obtained a resource to access data that is regular, systematic and more purposeful (Appendix 11).

Conducting the observation

Classroom observations were conducted from September 2019 to December 2019 for twelve weeks. In the first week of this period, I visited all classes four days a week and met students and teachers. In this way, I gave the teachers and students the necessary time to ensure that they were used to me and that my presence in the classroom was not distracting. During this initial week, I stayed with one class per day, communicating with the teachers and students and observing them. At the same time, a pilot study was conducted to test the observation form and the new space created for recording the staff' informal conversations. Later in the data collection process, I visited schools two days a week, playing different roles in the classroom in the morning and afternoon sessions. In both schools, there were artistic activities aimed at helping students with ASC to calm down in the afternoon, after taking compulsory courses in the morning (the different and similar practices of the schools on this subject will be discussed in a later chapter). Making classroom observations with my researcher identity in the morning classes and joining in activities and studies as a participant and volunteer in the afternoon, gave me an opportunity to try and be a part of the classes and the school.

The purpose of assuming different roles in the data collection process is to observe the students in the compulsory courses with their teachers and friends, and to observe the behaviours of teachers and students in a less structured setting. Thus, I had the opportunity to observe both groups of participants more closely and naturally. As Kawulich (2005, p.2) says, “participant observation is the process enabling researchers to learn about the activities of the people under study in the natural setting through observing and participating in those activities.”

During the classroom observations, especially in the afternoon classes, I had some informal conversations with staff. In order to record these on the form, I created a new space entitled

'Informal conversation between the researcher and the participants', therefore, making the observation form functional in every respect.

Thus, the observation notes, regarding every event, behaviour, response and attitude observed, helped me to gain stronger data by incorporating comprehensive information. The observation technique has contributed to many respects by enabling comparison of teachers' interviews with their classroom practices, and interpreting the factors affecting TI, reflecting on their effect in supporting students with ASC, and analysing them accordingly.

However, it is not fair to say that classroom observation is a perfect method that benefits the researcher in every aspect. In this technique, as with all others, there are some disadvantages, or points that challenge the researcher. I also had some difficulties in applying this technique. The first of these relates to the risk that the natural behaviours of the participants will be affected. To prepare teachers to behave naturally, I mentioned during informal conversations that I was learning from them, and that my aim was not to criticize or judge, but to learn from their practices. I experienced a similar situation with students, both neurotypical and those with ASC. Their sense of curiosity and anxiety towards someone they did not know in the classroom caused them to be distracted, but their concern about me disappeared thanks to the activities I participated in in the afternoon. Over time, participants who became accustomed to my presence in the class began to behave more naturally, and my presence did not affect them (Kawulich, 2005).

Another difficulty of the observation technique is that it takes a long time, which can be difficult for the researcher to manage. Mainly when performing classroom observations, observing in the same classroom environment throughout the day can make it difficult for the researcher to be able to maintain the focus of his/her attention and miss some data. Young (1956) argued that valid observation cannot be rushed, stating that the same desire, interest and motivation in this long period is a difficult skill for both the observer and the observed. Therefore, the fact that I did not prefer unstructured observation and that I had created the form beforehand, helped me to solve this problem.

In spite of all the difficulties mentioned so far, the observation technique has been a vital data collection method that has supported the interview aspect of the research, increased the reliability of the information acquired, and helped me to be a part of the research environment by communicating with the participants.

5.4.4.3 Documents

In cases where direct observation and interviewing is not possible in qualitative research, or to increase the validity of the study, written and visual material related to the research questions can be included. This means that document review or analysis can be a stand-alone research method, as well as a source of additional information where other qualitative methods are used. Denzin (1970, p.291) suggests that “document analysis is often used in combination with other qualitative research methods as a means of triangulation—the combination of methodologies in the study of the same phenomenon.” In this study, the aim was to support other data collection methods and to strengthen the data by examining general education policies about ASC, mainstream education and assessment, and various documents obtained from schools.

Collection of policy documents

Undoubtedly, one of the most important sources that can be used in understanding the education system of a country and especially in the interpretation of teacher practices is its educational policies. In this study, up-to-date education laws regarding the placement of SEND students in mainstream classes were investigated, together with their education in these classes and the evaluation methods used. All documents were accessed on the official government website. The documents reviewed within the scope of the research were The Equality Act 2010, SEND Regulation 2014, The Children and Families Act 2014, SEND Code of Practice 2014, and 2013 Primary Assessment and Accountability. Among these documents, The Equality Act, SEND Regulation, The Children and Families Act and the SEND Code of Practice, include the principles used in the SEND and equality policies of the research schools and are a resource for the preparation of these policies. The mentioned regulations and acts will be examined in detail during the analysis part of the research and their negative, incomplete or developable aspects will be determined, so that the obtained data will be used both to support other data collection techniques and to create a resource in the literature review and discussion chapters.

Collection of school documents

The fact that both schools where the research was conducted are in the same academy trust meant that they had many similar documents (SEND policy, Assessment policy, Equality policy). This situation allowed me to compare the differences in practice more clearly during the examination of the documents. For this reason, I used the same documents, such as the SEND, Assessment and Equality policies, Ofsted reports, students' books, historical student documents, teachers' written feedback, self-assessment and peer assessment forms. Also used

were photographs (schools and classrooms environment and students' work), taken by me during the lessons in both research schools to help understand the missions of the schools and to contextualise my analysis.

In the first week of the research, the school principals gave me photocopies of the class lists, so I could become familiar with the names of the students in the class, as well as the SEND (2020), Equality (2019) and Assessment (2016) policies to familiarise myself with these before the data collection process started. While it was possible to access many more policies like these on the websites of the schools, I could not access the Assessment policy in this way. Therefore, I could only obtain these documents as hard copies. As I mentioned earlier, both research schools have common policies, since they belong to the same academy trust. Although there were some minor changes in SEND policies, such as the distribution of the number of SEND students by class, the criteria set in general were largely the same in both schools. In addition, the Ofsted reports that I obtained from the websites of the schools were also among the important documents of the research, as they act as a tool that indicates the number of students with ASC in schools and measures the competencies of the schools in SEND and assessment.

In the first week of my visit to the schools, I took photographs in order to visualize my data while describing the teaching environment and the study areas of ASC students from the class, when they are not in the mainstream classroom. I filed these photographs separately for each school and student with ASC and saved the files on OneDrive. In addition, lesson plans given by the teachers that include the lesson subjects, the aims of the subject and the success criteria were added to the files created for the classes. Thus, an infrastructure was created to complete the missing points that may arise during the use of other data collection methods (Merriam, 1998).

Written feedback, marking, and emojis given by teachers during the lessons on the written work of the students with ASC were indicative of both the teachers' internal thinking processes (ibid) and the differences they followed in the use of the written FA method. All these documents were collected at the end of the lesson, mostly after the students left the class, in order not to distract the students and not to affect the natural learning environment. These documents were photographed and turned into visual documents. In addition, with the help of teachers, the notebooks, students' work and the FA forms of ASC students belonging to past years were accessed and photographs were taken by me. All these documents were added to

the files created for students, as recommended by Miles and Huberman (1994), by indicating the date and place, and added to the observation notes and interview transcripts for analysis.

Sometimes I played an active role in obtaining these documents collected from schools and sometimes they were provided for me. However, thanks to the understanding and helpful approach of teachers, I have acquired an archive of documents that enrich my data. Describing the roles, I had as a researcher and participant throughout the entire data collection process, including document collection, will also provide an idea of how and by which methods the data analysis is performed.

5.4.5 My Role as a Researcher and Participant

As already stated, I had two different roles in the present research. First, in the morning I participated in English, mathematics, history, geography, and science classes as an observer, interviewer, and researcher, and second, I took part in art, nurture group and IT classes in the afternoon. Thus, I had the opportunity to observe students and teachers in their daily routines from different perspectives and to examine the activities from these perspectives. During this process, I maintained my ontological and epistemological views and approach, as a principle of research. The shaping of all phases of my research within the framework of these views, guided me in the data collection process as well. As Viren and Walwyn (2017, p.4) points out, “researchers with an understanding of their ontological, epistemological, and phenomenological positions will be able to account for their subjectivity in their research designs and conclusions.”

Consequently, as a researcher trying to find answers to the research questions, from my own perception of reality, and at the same time, my respect for different ideas and subjectivities always meant that I was inside this research, because “as researchers... we are never outside our research, never planning with full confidence that we know precisely how it will be. Rather we are always, already in the midst of the research, confronting the possibilities, making choices, wrestling with the restlessness of possibilities” (Smythe et al., 2008, p. 1391). For these reasons, even sitting in the classroom and observing, simultaneously interpreting events, trying to look through my epistemological perspective, trying to find the most delicate details, and trying to see what was behind the scenes, were part of this active role. Since I witnessed many unscheduled activities, especially in those classes and activities in which I participated, I also had the opportunity to observe how teachers and students behave in activities where they

are more comfortable and flexible. In other words, to be a participant in the research improved the quality of data collection and interpretation (DeWalt & DeWalt, 2002).

The researcher is required to contribute to the quality of research by fulfilling certain criteria. The first is that the researcher should be aware of their own prejudices and has mastered ways to reduce them. If I had not been aware of this, I could have projected my own perceptions and experiences onto those of the participants. Therefore, I have tried to be very meticulous about this and to minimize my prejudices and to remain aware of my own experiences.

Another criterion a researcher should possess in qualitative research is to have the necessary competence in the methods to be used. Although many researchers think that they have this qualification, especially in qualitative research, they can face many problems when they enter the research environment. Just as I thought I was well equipped with qualitative research methods, I realized that I had some deficiencies in conducting interviews and observations and analysing the data. Therefore, I think it is important to spend sufficient time in the research environment to provide the opportunities to collect more quality data by improving qualitative research methods skills.

As a result, I believe that fulfilling both of these criteria enabled me to take into account the rights, opinions and feelings of the participants, and at the same time demonstrate sensitivity in order to not affect the impartiality of the research process. I also believe that when a researcher has more than one role, it adds different perspectives to the research, strengthened by experience giving a more precious insight to the researcher.

5.4.6 Data Analysis

In this study, which was conducted in order to understand the role of TI in using FA methods to support the learning of students with ASC in mainstream classes, as previously stated, 3 different data collection methods (interview, observation, documents) were used. These methods enabled a rich data archive to be obtained through 48 hours of observation, 22 interviews, documents obtained from both schools, classrooms and students' work, and by examining some government policies. Detailed information about the collected data is presented in Table 5.2.

Table 5.2 Details of The Data Sources

Participants	1 st Interview	Observation	2 nd Interview	Documents
Alison (T)	✓	✓	✓	✓
Brad (T)	✓	✓	✓	✓
Betty (T)	✓	✓	✓	
Francesca (TA)	✓	✓	✓	
Helena (T)	✓	✓	✓	✓
Andrea (TA)		✓		
Olivia (TA)	✓	✓	✓	
Harry (TA)	✓	✓	✓	
Teresa (TA)	✓	✓	✓	✓
Maria (T)	✓	✓	✓	✓
Meghan (T)	✓	✓	✓	✓
Rachel (TA)	✓	✓	✓	

As indicated in the table, all staff, except for one TA, were interviewed twice and observed in their classes for twelve weeks. While the meetings and observations progressed, the document collection process was continuous. Documents about students' work were mostly obtained from classroom teachers and TA Teresa, because they were more knowledgeable about FA processes and could access the documents that I needed during the data collection process. This process ended with the completion of observations and interviews.

A detailed analysis to be made before presenting this data to the reader is one of the most important elements in the realization of the purpose of the research. For this reason, Braun and Clarke's (2006) thematic inductive analysis method consisting of 6 stages was followed during data analysis. The reason for choosing this method is that these 6 steps guide the researcher in more systematic and sequential analysis of the research data and allow more flexible action in the coding process. However, since this method is an iterative process, the completion of a stage does not mean that that stage is completely over. In other words, the stages, such as encoding data, establishing a connection between codes, and creating and editing themes, continue throughout the entire analytic process. Each step was repeated and reviewed so that the data could be analysed in the most detailed way and reflected in the most accurate way. As

Braun and Clarke (2006) suggest, in order not to miss important themes, each set of data was analysed with full and equal importance and themes were created in accordance with this purpose.

Thematic inductive analysis, which can be a guide in the analysis of qualitative research (ibid), consists of 6 systematic stages as shown in the table 5.3. below.

Table 5.3 Phases of Inductive Thematic Analysis (Braun & Clarke 2006, p.87)

Phase	Description of the process	
1	Familiarising yourself with your data	Transcribing data (if necessary), reading and rereading the data, noting down initial ideas
2	Generating initial codes	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code
3	Searching for themes	Collating codes into potential themes, gathering all data relevant to each potential theme
4	Reviewing themes	Checking if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic 'map' of the analysis
5	Defining and naming themes	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme
6	Producing the report	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis

1. *Familiarisation with data*

The first step of the thematic inductive analysis that I used in the data analysis of this research is familiarization with data. At this stage, in order for the researcher to be familiar with the data collected, every detail in the data should be recognized. Therefore, all interviews were first copied from a digital recorder to a transcription software application known as "Otter", in order to establish such a relationship with the data. However, so to ensure the reliability of the transcriptions, each sound recording was listened to, while carefully reading the transcript, and amending the missing or incorrectly copied parts. Unrelated conversations and repetitive words (i.e., I... I... I want to...) were excluded from these documents (Anderson & Felsenfeld, 2003) and a more understandable and fluent transcript was produced. This method increased my familiarity with the data by allowing me to both listen back to the interviews and also recognize some key phrases and words while editing the transcripts. Each staff' transcript was saved to a separate word document.

Similar to the experiences of many researchers, data transcription was very difficult and time-consuming for me as well. However, at this stage, the first part where I had the most difficulty

was with the poor quality of the voice recordings of two of the staff. The interview environment was very crowded and loud as the interviews were held in the staff room during lunch time, which made the sound recordings very difficult to understand. To solve this challenge, I contracted with an agency approved by the University of Nottingham to transcribe these interviews, then listened to them again and tried to make the comparison. Another difficulty I encountered during the data transcription process was when the voice recordings were in Turkish, since a Turkish participant wanted to speak Turkish for the interviews because she thought she might express herself better, and therefore the transcripts had to be translated into English. It was quite difficult and time-consuming to transcribe the audio recordings of the interviews with this participant first into Turkish and then translate them into English while trying to avoid any misunderstanding. I worked with two different Turkish doctoral students familiar with qualitative research to ensure the accuracy of the voice recordings, transcripts and translations, and I asked them to check both the Turkish transcripts and their English translations. Following the rewording of some sentences, the interview transcripts of this participant were completed. After the completion of the transcripts, the documents were read by all staff, their approval obtained, and the reliability of this process was ensured.

Since the observation forms were filled in during the data collection process, the forms were checked repeatedly after each observation, thus enabling the researcher to become increasingly familiar with the observation data throughout the whole process. However, after reaching the analysis phase, the observation documents were read again and the first impression was obtained about the themes that could be created. In order to become familiar with the students' work, it was noted, for the documents collected from the classes and the school, the date, from whom and where each document was obtained. In addition, school and state policies have been read repeatedly to learn about their contents, thus completing the first part of the analysis phase.

2. Generating initial codes

Braun and Clarke (2006) state that the second step of the inductive thematic analysis process forms the basis of the themes that will be revealed after the determination of the first codes, and that this is the first step in capturing important points from the data to answer the research questions. Since the determination of the first codes is to organize the data into categories with similar characteristics, each type of data has been coded separately.

The coding process was first started with the interview data of each participant being encoded one by one, then these codes compared with those of the other staff' interviews. Codes that

started to form slowly during the familiarization phase of the data were determined manually in this phase of determining the first codes. These procedures used with the interview data were then repeated with the data obtained from the observation forms and documents and compared across the staff.

Saldana (2016) stated that coding is not only a means of labelling, but also a means of establishing a link between data, therefore, he recommended that the codes and themes should be examined as an ongoing process and the research question should be answered by extracting understanding from them. In this study, following this recommendation, the data were frequently returned to during the analysis process and efforts were made to see the relationship between the data sets and the big picture. Some sample initial codes created at the end of this whole process are as follows.

Table 5.4 Example of Initial Coding

Example quotes	Initial codes
<p><i>I help him structure the knowledge and ultimately praise verbally. (Teresa)</i></p> <p><i>We use self-assessment is where somebody is just assessing their own work. (Olivia)</i></p>	<p>Using verbal FA method</p> <p>Praise</p> <p>Knowledge of FA methods</p> <p>Using FA method</p> <p>Assessment</p> <p>Definition</p>
<p><i>It might be informative but I'm observing the students' behaviours to understand them and work as well. (Betty)</i></p>	<p>Knowledge of FA methods</p> <p>Informative</p> <p>Observation</p> <p>Behaviour</p> <p>Using FA method</p> <p>Opinion about FA method</p> <p>Understand</p>

<p><i>His body language can tell what's wrong with him in terms of body language you know if there's a problem. (Helena)</i></p>	Students' response
	Behaviour
	Emotion
	Problem
	Body Language
	Understand

3. Searching for themes

According to Braun and Clarke (2006), the third stage begins when all data are coded at the initial level and gathered together, and a long code list of different codes defined by the data set is prepared. In this way, all codes can be used to create themes and important themes can be searched that can answer the research question. Consequently, important parts of the first list of codes, where the answers to the research questions can be found, were searched and categorized. In this process, it was considered how different codes could create a more comprehensive theme by re-analysing them as suggested by Braun and Clarke. At this stage, a mind map was created showing the emergence of codes and themes in line with the belief that using visual elements would be beneficial for the reader to see the analysis stage more clearly (ibid).

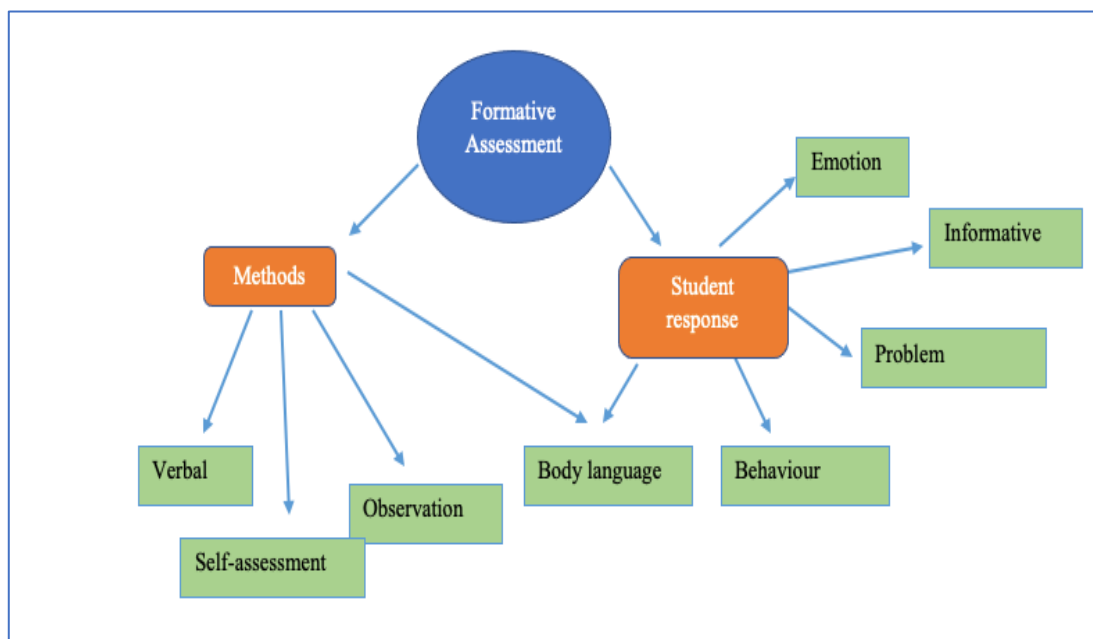


Figure 5.1 Mind map of searching for themes stage

4. *Reviewing themes*

Braun and Clarke (2006) state that at this stage, a series of initial themes determined by the researcher should be simplified. Therefore, at this stage of the analysis process, whether the first previously determined themes covered the entire data set, was reviewed, and then the necessary simplifications were started.

Review

- At this stage, how far the first themes formed could answer the research questions was checked.
- The content encoded for each theme was read again and it was decided whether they were consistent with each other. Thus, whether it reflected on the reader as a meaningful whole or not was evaluated.
- After it was concluded that the themes reflected the research, the second phase started.

Simplification

- At this stage, additional data overlooked during the coding in the first stage were coded into themes.
- Unnecessary codes that would not be useful for research were removed and simplified.
- Finally, when certain that the theme map fits with the data set and has a pattern that can answer the research questions, the coding was terminated, and the next step was taken.

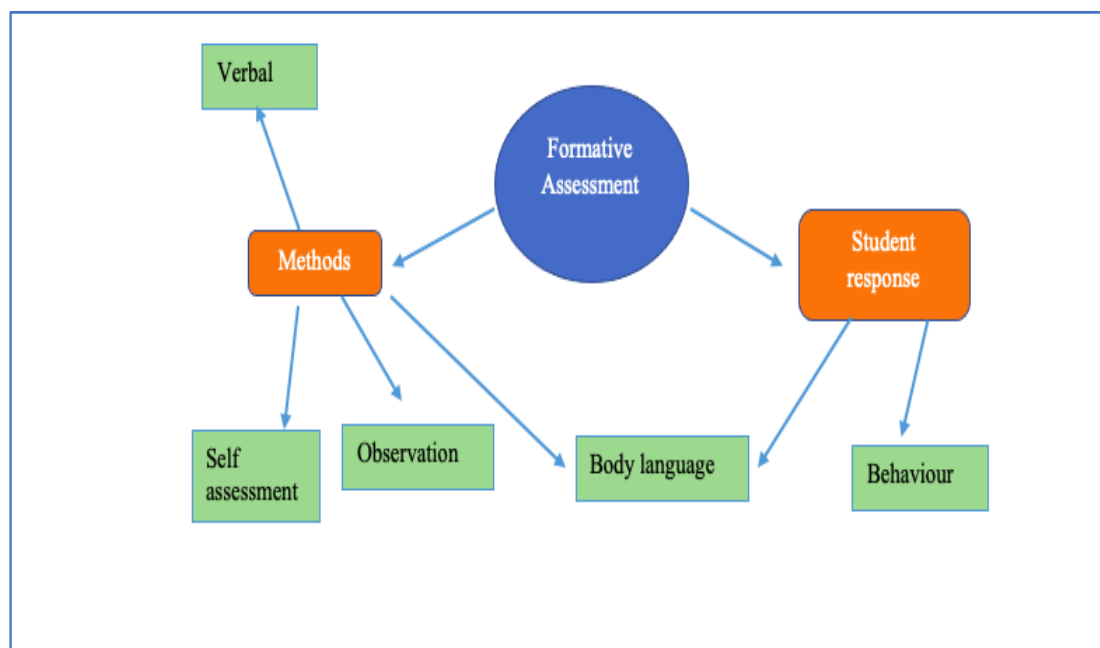


Figure 5.2 Mind map of searching for reviewing themes

5. Defining and naming themes

From themes were reached at the end of the previous stage, and from the compatibility of these themes, a clear idea was obtained about the general framework of the analysis. According to Braun and Clarke (2006), in order to complete the fifth stage, the researcher should be able to define the scope and context of each theme in a few sentences. For this purpose, the scope of each theme was described, the final names were given to the identified themes and the analysis was completed in the last step before reporting. The themes, sub-themes and codes obtained as a result of applying the analysis steps, one by one, for all data sets are shown in the table below.

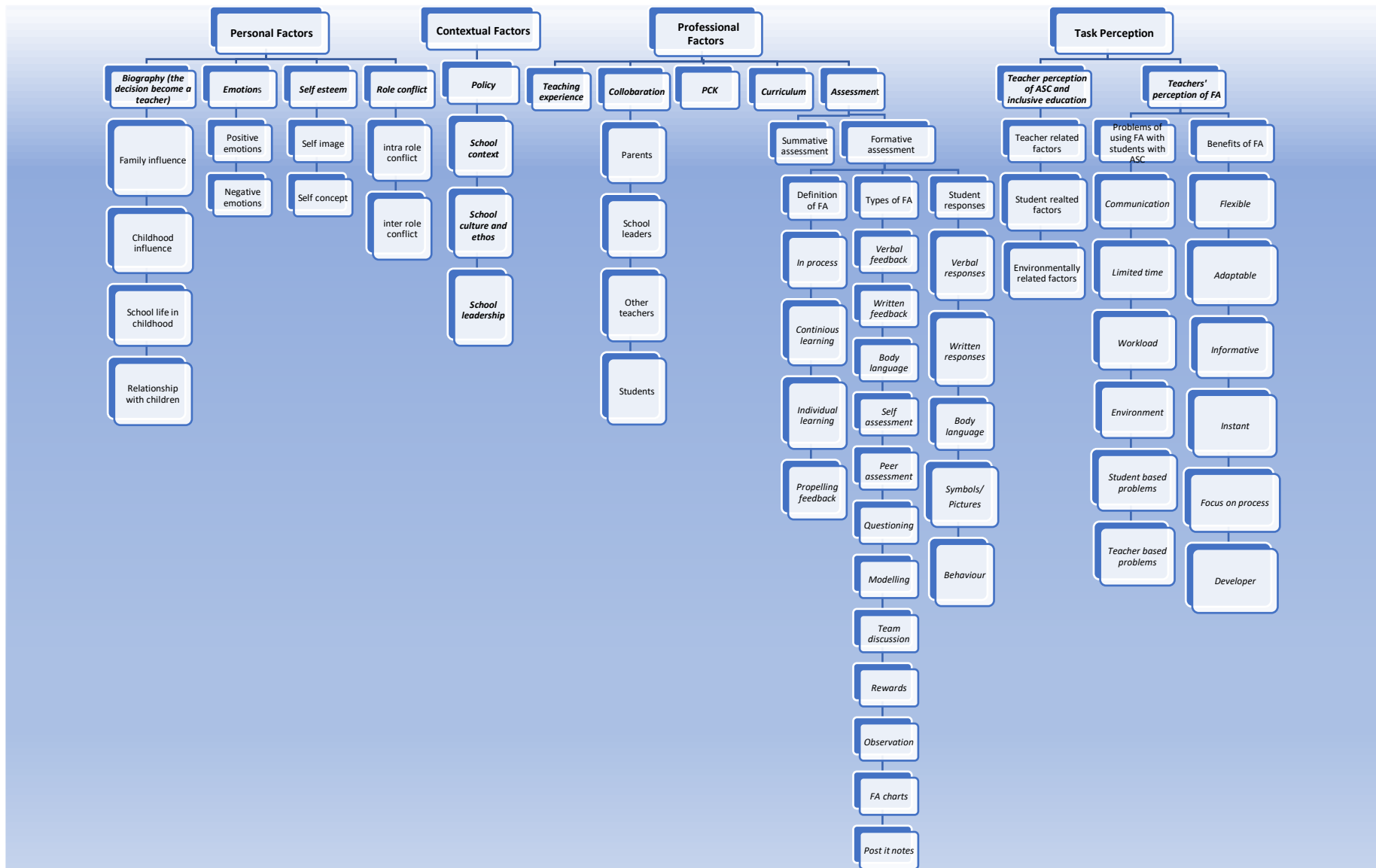


Figure 5.3 Defining and naming themes of the research

6. *Producing the report*

The last stage of the analytical process is the preparation of the analysis report. It is very important to increase the reader's interest in the story of the research, in accordance with the themes that have been identified, and using evidence to support them. Therefore, an effort was made to provide sufficient direct quotations to substantiate the validity of the themes identified in this final and important part of the research. When identifying direct quotes, as Braun and Clarke (2006) say, a researcher must provide striking examples or quotations that can support the point they want to make without getting into unnecessary verbose language. For this purpose, coloured pencils were used to provide a number of examples and quotations by marking similarities. This helped group similar expressions and meanings together and categorize them.

This method was applied on all data sets. Thus, it was possible to have a deeper knowledge of the data, as well as being able to examine all quotations further. A cyclical thematic inductive analysis process was completed by showing that the evidence obtained from all data sets was expressed as examples that support each other, while presenting themes to the reader. Obtaining the data sets through different data collection methods made it possible to understand the actions of the participants from different perspectives and directions. As a result, thanks to this analytical method it has been understood that;

- The identity of a teacher is shaped by many factors.
- The same factors may have different effects on the presentation of FA methods, which can be viewed as a simple type of assessment.
- The methods used in different ways affect the learning of students with ASC.
- There is a connection between the way students with ASC are affected by this situation and TI.

5.4.7 Trustworthiness of the Research

Flexible patterning strategies that reflect the effects of philosophical thought systems, such as social constructivism and interpretation, make it challenging to use the presumption of certainty of positivism and post positivism in qualitative research (Creswell 2009). This is because there are no predetermined limitations on the manipulation and findings of the participants or events in qualitative research. The research design needs to be flexible enough to allow new queries to be implemented as the situation changes or the problem is better understood. Therefore,

rather than being confined to a rigid pattern, it is more appropriate to follow the naturalistic and flexible aspects of qualitative research (Patton, 2002). Therefore, Guba and Lincoln (1994), adopting the paradigm of social constructivism-interpretivism, propose the concept of trustworthiness instead of the concept of certainty. For these reasons, in the present research, I opted to follow Guba and Lincoln’s trustworthiness, while conducting the research, because of my proximity to the social constructivist approach and the interpretivist paradigm and its importance in the research.

Guba and Lincoln generally divide trustworthiness into four dimensions: credibility, transferability, dependability and confirmability. How the trustworthiness of this research was achieved in these four stages can be explained as follows:

Credibility

Since the credibility in qualitative studies is essentially based on data trustworthiness, I have followed some methods to ensure this reliability. Therefore, in order to understand the effective role of TI in the classroom, to learn the FA methods used, and to examine the reactions of students with ASC on this issue from the perspective of the teachers, the staff were interviewed twice, and observations were made more than once. Also prolonged engagement (Lincoln & Guba, 1985), persistent observation, triangulation (Stake, 2013) and member check (Punch, 2013) were used to provide a full complement of research methods. The Table 5.5. below shows how I use these methods and how credibility is achieved.

Table 5.5 The Credibility Criteria of Research

Criteria	Method
Triangulation	Multiple data sources and different participants were used to generate the data. While observations, interviews, and documents were the main data collection methods, teachers, TAs and students with ASC were the participants of the research.
Prolonged engagement	I visited the schools to get to know the school, the classroom environment and to familiarize the teachers and students with the school culture.

	<p>Before starting to collect data, I established a relationship with school administrators via e-mails and then went to the school to meet teachers.</p> <p>Since I was an observer in the classroom, I voluntarily participated in some teaching and learning activities for 10 weeks in order to reduce teacher and student anxiety and create a more natural research environment.</p>
<i>Member checking</i>	<p>I used the member checking strategy to make sure the interview texts were correct, so that those staff were informed about the content.</p> <p>Almost all of the staff in my study approved the interview transcripts, although one teacher (Alison) noted that there were minor grammatical errors, but they were fixed while with the participant.</p> <p>The accuracy of the transcripts of the interviews with a participant (Teresa) who wanted to interview in Turkish was confirmed by another Turkish Ph.D. student.</p>
<i>Persistent observation</i>	<p>For creating codes, and themes, the data was constantly read, reread and analysed. More in-depth research was attempted by making connections with the theories I had adopted in principle. I rearranged the codes, themes and main categories that I created and looked through the data to gain the depth of insight and understanding I was aiming for.</p>

Transferability

According to Lincoln and Guba (1985), for research to be transferable, the researcher must describe a detailed analysis of interview transcripts, observations, documentation, and purposeful sampling to allow the possibility of applying the research process to other contexts. With this framework in mind, I also made a detailed presentation of the analysis with relevant examples through quotations from the data. The deliberate selection of the participants of the research and the judgments of the data created in this way are aimed at increasing the possibility

of the research being repeated with participants in similar settings (Stake, 2013). In this way, interpretive research provides a rich explanation of the research topic. I linked it to my descriptions, analyses, arguments and comments, with the rich citation patterns from participating teachers. Thus, I have ensured that the cases I investigated are understood and illuminative.

Dependability

Bryman (2016) stated that dependability is a chain of evidence that requires clear documentation of all research activities from the beginning of the data collection process to the conclusion of the research. Merriam (1998) clarifies by adding the term completeness to this definition. When I examined the research process in the light of these definitions, I saw that the whole process could be documented, from the day when ethical permissions were obtained for the research, to the reporting of the data. An audit trail (permission certificates, field notes, observation records and interview forms) is included in these documents, as well as in the research diary I kept for myself. In this process, my supervisors guided me with the depth and insight required for collecting data effectively, recognizing details, analysing data and presenting analysis.

Confirmability

According to Lincoln and Guba (1985), confirmability is the degree to which research data and interpretations can be based on events. Thus, the prejudice of the researcher is reduced by specifying the criteria for the selection of the participants, explaining the reasons for the data collection methods in detail, and presenting the analysis tools with which the findings were interpreted. The confirmability of this study was provided by a comprehensive explanation of the whole research process, the analysis method of the data collection method and its connection with the theories. The supporting evidence also contributed to the confirmability by stating it both as an appendix (8-9-10-11) and especially in the findings part of the thesis.

5.4.8 Ethical Concerns

In this research, three data collection methods were used to investigate the role of TI in using FA methods to support the learning of students with ASC: interview, observation and documents. Due to the researcher's obligation to ensure the safety of the participants throughout the data collection process, I followed the British Educational Research Association's (BERA) ethical guidelines for educational research and the University of Nottingham ethical guidelines throughout the research, to ensure that the necessary ethical requirements and all needs were

met. Thus, I had prior knowledge of ethical issues and avoidance of ethical concerns during the data collection process.

Before the data collection it was necessary to get permission from the teachers, TAs, students with ASC, neurotypical students and their families for classroom observations. For this reason, participant information sheets were given to them informing them about the content of the research, the methods of data collection and the process. At this stage staff were informed that a laptop, smart phone and voice recorder would be used to record the interviews. After giving all information to participants, consent forms were signed.

In addition, permission was obtained from families of all pupils in the class to allow their children to participate in this study, according to the rules of the schools and ethical guidelines. Although I have no intention of collecting data from neurotypical students, because of the class observations, the families of these students were informed about the purpose and process of the research. Parents were only informed about the investigation, as the school authorities indicated that one-to-one permission from these parents is not needed and that the school has the authority to grant permission on their behalf.

However, in order to conduct classroom observations, I still thought that I should get permission from autistic and neurotypical students under the guidance of teachers. In the form that I prepared specially for them (Appendix 7), I asked them to colour the smiley face if they agreed for me to come to their classes and the sad face if they did not. Since I had come to the classrooms and met with them before, all the students agreed. All participants were told that participation in the study was voluntary and that they had the right to withdraw from the study at any time. Thus, the participants were made to feel comfortable about volunteering.

After getting the necessary permissions, interviews were recorded and transcribed. Although there was no request from the staff, at the beginning of the research, as the staff were told that they could be given a copy of the transcripts if they wanted, all transcripts were sent to the staff, who were asked for their opinions. Thus, it was ensured that both ethical concerns were addressed, and the reliability of the research was increased.

In the observations made during the second phase of the research, I took care to be sensitive about keeping ethical principles at the forefront and protecting the rights of the participants. However, maintaining the naturalness of the teachers' behaviours while I conduct classroom

observations was an ethical risk. To eliminate this risk, I tried to prevent them from feeling as though they were being evaluated, both at the beginning of the data collection process and during the informal conversations. On the other hand, in order to prevent possible discomfort during my observations, I did not use any recording devices and sat in less prominent places, such as near a window or in a corner of the classroom. In the following weeks, I became familiar with the classroom environment and working arrangements so that I could see a focus student and sit close to them observing. They did not appear to be disturbed by my presence. I chose this method of observing in the classroom, to reduce the discomfort of the students by not disrupting the general seating arrangements, and not being within their field of view.

I showed the same sensitivity when collecting documents. While taking photographs of the students during their studies, I paid attention to not allowing their faces to be visible, so protecting their identities. For this reason, I usually either photographed their work after the lesson or photographed the students from behind. To protect the right to confidentiality of the participants, it was essential to avoid all descriptions that would facilitate the identification of teachers and students during the transfer of interviews and observations. Therefore, the real names of the participants who contributed to my research were not used, but pseudonyms were used instead. Providing the limited amount of information about the participants and using pseudonyms helped me to protect their anonymity. Considering the sensitive situations of the children with ASC who were the subject of my research, I made a special effort not to identify and discuss these students in the classroom other than with the teachers and out of the classroom, with my supervisors. As Hallett and Hallett (2012) stated about research, "...the most ethical response is likely to be to only release material that continues to safeguard the child concerned" (p.11).

Hallett and Hallett (2012, p.110) also identified the characteristics that should be found in research and the researcher as follows: "When researching any aspect of teaching and learning, integrity, open-mindedness, and clarity of purpose enable us to approach classroom inquiry to raise thoughtful questions about what it is that we do and why we make certain choices." I believe that I have taken the necessary ethical measures to protect the participants from potential risks and have managed the process in the best way by trying to maintain these characteristics in all the steps explained above. Therefore, I think my research is based on ethically strong and solid foundations.

CHAPTER 6

CONTEXT OF THE STUDY

6.1 Data Collection Area

This research was conducted in Nottingham, a city in the East midlands of England with a population of 306,000, according to the 2014 census data. People from many different countries and many different cultures live together in the city. According to 2011 data, the ethnic breakdown of Nottingham was 66% British, Indian: 3.2% and Pakistani: 5.5%.

Although such a multicultural structure prevails in the city, it is seen that people who share a common culture tend to live together in certain regions. The demographic structures of the schools reflect this distribution of groups. There are 89 mainstream primary schools in Nottingham city. The current research was carried out in 2 mainstream schools, selected from the 89 schools mentioned, that meet the criteria for participation, and are suitable for the purpose of the research.

6.1.1 Participants

This study includes 16 participants: 12 staff and 4 students with ASC (Kevin, Thomas, Hasan, Jordan). The most important criterion for participant selection was that case students with ASC, and that they were studying in an inclusive class. In addition, the criteria I set for the selection of other participants was that they were teachers or TAs in these inclusive classrooms. All case students who are included in the research are male and receive education in different classes. Although I did not have any criteria regarding the gender of the students, I was aware that the diagnosis of ASC is higher in boys than girls, and that strengthened the probability that all of the students I focused on were boys. This situation eliminated having to take gender into consideration as a factor during the analysis, since I could not make any comparison.

Kevin was a very active, conversational and sociable student in year 3 at Rainbow School. However, since the time he concentrated his attention on a topic was very short, he was the student that TA taught the most, even in group activities.

Toby, like Kevin, studied at Rainbow school but was in year 4. Due to his quiet, calm nature, and tendency to self-isolate, he studied one to one with staff in many activities. He spoke less than the other participating students.

Hasan was studying in the 4th grade at Eastwood school. He was an extremely sociable, friendly student who liked to talk with his friends and staff. In particular, his talent in math class was often appreciated by both his friends and staff.

Jordon, the final case student, was studying in the 5th Grade of Eastwood school. Although he was more reticent to talk than Toby, he did not receive one to one education. Instead, he studied under the same conditions and curriculum as other students in the class. Although he was not very active in the classroom, he fulfilled every responsibility given to him in in-class activities.

While I was searching for the students to focus on in my research, I especially hoped that they would be in different grades. On the one hand, this difference reveals individual differences between different staff in the same key stage, on the other hand, it enables to compare their practices in different classes. In this way, it would be clear to see how students react to the FA methods used in the different classes. As a result, my research was carried out with Years 3, Year 4, and Year 5, and I obtained the diversity I had hoped for. Two teachers and four TAs in Rainbow School and four teachers and two TAs in Eastwood School agreed to participate in my research. The demographic characteristics of the staff are shown in the Table 6.1. below.

Table 6.1 Demographic Characteristics of Staff

Teachers	Position in school	Gender	Race/ethnicity	Relationship status	School	Teaching experience (year)	Teaching experience in mainstream	Grade level	Data collected from participants
MARIA	Teacher	Female	British	Married	Rainbow School	12	9	Year 3	Interviews&Observation
OLIVIA	Teaching assistant	Female	British	Single	Rainbow School	9	7	Year 3	Interviews&Observation
MEGHAN	Teacher	Female	Pakistan	Single	Rainbow School	1	1	Year 4	Interviews&Observation
RACHEL	Teaching assistant	Female	British	Married	Rainbow School	5	4	Year 4	Interviews&Observation
HARRY	Teaching assistant	Male	British	Married	Rainbow School	15	7	P. E.	Interviews&Observation
TERESA	Teaching assistant	Female	Turkish	Married	Rainbow School	3	3	Nurture Group	Interviews&Observation
ALISON	Teacher	Female	Spain	Single	Eastwood School	3	1	Year 4	Interviews&Observation
BRAD	Teacher	Male	British	Single	Eastwood School	10	6	Year 5	Interviews&Observation
HELENA	Teacher	Female	British	Married	Eastwood School	16	12	Year 5	Interviews&Observation

BETTY	Teacher	Female	British	Married	Eastwood School	21	18	Year 4	Interviews&Observation
FRANCESCA	Teaching assistant	Female	British	Married	Eastwood School	34	27	Year4-5	Interviews&Observation
ANDREA	Teaching assistant	Female	British	Single	Eastwood School	6	4	Year 4	Observation

Including the demographics of staff is relevant to understanding the process of forming their teacher identities, to question the reasons behind their behaviour, and to observe their activities in the use of FA, with a more detailed and interpretive perspective. The staff consist of two male and ten female teachers and TA (6 teachers and 6 TAs). Meghan was the most inexperienced teacher in this study. She finished university last year and this year is the first teaching year for her. All of the other staff had between 3- and 34-years teaching experience.

Andrea is a TA working part time. She did not want to participate in the interview phase of the research, but she did consent to being observed. She was working with students with ASC for the first time, although she had previously worked with students with SEND.

Brad, Helena, and Betty are part-time teachers at Eastwood School; Brad and Helena are teachers of the same class, with Helena teaching this class two days a week. Since all these teachers have other roles in the school, they are in the school when they do not attend classes. Therefore, they could intervene and support each other in any situation related to students.

Harry is a TA in PE lesson who has worked as a football coach for about 20 years. During his time as a football coach, he also worked with individuals with SEND and with ASC. He teaches physical activities to students with SEND and ASC 3 days a week between at 10-10.30 am, while neurotypical students were working with staff in the classrooms. By adapting his own experience to his new job, he created a football group consisting of SEND students, with whom he trains at the weekends. While neurotypical students are also allowed to join this group, the main purpose is to allow SEND students to socialize with the help of such activities. At the invitation of the teacher, I included my son in this football group at weekends and had the opportunity to see that environment more closely.

Meghan, Teresa and Alison have a different ethnic origin, while other staff are British. Although the staff have different cultures, they have achieved a natural harmony by working in great cooperation. The teachers knew and communicated not only with the students in their own class, but also those in other classes. Thus, the social behaviour and academic skills of almost every student in both schools were supported in a coordinated manner. For example, in Rainbow School, a card was used by all staff to support the behaviour change of a Year 3 student with ASC, who had difficulties with social behaviour. There were different facial expressions on both sides of this card. When the student showed positive behaviour in the school (thank you, apologise, please, not hit friends, finish lunch), the teachers or TAs showed

him a smiling face. If the student behaved negatively, he was warned by a teacher by showing the sad face. This was an indication that students were supported by staff across the school, collaborating and cooperating with the use of FA to support the learning of these students and in regard to behaviour management.

In summary, the staff have some similar, and other quite different features and backgrounds. How useful these features are in finding answers to the research questions will be discussed in detail in the *findings* section. Firstly, description of staff' teaching conditions provide better understanding of the contextual factors that influence their identity.

6.1.2 Rainbow School

Rainbow School is located in an area where the majority of its students are Pakistani and Romanian, and where low-income families live. In the school, there are 208 students between 4-11 years of age, from nursery to Year 6 and it is smaller than the average-sized primary school. Pupils who attend this school come from a wide range of ethnic backgrounds. The proportion of pupils who speak English as an additional language is well above average (Ofsted, 2017). It was previously inspected by Ofsted in 2013 and was judged as 'requires improvement' overall. After this inspection, the Rainbow School aimed to work in collaboration, by participating in an Academy Trust that includes 25 schools, thereby aiming to increase the competence of the school in every field. As a result of this situation, the school has improved to "good" status according to the 2017 Ofsted report.

The school has two separate entrances. Only students between years 1 to 6 use the first entrance, and the second entrance is used by the nursery and reception class students. The playground for these young students is in a different outdoor space than that for the other students. Therefore, I can say that the school is physically divided into two: early years and primary. All classes of the school have doors that open to outdoor space, and teachers can do outdoor activities in some parts of the lessons by using these doors. Thus, different from the practice in my country, activities can be carried out without disturbing other students or teachers. This situation facilitates classroom activities and applications, especially with SEND students.

According to the Ofsted 2017 report, the proportion of pupils who have SEND is above average. The proportion of pupils who have a statement of SEND or an EHCP plan is well below average. Consequently, the school has 14 SEND students and 2 students with ASC with EHCP plans. According to the same report, the school's status is "good" in terms of education

for SEND students. All the staff at the school receive extra training on the education of these students. If necessary, they contribute to education by supporting each other. As I have encountered many times during my research, staff work in collaboration. Therefore, the familiarization of school staff with pupils who have SEND and/or disabilities shapes the training that will be given to them. The inspector who prepared the Ofsted report, believed that this was sufficient to support the learning of the school's SEND students. These recognised and supported students, “sometimes, do not meet these targets but are still well cared for and make good progress from their starting points” (ibid, p.7).

SEND students at the school usually have lessons in a separate room from their classmates (because the attainment levels of the students are considerably lower than their peers), in order to have one-to-one study with TAs. They sometimes work as groups and sometimes individually. Another practice that supports the learning of SEND students are PE and yoga classes, held between 10 and 10.30 in the mornings. Harry teaches all SEND students at the school within a specific plan. Thus, while participation of the students in physical activities increases, it also contributes to socialization with other SEND children. Even Harry stated that Kevin and Thomas met and became friends thanks to these lessons and spend time together during the break.

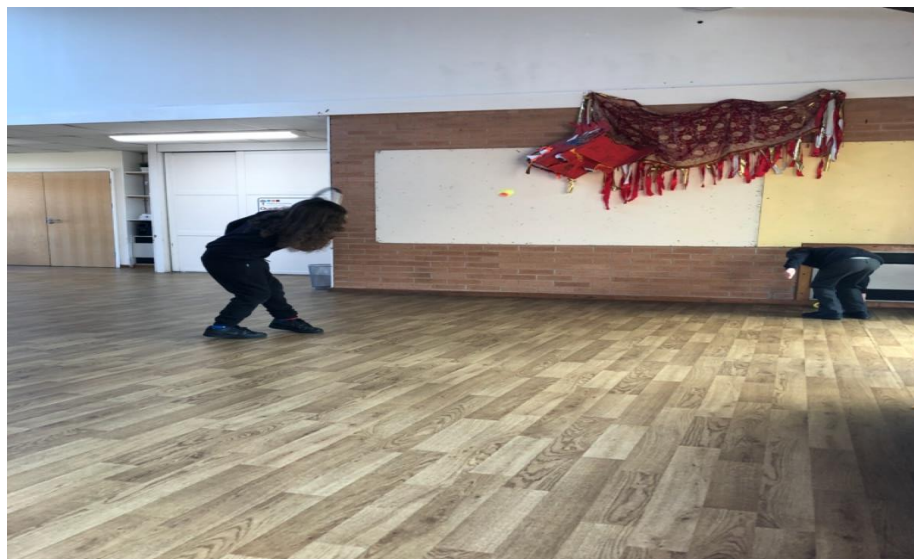


Image 6.1 PE class

Nurture group activities are carried out in the afternoons 3 days a week to work on the subjects that SEND students do not join with their class for, and for which they need support. In this two-hour period, 3 TAs work one-to-one with 6 children, in collaboration with teachers, on

activities related to the subjects for which the student requires additional work. One TA takes art, music or other creative activities with other SEND students. This is noted by the inspector as follows, “Staff provide help to pupils who need extra support. They make good use of resources to guide pupils and improve their understanding. At times, TAs support pupils with SEND. Teachers use this time to work closely with pupils who need support that is more intensive” (ibid, p.5).

6.1.2.1 Classes

The research was carried out by observing Year 3 and Year 4 in Rainbow School. It is of great importance to this study, to learn how SEND students are educated in mainstream classes and within what kind of environment, given the dependence of the students with ASC on their routines. For this reason, before presenting the findings of this study, it would be useful to describe the teaching and learning environment.

Year 3

There are 28 students in year 3: 4 of them with SEND, and one of these students being on the ASC. This classroom has one interactive board, a carpet in front of it where students have reading and watching activities, and cabinets, where students put their notebooks and teaching materials. In the middle of each table, there are pencil holders shared by the students, and the same materials in each pencil holder. This was surprising to me when I first entered the classroom, as the common use of the same items by the students was something that I have never met in my teaching experience, but it made them 'the same', regardless of their socio-economic status, thus eliminating some possible differences.



Image 6.2 Year 3 classroom

In another room within the classroom, students with SEND were doing activities sometimes one-to-one, and sometimes with TAs. This room was very plain in comparison to the main class, and there were not many students' pictures on the walls. This class included a table and 6 chairs, where only 6 students can sit, and a white board, and drawers with specially prepared activities for SEND students. Each drawer had written on it the name of the pupil it belonged to, and from their drawers, they could find and do the activity of the day. In addition, Kevin's technology activities were carried out in this room with iPads specially designed for him. He was taught here for about one hour a day and was very difficult to observe as this room was very small. Therefore, before the students came, I tried to take my place near the window and not distract them during the lesson.



Image 6.3 Individual study room

Inside the class there was a place reserved for Kevin. This area was built in a place where he could both easily see the board and the teacher, and it was near the exit door, so when he had to go for a PE lesson, he could easily leave the classroom and return. Unlike other students' desks in the classroom, Kevin's table was red. The daily routine visuals were hung on the blue board hanging right above his desk on the wall, and he could follow his next work from here. Kevin repeats these daily routines with the TA after a daily check, and if there is a different activity for that day, he would add the image to the chart.



Image 6.4 Kevin's table

The first day I entered the classroom, the rainbow poster on the classroom wall caught my attention. This poster is a behaviour chart that has been put in place to evaluate the positive and negative behaviours of students in the classroom. Consequently, each student sticks his name on the sun in the morning and rises to the rainbow or descends to the cloud in line with the teacher's warnings according to his behaviour during the day. Kevin's favourite activity is sticking his name to the rainbow, but worryingly his name often goes to the cloud. This scheme remains on the wall throughout the year, as the staff thinks this is the most effective FA method for all students, but especially Kevin.



Image 6.5 Rainbow chart

My favourite corner in the class was the book reading corner. This area has been created by placing a red-coloured armchair with a pillow, next to a teddy bear, right next to the class library. Thus, the students can borrow the books they want and read here. Since this corner is a place from where it is possible to see the whole class, I could sit here at times outside the reading time and complete my classroom observations. In addition, the names and photographs of the students who were stars of the reading were hanging on the big poster hung at the entrance of the class in order to encourage reading. To be included on this poster, it was necessary to have read the expected number of books. Most students were encouraged, evaluated and supported mostly by using FA methods in this regard. There was also an area in the classroom where teachers put the materials for FA. Papers prepared for self-assessment and peer assessment were stored in these cabinets until the time came for them to be used.

Year 4

This class consists of 30 students: one with Down Syndrome, and one with ASC. Year 4 is the largest of all classes and the classroom has been designed in a multi-system way.



Image 6.6 Year 4 classroom

Its general appearance is similar to other classrooms, but here, one of the walls is devoted entirely to mathematics, and there are terms and operations written that are key to maths.



Image 6.7 Maths board

In this class, the decoration was comparable to the year 3 classroom. The small room off the classroom was prepared in a similar way, in order to perform one-to-one and group activities for students with SEND. However, in this class, unlike the other, there was no whiteboard. Instead, the teacher brought out a portable whiteboard and used it to present the activities. Another different practice in Year 4, was that at times, one-to-one teaching was carried out with students who did not have any disability but needed more support from the teachers. In contrast, in Year 3, where the entire ante room was reserved for SEND students only. I have observed that Thomas only experienced one-to-one work twice in this room. The TA preferred to work with him in class, at his desk.



Image 6.8 Thomas's table

There was a specially prepared area for Thomas. In this area, he had a table and chair similar to that of his friends, the visuals and word cards he used to make sentences on his desk, the blocks he frequently used in maths activities, and his notebooks under the table. On the green wall next to the table, there were visuals prepared in accordance with his daily routines, such as phrase or sound images and occupational groups related to literacy. Job groups are a specially prepared resource for students to fulfil some responsibilities in the classroom. Therefore, if the students have tidied up the desk, they become the table manager or have arranged the books, become the librarian and they place wooden bars with the pupil's name written on them in this section. At the end of the day, the teacher gives the students an appropriate sticker, and the student who collects the most stickers at the end of 6 weeks gains a certificate. This table was especially placed near Thomas' desk, and when he completed his task, he was given the opportunity to put his name in the proper place. Along with many such applications, the arrangement of the classroom, the use of walls and free spaces are designed to enable the use of many FA methods.

6.1.3 Eastwood School

Eastwood School is a mainstream school, and a member of an Academy Trust in Nottingham, like Rainbow School. However, this school is located in the city centre, and the number of pupils on roll is slightly bigger than the Rainbow School. According to the Ofsted 2019 report, a total of 241 students aged 3-11 years are given education at the primary school level. Arabian and Turkish students constitute the great majority of the students at the school. The provision for pupils with SEND and for those pupils who have English as an additional language, is strong (Ofsted, 2019). That is why 75% of these students, who come from different cultural backgrounds can speak English as a second language. Currently, 28 different languages are spoken in the school.

Speaking and literacy training for students who speak English as a second language are given by experienced teachers. Together with these students, different disability groups are included. According to the Ofsted 2019 report, the proportion of pupils with SEND is below the national average, 24 students with SEND (20 boys and 4 girls) are educated in this school. Unlike the Rainbow School, this school does not have separate classes designed to teach SEND students. Students with and without disabilities study in the same classes with their peers. One-to-one teaching is given to these students, but it is provided in the same classroom environment.

The school has 7 classes, i.e., Reception, and years 1 to 6. All classes are on the same corridor, and all corridors are decorated with students work. One thing in particular that caught my attention, was that artistic work of the two case students I observed was exhibited in the school corridors and that Jordon was a member of the 'Environment Council' group as included on the school noticeboard. Since this is a situation (giving some responsibilities to students with SEND) that I have never faced in my country's schools, I was very pleased to see that such a responsibility was given to a student with ASC and that their work was so appreciated.

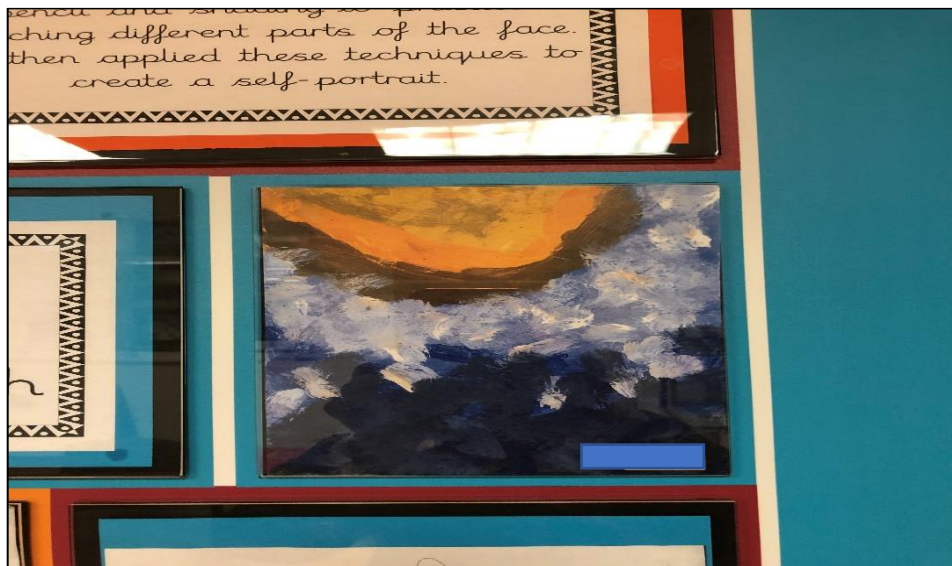


Image 6.9 Hasan's painting

There are a minimum of 27 students in each class, and at least one of them requires special education. In order to provide the expected education, there is one teacher, and at least one TA in each class. While some of the TAs work full time, some are part-time. TAs have roles in supporting the learning of students with SEND. According to the Ofsted (2019, p.3) report, "Leaders use highly skilled TAs to provide tailored one-to-one support for pupils. They adapt the curriculum carefully to ensure that pupils with SEND access learning alongside their peers". However, based on 12 weeks of observations, it appears that, only one TA has worked in many classes. Some problems caused by this situation and its impact on the learning of the students with ASC will be discussed in the next section.

There are six students with ASC across different grade levels in school. Various teaching methods are used for these students. According to the Ofsted (2019, p.9) report, "Staff use a range of external agencies to provide specialist support for children with SEND. TAs are used expertly to provide high levels of support for children with complex SEND, including

physiotherapy and sensory-play activities. As a result, children with SEND access the curriculum and learn together with their peers.” On specific days of the week, students are given yoga, swimming and music lessons by the experts who were mentioned in the report. Additional funding is used for these kinds of activities to give extra support for children with SEND, including one-to-one support, small-group support and specific interventions to improve children’s speaking skills.

In this school, SEND students are taught by applying IEPs that are created in accordance with the disability and educational level of the students. The skills expected to be achieved in line with these plans, are evaluated using FA and SA. Because of their involvement in the same Academy Trust, staff evaluated the students with SEND in Eastwood School by following the same assessment policy as Rainbow School.

As a result of all the educational approaches I have explained so far, the overall status of the school that was “good” in 2016, became "outstanding" in 2019. According to the inspectors, "The outstanding teaching, learning and assessment, enable the proportion of children achieving a good level of development in 2018, to be above the national average" (ibid, p.9). However, in the same report, it has been advised in order to sustain quality to "Improve the effectiveness of teaching, learning and assessment by ensuring that pupils check and proofread their writing so that errors in spelling and grammar are quickly addressed." (ibid).

6.1.3.1 Classes

The research was carried out by observing Year 4 and Year 5 from which 2 of 3 students with ASC were selected as cases in Eastwood School. The role of the teacher identities on using FA methods to support these students' learning was investigated with 4 class teachers and 2 TAs in the mainstream classes.

Year 4

Year 4 in Eastwood School is much simpler compared to the other school's classroom design. The classroom is quite small, and student desks are used so that many students can sit together. There are 27 students in the class, four of them with SEND, and 2 of them with ASC. The classroom walls are decorated with boards that contain only reminder activities. Students' favourite work is exhibited in school corridors. There is a computer and a small library in the corner, located next to the back door of the classroom. Students are provided with the opportunity to obtain books for reading hours and use the computer when necessary.



Image 6.10 Year 4 classroom

In this classroom, there is no room prepared for SEND students to get one-to-one education. Students receive full-time education in the same classroom environment as their peers in all classes, except for yoga and swimming, and the staff assist the student at the desk when they need to do one-on-one teaching. I think this contributes to the highly inclusive category of the school, given in the Ofsted 2019 report.

Students sit as a group in the classroom, but these groups change for each lesson. On each table were materials and notebooks shared by students. When the lessons changed, there were students who were tasked with changing the notebooks and delivering the existing notebooks to the teacher for marking which is used as an FA method to give rapid feedback. Students review their notebooks for 10 minutes at the end of the day, reading the teacher's corrections (Appendix 12.).

Hasan usually sits with a particular group in the classroom for subjects such as English and Science. Only in the maths class, did he leave this group and join another group, to support his friends with maths, because his maths skills were higher than the others. Therefore, unlike in other schools, there was no constant place that was specifically designed for Hasan's needs. He was educated in the same way as other students, with no daily charts or teaching materials (this will be discussed in the later parts of the investigation about causes and consequences). When determining the location of Hasan, it was chosen because he would be closest to the teacher's desk and could easily see the board.



Image 6.11 Hasan's table

Year 5

This class is physically well organized, as well as having the oldest children of all the classes I have researched. The class consists of 30 students and one of them has ASC.



Image 6.12 Year 5 classroom

Jordon receives all his education in class, and his position in the classroom, like Hasan, is the closest place to the interactive board and teacher. The placement of other students is in groups, with each group varying depending on the content of the lesson. Despite the fact that the class is not very large, tables, student cabinets, an interactive board and bookshelves are placed in a very systematic way. One corner of the class is reserved for computer use, with two computers, giving the impression of having a separate room in the class.

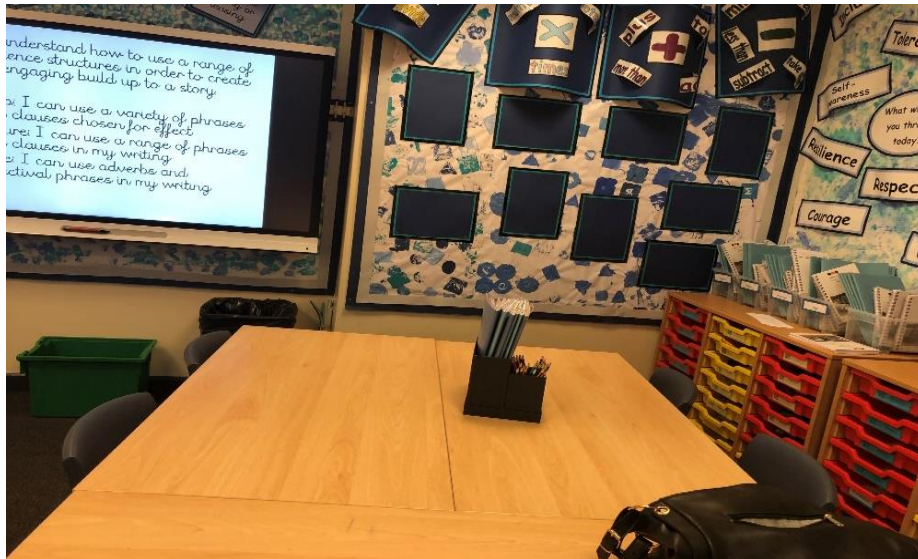


Image 6.13 Jordon's table

CHAPTER 7

FINDINGS

Introduction

This part of the result chapter presents the analysis of the data obtained from interview, observations, and documents. The findings indicated that teachers shape their teaching methods based on their teacher identity, and all factors that will be mentioned below play an important role while teaching students with ASC.

7.1 Personal Factors

An important finding is that the identities of the teachers and the factors affecting them also guide their teaching styles and practices. Consequently, the personal factors are organized into four themes; biography, emotions, self-esteem, and role conflict.

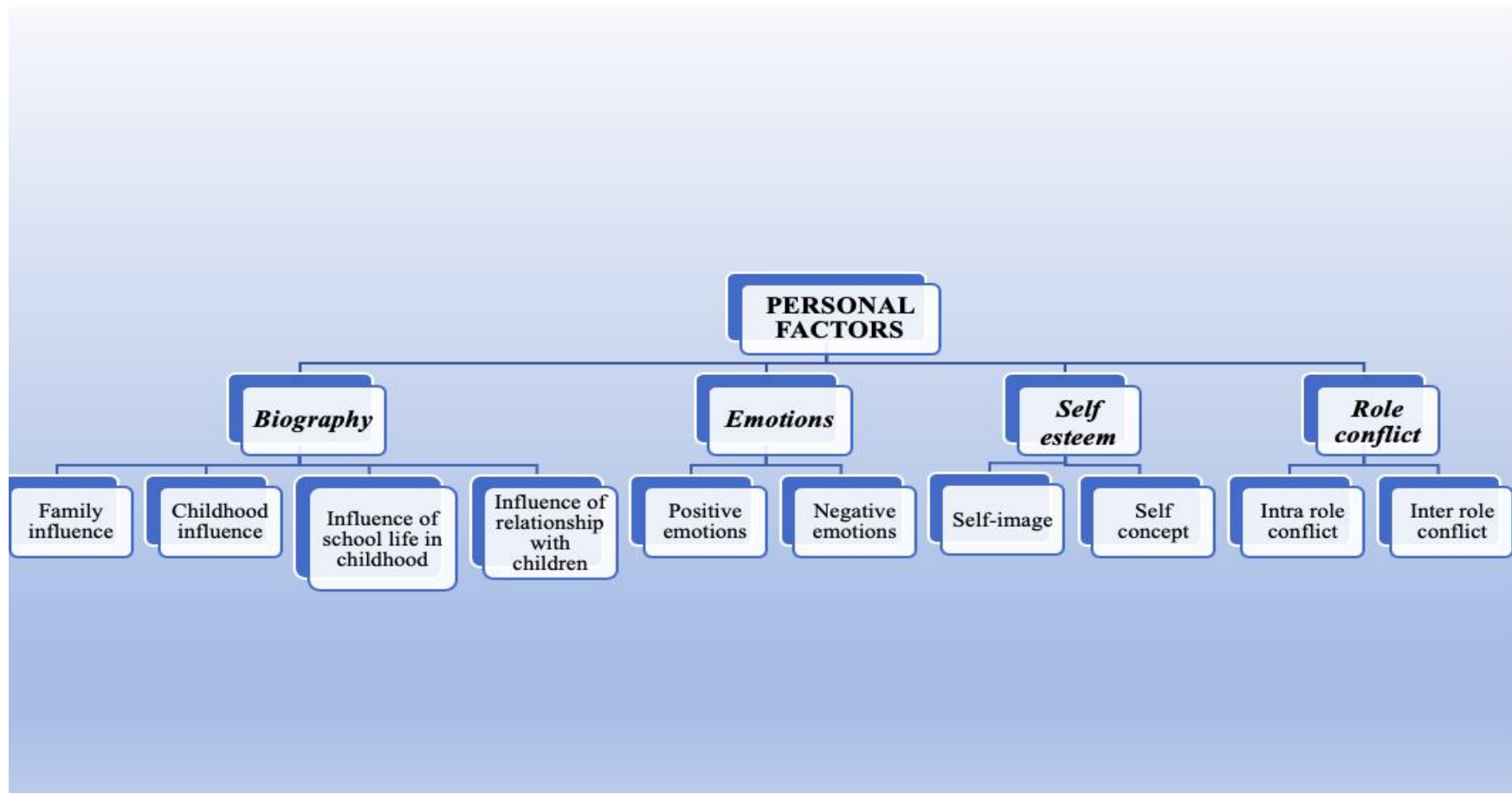


Figure 7.1 Personal factors of teacher identity

7.1.1 Biography

The events that staff have experienced in the past affect the reasons they want to be teachers and therefore, their teaching methods. It is possible to identify the traces of their past shaping their pedagogical knowledge and creating their identities. In the current research, when the biographies of the staff were examined, it was seen that in their life course steps had arisen to become teachers and to take on this identity. Therefore, the biography theme was examined through the decision to choose teaching as a career and the factors affecting it. The staff decisions to choose this profession have been influenced by their families, their own student learning experiences, the teachers they see as role models, and their relationships with children.

The Decision to Become a Teacher

I believe that the more teachers there are in the world, the more reasons there are to teach. For some, teaching is a lifelong career, while others discover by chance that they do it well and find themselves as teachers. The staff of the current research explained their reasons for becoming teachers, which have been categorised under four effects.

Family influence

As a result of the interviews with the staff, it was observed that only two of the twelve staff' families had education beyond school level. Brad's mother and Rachel's father were teachers who grew up in a family of teachers. However, interestingly, they both said that they did not consider being teachers for a long time. The educational pressure of being a child of a teacher seemed to prevent them from wanting to choose the same job. However, over time Brad noticed that his mind began to change, and he stated that teaching is "*a job where actually there has to be some sort of legacy for me*" and he found himself in the profession. Rachel stated that her father always helped her, but it was still not enough to want to be a teacher: "*Every evening he would have so much work to do, so that he played very little with us. Teaching has always been a very tiring job in my memory.*" Rachel stated in our conversations that she wanted to be an assistant teacher so that she could work more comfortably and with less responsibility, because she preferred to choose a profession where she was less tired and less overburdened than that of being a teacher who was always tired and had no time, like her father. Moreover, she would still be in the classroom with the students.

On the other hand, Teresa, Alison and Betty were the first and only teachers in their families who went to university, and they explained that their families were not role models, they only

supported them. In fact, Alison had left her education unfinished and had done other jobs for 6 years, before going back to university. In all these processes, *“They were all behind me. They all think I’d be a fantastic teacher.”* While Alison was supported by her family under all circumstances, Maria and Betty stated that their mothers supported them with a dominant approach. Both of them were acting on their mother's instructions in many areas, such as school attendance, homework and exam results, and that they had no chance of failing. *“My mums always expected us to give the best that we can educationally and to move on to something appropriate as a career.”* (Betty)

Harry and Francesca’s interviews show that the decision to teach is not necessarily affected by parents, but a spouse could influence this decision as well. Harry *“I would not be the person I am today without my partner. She is fantastic. She has the time and the patience and the know-how, you know, she never gets cross with children, which I’ve learned over the years. If it was not for her, I wouldn’t be doing this job.”* In his teaching career, which he started at the age of 40, he said that his wife played a large part. Francesca’s is a similar story. She chose to be a TA but got support from her husband to continue after marriage: *“My husband and I put our wages together. Thanks to him I prefer to carry on being a TA instead of looking for something more well paid.”* This data shows that the decision to become a TA is not only due to the effects of events and relationships with people at a younger age but could occur later in life too.

Teresa mentioned having a child as contributing to looking at family influence from a completely different perspective: *“After I had a child, I started looking at the children with another eye. I started developing myself in order to be enough for my own child and to raise him. Then, since I put in so much effort, I thought why I wouldn’t do this as a profession?”* However, the point to be considered here is whether entering into a professional community will have the same effect on others’ children as it has on their own children. Teresa’s idea may mean that many mothers who are interested in their child in society could all be teachers but working with many students with different identities is sure to be more different and complex than caring for a single child at home.

Childhood influences

Three staff stated that teacher education is a childhood dream for them, while nine other staff stated that they did not think of any such thing when they were children. Alison and Francesca, on the other hand, said that they had really wanted to be teachers since they were very young and how this affected their lives.

I've wanted to be a teacher since I was a little girl. It was one of those things where I would line up my Teddy's and pretend to teach them. (Alison)

Ever since I was a child myself, I always knew that I wanted to help other children and work with children. (Francesca)

These quotes showed that the idea of being a teacher as a child influenced their relationship and play with their friends. Another participant, Harry, stated that he did not have such a dream when he was a child, but he said he remembered the games where he was a teacher, which he enjoyed very much at that time.

Meghan also mentioned about this dream and her reason to be a teacher and said, *"I thought it would be quite rewarding and I've always wanted to be a teacher"*. I did not examine what was at the basis of staff' thoughts and, as a child, the reasons that led them to think of the benefits of a profession, but it brought me to a new sub-theme, 'students' life influence'.

Influence of School Life in Childhood

The data showed that for a great majority of staff (9/12) their own school life was effective in their decision to choose to be a teacher. Only TAs such as Francesca, Harry, and Rachel did not mention school experiences or teachers. Among the staff, only Meghan emphasised that it was a very good school life, although she did not mention the existence of any particular teacher who influenced her choice. All the other nine staff had a teacher who remained in their memory. I would like to use the term *"role model"* for these staff, but Alison's explanation of her school experience prevented me from using this term. Alison lived in Mexico for a while, as one of two children of a Mexican family, but settled in England at primary school age. However, being the only student of a different colour, race and language in the school led to challenges, with even her name being seen as *"weird"* by other students and some teachers. Alison explained that this exclusion became more brutal as she grew up and that it influenced her decision to become a teacher.

"As I got older, and as I went through school myself, I guess you could say I saw how it was done, and I didn't like it. My education was not great. I didn't have good teachers. I didn't enjoy school, so I wanted to make sure that I could make it so differently enjoyable for the children, so it's not come from a place of having a really good teacher. Did they inspire me? No. I was like, I've seen that you do really badly and I'm going to do it better than you."

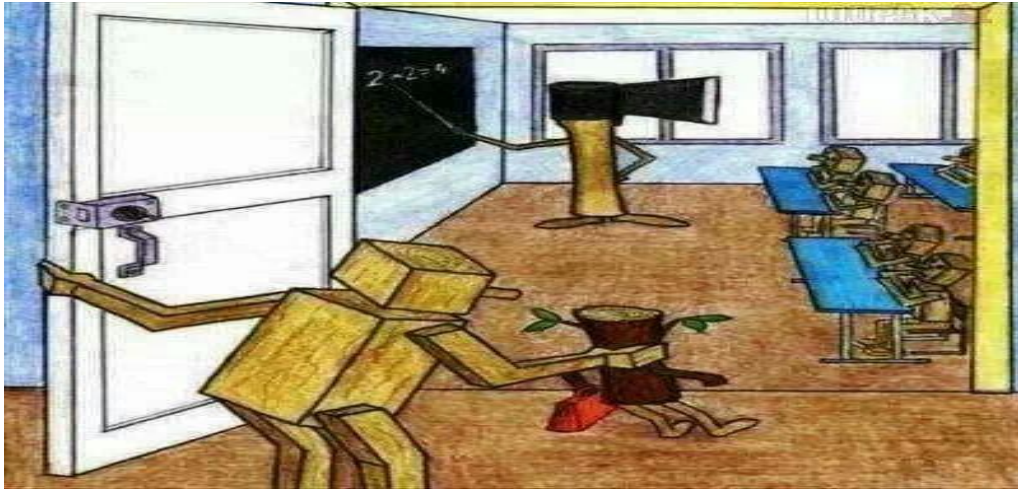


Image 7.1 Alison's description of her student life

Alison sent me the above caricature, considering it to sum up her own student life. However, outside of the teacher model, where she saw this experience, Alison took advantage of this experience in her own words, *"to become a better teacher"* and shaped her TI in this direction. She stated during informal conversations that she did not want to work in a school where there was a single race, and that she felt lucky because she worked in such a multicultural school. As a result of our interviews, it became apparent that she insisted on this, because teachers build their identities under the influence of not only good experiences but also bad experiences as, *"It teaches you so much about the world"* (informal conversation record with Alison). An example like this was also given by Teresa. She said she met two kinds of teachers: either role models, or like the teacher that Teresa had been afraid of and could not even talk to. In fact, *"My classmates and I always said to each other that we don't want to be such a teacher."* But on the other hand, she tries to do everything in her own teaching practice that she remembers from her role model teacher, because according to Teresa *"There is no other way than love, to permeate the heart of a child."*

Olivia, Betty, Brad, Helena, and Maria talked about their teachers, who they see as role models and how that helps to guide them through the methods they use. Even when Brad did not consider becoming a teacher, but explained that there was one teacher, who he would have wanted to be like. Betty depicted how her teacher affected her: *"She influenced me as a teacher, because she influenced me as a pupil, so she made me want to go to school and want to learn: she engaged me. She gave me the philosophy of make it fun, make children want to do it, think of ways to engage children."* Similarly, Maria said, *"They sort of made me excited about being*

a teacher. I thought that's something that I wanted to do. I wanted to work with children, to help to guide them in their learning."

Based on the statements of staff and the observations I have made about their teaching practices, I can say that relationships between a teacher and their own teachers also guide their relationships with their own students, and teachers who can use this experience well can be supportive teachers, regardless of their experience.

Influence of Relationship with Children

Although I observed that the majority of the staff developed good relations with the students, five of them especially stated that their relationships with children before becoming a teacher were effective in their decisions to become teachers. The words of Olivia, Helena, Harry, Teresa and Rachel on this subject are as follows:

I really like working with them. And I went to nursery before, and I realized I wanted to do something a bit more. (Olivia)

I just liked working with children really. I used to run Brownies and still do and I just decided actually that's what I'm probably good at among other things. (Helena)

I'm good with children. I've always sort of been around children, and one day I thought I can make it as a job. (Harry)

First of all, I decided to be a teacher, because my relationship with the children was good. Especially, I was getting along better with young children. (Teresa)

I really enjoy spending time with children, and I always seem to have my friends' children all the time. I enjoy working with children and doing things like craft stuff and art and stuff, so I decided to become a teacher. (Rachel)

One interesting point in this data is that other than Helena, all of the people who thought that positive relationships with students were effective in choosing a profession were the TAs. They stated that when they thought about their good relationships with the children, they decided to do it as a profession. Rachel made a statement that supported and summarized this idea:

“I didn't realize how much work I would have to do at school or how much money I would earn. Students mean more than money and work.”

7.1.2 Emotions

Permanent effects of staff' feelings on both their personal and professional lives were sensed in the biography section. However, when examined in more detail, some of the data gathered about their feelings about school environments, the education of students with ASC, teaching methods and their personal life became more understandable and open to interpretation after observation. Some points which were unclear were better comprehended in the light of both the informal conversations and the information I obtained during the second interviews. All the data revealed that the staff' emotions influenced their teacher identities. The table below outlines the feelings staff talked about most in the interviews.

Table 7.1 Staff's Emotions in Teaching

	Staff											
Feelings	Alison (T)	Brad (T)	Betty (T)	Francesca (TA)	Helena (T)	Andrea (TA)	Olivia (TA)	Harry (TA)	Teresa (TA)	Maria (T)	Meghan (T)	Rachel (TA)
Excited	✓			✓	✓		✓	✓			✓	✓
Determined	✓		✓	✓				✓	✓	✓	✓	✓
Confident	✓	✓	✓	✓	✓			✓		✓		
Contented	✓		✓	✓	✓		✓	✓	✓			✓
Empathetic	✓		✓	✓				✓	✓	✓		
Anxious						✓	✓		✓	✓	✓	
Reluctant						✓						
Disappointed		✓		✓			✓			✓	✓	
Angry	✓					✓	✓					
Overwhelmed			✓	✓	✓	✓	✓		✓	✓	✓	✓

When the table was examined in more detail, it was seen that staff experienced both positive and negative emotions together. On the other hand, the feeling most expressed by the staff was “*overwhelmed*”, and the reasons for this situation must be examined. Nine staff who mentioned this both during the interviews and the informal conversations stated that there was too great a workload, they had difficulty in meeting these responsibilities, and that they were sometimes in a position where they had to work at home. Betty, Francesca, Helena and Maria stated that they did not have such extra responsibilities in the years when they first started working, but that over the years, staff are given more duties, and this has caused them to become overwhelmed. For instance, Helena said, “*The time I spent outside of school doing work greatly increased, with an awful lot of extra work that I didn't have to do when I first started.*”

This excess of work and the feeling of being overwhelmed caused disappointment, especially for some staff who are new to the profession. Five staff stated that they were disappointed, because they did not know that they would have to work so hard. I think the teacher who experienced this feeling most prominently was Meghan. She had just graduated and working until late made her very tired. The phrase “*It's a lot harder than I thought,*” clearly expressed her feelings on this matter.

However, unanticipated data about Meghan was that she thought that teachers had to be professional and that they had to get rid of their emotions, but she could not stand outside her feelings of frustration and being overwhelmed. According to her, teachers should “*leave their feelings behind the class door*”. Unlike Meghan, another new teacher, Alison, always talked about her positive feelings. The only negative emotion she expressed was about her former teachers and the discrimination she had met in society. However, this feeling was “*whipping*” her to “*become a better teacher*”, and she was happy to live with it.

Of the emotions stated in the table, the least expressed was reluctance and only Andrea and Helena stated it. As can be seen when considering Andrea, she generally only talked about her negative emotions. In informal conversations, she often stated that she just did her job. Therefore, as I mentioned in my observation notes, “*Andrea is a TA who generally seems unhappy. She is particularly reluctant to work with a student with ASC who is new to the classroom. He constantly shouts while working with her, and this makes Andrea very angry.*” (*Observation notes.*). Helena was another teacher who felt reluctant. Her communication with Jordon was reflected in her feelings. She had already expressed this feeling as “*So and then it doesn't really make me feel like anything. I just look at his work, what he's done, and I just*

move him on.” The reason for this feeling between Helena and Jordon is because Helena is a part-time teacher, and in her own words, *“Jordon does not fully accept her as a teacher”*.

The most remarkable finding in the table was the absence of any negative emotion expressed by the PE teacher Harry. He was aware of the workload since he had been in supportive positions in schools and the working environment did not surprise him. He often emphasized that he was happy to do this profession, and his determination in this matter, *“I’m quite happy. I think, I could do this job till I was 70.”*

The available data revealed that teachers experienced many emotions at the same time and carried the traces of these feelings in their professional lives. However, what is important here is not how negative or positive the emotions are that they have, but how they manage these emotions. Although Harry occasionally had concerns about the methods he used and how effective they were, he could have thought of doing this job up to the age of 70, because he did not allow his concerns to prevent his professional excitement and perseverance. Because well-managed feelings do not just shape the identities of teachers, *“they also contribute to children’s identity. They will be more multi-faceted maybe; they can see the world completely differently thanks to teachers.”* (Betty)

7.1.2.1 Self Esteem

Self-esteem is a concept that includes self-image and self-concept. This study is concerned with the way teachers see themselves, especially in the role of teacher (self-image) and how they evaluate themselves (self-concept). The connection between the two concepts leads to an understanding of teachers' self-esteem.

During both meetings and informal conversations, staff shared with me how they evaluated themselves. The results revealed two types of self-esteem: positive self-esteem and low self-esteem. In fact, a large majority of the staff (11/12) were in the positive self-esteem category. The most interesting and contrasting examples on this subject were findings from Alison and Meghan. Although both staff had many similar features, the difference in their perspectives provoked the impression that even positive self-esteem may be experienced to varying degrees. As mentioned in the Emotions section, Alison grew up being excluded as someone of a different race, language, and colour and was educated under these conditions. These were the "destiny" facts that Alison could not change. However, she had faced the negative experiences and the mistakes of both herself and the people in her life, accepted everything and respected

herself and others. It was the most important indicator of her accepting herself as she was. Meghan had also grown up in England as a member of a different race, language, colour, and even religion, but she had always had positive experiences. Therefore, she insistently said, *"I have never seen myself as a different person, because they did not allow me to feel that way."* This positive growth approach by Meghan made a significant contribution to her self-esteem that prevented her from having inner conflict.

Harry remarked in his own words that he grew up in a *"bit of a mishmash"* family environment and like Alison, he managed to draw good results from bad experiences and did not lose his self-esteem. He felt lucky, saying, *"I know myself. I know what I want,"* because he had accepted himself and his family, discovered his potential and developed it. But according to him, *"If you're taught to be a wicked person, you're going to be a wicked person."* In that case, can we generalize Harry's determination and say that the self-esteem of the teachers has a similar effect on the students. Can we say that a teacher with a positive self-esteem teaches this too? Teachers with positive self-esteem are expected to see a similar self-esteem develop in their students, which contributes to their academic development, because a self-aware, self-contained teacher reflects this mood in the classroom environment and teaches it to his students (Gentrup, 2020). Harry emphasized this finding, saying: *"Students are like our mirror."*

Andrea is a teacher that could be rated in the low self-esteem category. She was a TA who refused an interview, but I could learn about her through informal conversations. Andrea was someone who thought that she had an ordinary childhood and was as happy as any other child. However, her own working experience made her feel *"incomplete."* It was noticed that even though she did not explain further, Andrea was under the influence of working experiences. *"Andrea was called by the head teacher during the lesson and there was loud discussion at the classroom door. When she returned to the class, she seemed to be rather sad. "I made a mistake again," she said to Alison. "(Field notes).* The word *"again"* in Andrea's comment was a word that depicted her self-criticism and low self-esteem.

7.1.2.2 Role Conflict

Every teacher involved in the research had a number of roles outside of teaching. While some staff mentioned these roles as a part of their life, others recalled them as a conflict. Based on the staff' discourses the roles that were recalled as conflicting were divided into two groups: intra role conflict and inter role conflict.

Intra role conflict

The concept of intra role conflict, in which the staff live in the teaching role as well as the additional roles they have, is represented by Helena, Brad, Maria and Betty. It was not surprising for me that all the staff in this category were subject leaders because it is common practice for teachers to have more than one role in the English education system. Therefore, these four staff mentioned their own inner conflicts, while talking about the role conflict that the additional tasks within the school imposed. References on this subject were as follows:

I'm a Spanish lead, as we have a curriculum subject leader, so I am responsible for ensuring that the standards are high in the subject. I'm also a lead for ESL. Ideally in a small school every teacher will have a curriculum area. (Maria)

I'm maths coordinator shared with Mr Brad. I'm a PTA teacher as well and for this reason I share the class with Mr. Brad. (Helena)

I'm assistant head in school. So, there's lots of lots of different roles and people have lots of different hats in school. These are my responsibility as part of my senior role. (Brad).

I'm also the RE coordinator and the trips and visits coordinator. (Betty)

As will be understood from the above citations, the fact that teachers do not only have the role of teacher in school also causes them to feel more responsible for their roles, such as subject lead, IT lead, assistant head, Spanish lead, ESL lead. For instance, Francesca did not play a different role in school. She was the only full time TA at school, and she also often experienced internal conflict. During informal conversations, she said, “*When I am a year 3, year 4 or year 5 TA, sometimes I even get confused*”. During my 12 weeks in the school, that I was unable to find out when and in which class I would find her may explain her confusion.

Inter role conflict

All of the staff could be seen to experience inter role conflict, which is the conflict that teachers experience between the expectations of their roles other than teaching such as being a mother/father, sibling, daughter/son, wife/husband. However, to improve the variety and versatility of perspectives in this research, the staff not previously mentioned in the intra role conflict section will be discussed. In the data obtained on this subject, the most frequently mentioned role by female staff was being a mother. Maria, Rachel, Teresa, Francesca, and

Andrea talked about the maternal role getting them into a really big mess. As an example, Maria pointed out *"I'm a mum. I've got three children and it's tough managing this, because of our school assessment, you know, making sure that school runs properly and home runs properly, I'm not going to lie, it's not easy. It's not easy. It's about being organized. Sometimes I feel like my children are missing out"*. She emphasized that there are actually two very difficult roles in balancing motherhood and teaching together.

Teresa said that having children was the biggest factor that supported her decision to be a teacher, but at the same time, *"sometimes I can't find the patience to show my child"*. The reason behind this behaviour was her responsibilities and sometimes she could not balance them. Therefore, Teresa's tiredness may have caused her to behave impatiently to students, just like her children. When the intensity and fatigue in the home are combined with the needs of the classroom, it could be difficult for the staff to balance everything and as a result, the teacher becomes a person who is intolerant and irritated towards their students. Rachel, on the other hand, stated that she received a lot of support from her family to look after her children and therefore, she could find a few hours to spare for herself when she went home, and she felt *"lucky"* about it. However, Teresa said that she had not been able to get enough support due to some habits of growing up in her eastern culture, and that she had *"2 small children and 1 older child (her husband) at home."*

Interestingly, there were no male staff talking about the role of parenting, whereas both male staff had children, but they did not specify this until I asked them about their roles. After I reminded them, they stated that this role did not cause difficulties and even played a supportive role in their communication with students. In fact, in the data on role conflict, male staff did not portray this as a problem, but that there is an advantage to having more than one role at a time. For example, Brad was an assistant Head, IT teacher and had mentor safeguarding roles in the school and was teaching a reduced timetable for these responsibilities. However, he was happy to talk about the roles he had and emphasized this by saying *"I think all the roles I have are steps for me to improve myself"*. Another male teacher, Harry, was a football player and stated that this role *"supports the skills of directing and managing students."*

The findings suggest that some staff turn having these roles into advantages rather than the other staff, who experience conflict between their roles in their life. There is a strong possibility that the external roles that societies have placed on some staff have a part to play, and how they

internalised these roles within their identity. The difference in the viewpoints of the staff who have similar roles can be explained in this way.

7.1.3 Analysis of Personal Factors

While analyzing the personal factors of the TI, the role of the factors that constitute and shape the TI were examined. However, the aim here was not only to analyze the personal factors, but also to examine the effects of the factors that make up TI on the teaching methods and therefore the influence of the methods on the students. The data suggests that the place where staff were born, the family they were brought up in, the schools they were educated at, and their work experience, are the basis for their identities. Thus, while Alison emerges as a teacher who has sworn to raise happy children from her unhappiness, Brad grew reluctantly to become a teacher from an educator family.

In fact, the great majority of personal factor findings so far reveal the need for staff to have the ability to balance the demands of their lives. The common result of all themes is that teachers who have positive identity developments, can balance their feelings, roles, experiences, and perceptions. The result of this is a teaching process that tends to develop a positive classroom environment, close relationships and developing students. As Betty says, "*The important thing is not the TI alone, but what my students can get from this identity.*"

7.2 Contextual Factors

Data showed that contextual factors influence TI and teachers' FA practice while teaching students with ASC in mainstream classes. Therefore, the contextual identities of the teachers are determined by four themes, policy, school context, school culture and ethos and school leadership, on which the data analysis is based.

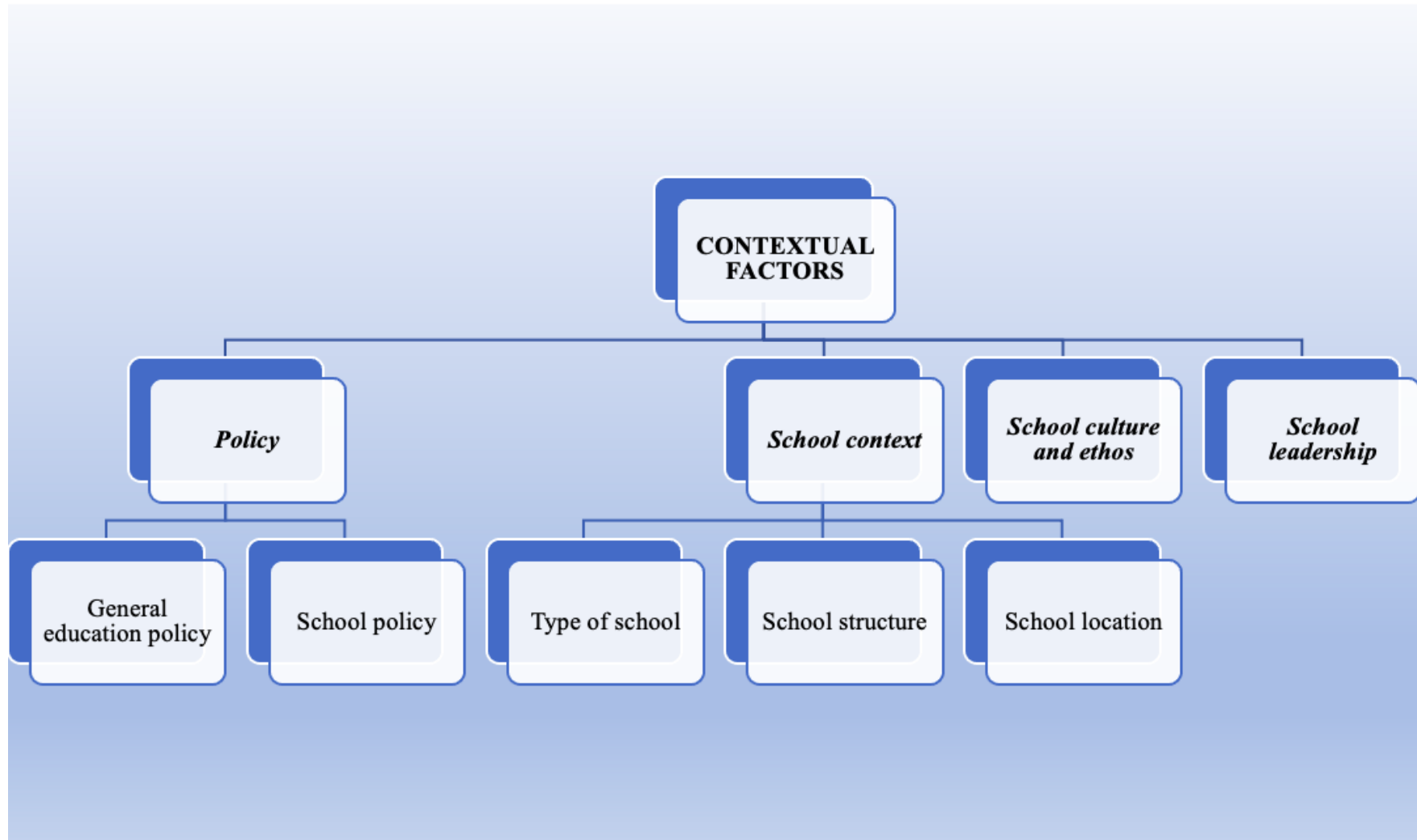


Figure 7.2 Contextual factors of teacher identity

7.2.1 Policy

The research data shows that the staff were expressing two types of policy-related views: general education policy and school policies. When we consider the education laws and regulations, it can be seen that some of the staff complained about the content and density of the curriculum. For instance, Betty, Helena, Teresa and Maria stated that it is very difficult to plan activities suitable for different curricula and to keep up with the intensity of the existing curriculum, especially in mainstream schools. According to Maria, *“There are many different types of learners. Not everybody is able to access the curriculum in the same way. I think it is tough to plan and make sure the needs are met.”* Indeed, this situation caused her anxiety. During informal conversation, she told me of a personal incident, *“Sometimes I lie awake at night thinking about planning. It's really sad. But I'll wake up in the middle of the night and I'll just have this. Right, quickly write it down. This is a great idea. You know? It's like that. It's crazy.”* However, Betty stated that *“When you're delivering information and the curriculum, you've got to be very flexible,”* especially in the mainstream schools where students with many different characteristics come together.

Teresa explained the reason behind the current curriculum having such a strong and sometimes negative impact on teachers: *“I think the curriculum was intensified, for example, the contents we gave to third year students before, we are now giving to second year students, and this is very heavy for both students and us. Therefore, it is very important to be supported in this matter. All teachers need to be directed to more courses, so we can keep our information fresh.”* Intensified curriculum changes in general education policy also affect the current policies of schools. Therefore, the research schools adopted policies that support staff in receiving education on subjects in which they consider themselves less informed. In the Equality Policy statements of both schools their attitudes show formalization on this issue in the phrase *“We ensure that all staff, including support and administrative staff, receive appropriate training and opportunities for professional development, both as individuals and as groups or teams.”* (Equality Policy, 2019, p.7). However, SEND policy emphasized the necessity of providing full access to the curriculum through differentiated planning by classroom teachers, with extra planning being required to consider the different needs of the SEND students.

Olivia and Maria talked about the importance of TAs with a discourse that responded to the question of the extent to which teachers can be effective in implementing such a general and

intensive programme. Olivia emphasized the importance of support in the busy work environment by saying, *"It definitely helps having more than one person, because you can work together and work as a team and support each other with what it needs."* Betty supported her by saying, *"The main challenge is if you have a child that has a different learning style to all the other children in your class. But she (TA) is the biggest resource I can have to get enough vital supports in the class"*. However, according to Maria, there were some problems related to the financial support required to provide both necessary training and sufficient support staff. *"The main issue is not having enough helpers, because of funding. Although there is various funding available in places, but schools funding is quite tight and so it's difficult to manage what they should be doing."* Additional support is provided by trained TAs/learning counsellors as in the school policy and the financial support *"is funded from the academy's annual budget"*. However, since Brad was on the school's management team, he stated that sufficient financial support was not always obtained, and that the government did not fairly distribute the funding. Maria even pointed out that the funding paid last year was reduced, so *"we lost a teacher in this school because of low levels of funding."*

Maria frequently stated that there was a lot of expectation from the teachers, but not enough support, so they want to make sure that at least their needs in the class are met, and therefore, the way to do this is by *"new and quick written arrangements."* Maria thought teaching at this kind of school *"is on an emotional, social and an academic level."* That is why the teachers are not only academic staff, but also concerned with social and emotional development, rather different than what the government has communicated to them. *"It's not just about curriculum, which the government thinks is all academic."* The discourses of teachers on this subject, but especially that of Maria, constitute important findings regarding the pressure on the identities of teachers and the differences between their own expectations and those of the government, as well as the realities of what a teacher is.

7.2.2 School Context

The environments in which teachers work, play an important role in shaping their identities and influencing their motivation to work. For this reason, it is important to investigate the role of teachers' identities on the methods they use, with the understanding of school contexts. Because environments and contexts contain elements that affect the formation and attitudes of teachers and students and their actions, in this study it was found that teachers were influenced by the type of school, physical conditions, number of students, ethnicity of the students,

additional languages and SEND students in classes. Conducting the research in two different schools in the same region provided an opportunity to analyze the situations in which the teachers' identities are affected by the environment they are in and therefore affect their students. It was important to make a distinction between the two schools because, according to the staff' statements, their professional identity appears to have been significantly influenced by the multicultural structures and the mainstream school status. However, since, different school cultures are likely to attract different people, interpretation of the staff' statements should be made carefully. Otherwise, some small but important differences noticed between the two schools might not be discussed.

Staff work in two different mainstream schools in Nottingham, with Eastwood School being slightly bigger than Rainbow School. Although both schools have a multicultural structure, 28 different languages are spoken in Eastwood School (Ofsted, 2019). Although it seems to be an advantage that students have different languages, it was often a challenging factor for staff. *“Because we've got some children who don't know very much English, some who have come with a little bit of English and some who don't know English at all well. I have to have different work for them.”* (Meghan)

Rachel, like Meghan, also talked about the difficulty of working in a multicultural school. *“Marvellous space, especially coming to work in this kind of school where you're in a city area and you've got lots of different people from different types of background. Communication might be hard sometimes.”* However, Alison was thinking about it completely differently. Since she was the only international student in a non-multicultural school when she was a child, she wanted to work in schools like Eastwood and Rainbow after becoming a teacher. Unlike other staff, she felt lucky about it and according to her, *“every school should be multicultural. There's no need to have schools that are all the same races.”*

Francesca emphasized the number of SEND students included by looking at the school context from another perspective. There were 14 SEND students in Rainbow and 24 SEND students in Eastwood, which meant that there was more than one SEND student in each class. According to Francesca, *“They've got a lot of SEND children and different activities for different students. It is really busy.”* Similarly, Maria pointed out that *“It's not an easy task, because then what you're doing is you're almost planning for three different groups in the classroom. And then this is a fourth group of children whose needs are very different, you know, so I think in terms of the workload, it has a significant effect on me.”* Therefore, working in the mainstream school

can become intense and sometimes tiring for some staff. As a matter of fact, Olivia pointed out that it is “*great practice*” for students with SEND to take yoga, PE and nurture group lessons separately, but highlighted the difficulty of IE that is tiring for staff. The observations I made in both schools showed me that the times when SEND students were out of class (Yoga, PE) were perceived as relaxing for their staff. However, the Rainbow School had more favourable conditions in this regard. A separate room in the classroom allowed SEND students to receive one to one training, while allowing their teacher to teach neurotypical students. However, it should be underlined that the separation of SEND students from the classroom environment and the fact that this is seen as a very positive practice is not appropriate for the purpose of IE.

Another topic emphasized by the staff is the region where the school is located. The fact that both schools are located in the city centre and that Nottingham is a multicultural city has also affected the student potential of these schools. Therefore, the staff compared themselves with the staff working in less populated regions and said that “*in some schools, like in a village, there wouldn't be that problem for teachers and they can just plan a set of work and everyone can access it, but in schools like this, everyone might not be able to have access to it*” (Meghan). This quotation showed that the region where schools are located has an impact on the motivation and teaching methods of teachers.

The research data suggests that these two heterogeneous schools play an important role in the construction and shaping of TI, and thus affect their motivation, job satisfaction and workloads. It was also among the research findings that the complex conditions existing in schools did not affect the opinions of staff about their professions, but they increased staff’ responsibilities, thereby affecting the selection of teaching methods.

7.2.3 School Culture and Ethos

For the purposes of this study, the main aspects of the two mainstream school cultures were investigated, and based on these aspects, the effects of school culture on the teachers' identities were determined. Therefore, it has been found that cooperation, a common values system and respect for differences are the main factors that make up the schools’ culture. School ethos was reviewed in conjunction with school culture in this research, because the staff had established a very sensitive link between school culture and ethos. Therefore, ethos was analyzed as an aspect of school culture in connection with the perceptions of staff.

Various indicators showing the characteristics of school cultures were encountered in the participant schools in this study. The first is cooperation between school staff. In particular, all of the staff at the Rainbow School have made references that emphasize the role of cooperation in creating a positive school culture. For example, Maria said, *“In our school, the teachers have got very good relationships. We're a really strong team, so we support one another. The support network in school is amazing. Last year we evaluated what went well and as a school we decided what the children need. So, again, it comes down to that, the team, you know, because it's not just one person.”* She emphasised the effect of this collaboration on the general structure of the school.

When not only the leadership team makes decisions about the school, but the staff are also consulted, it *“feels that teachers and students are both cared for and valued and makes me part of a more effective education.”* (Teresa). The collaborative and supportive school culture of Rainbow School has often been the subject of my observation notes. For example, in my report on 25th November 2019, *“Teachers eat together in the staff room and chat during the meal. Everyone calls out to each other with their first name, and they definitely talk about professional issues.”* At first glance, it seems like an ordinary situation for staff to eat together in the staff room, and after observing in Eastwood School, I realized that this was a situation that varied depending on the school culture, because at Eastwood School, the staff generally communicated in groups of two or three people, and it was not possible to see all the staff in the staff room because some staff did not join in.

Is this difference important, and if so, why is it important? In order for the teacher to have a place in a school culture, they must have commonly shared aims and values, and if these create positive feelings in the staff, a positive school culture will occur. A quote depicting staff feelings about school culture was made by Harry:

“This school is not really a job to me. I just enjoy it. My teaching identity is seen in my class, through my children. You can see a teacher in her children, and a happy teacher makes a happy class.”

Another indicator showing school cultures is respect for differences. As I mentioned in the school context section, the fact that there is a multicultural structure in both schools has enabled many students to study together under equal conditions. However, this difference between school cultures was seen not only among students but also among staff. The fact that Alison,

Meghan, Teresa and Harry are from a different ethnicity was a finding that enhanced a multicultural school structure. Alison felt herself very fortunate in this matter because, *“You could go to a school where their ethos and their ideas are completely against what you believe. You'd be miserable in such a school. Luckily, I work at school like here.”* This attribution emphasised the connection of the school culture with the ethos of the school.

The different student and teacher profiles available in schools contribute to their diverse perspectives. It also means respecting those who do not look like yourself and accepting them. The perception of identity of teachers working in such a school culture is shaped and understood in parallel with this. For instance, *at the Diwali festival, all teachers at Rainbow School wore Indian local clothing and danced like them (observation notes)*. A similar finding was observed by the inspector and recorded in the Ofsted report. The feelings of acceptance and respect of teachers and students of other traditions in the school creates for them a positive identity, while at the same time creating the building blocks of a strong school culture and ethos.

At Eastwood School, Betty has provided a different example in this regard:

“I'm an active member of my church. A lot of the values of the church are really important in other settings, so I want to instil good values into children. It also makes me sensitive to other religions. My students can see the world completely differently, because they have a Christian teacher and a Muslim teacher in the same place. That's the dream. They need to see the world in a different light.”

These findings are stated in the Ofsted (2017, p.5) report, *“The school has a clear community ethos. Pupils have every confidence in the staff to address bullying, should it occur.”* This finding that staff and students were considered unconditionally accepted despite their differences supports the positive impact of a school culture and morality on teachers' and students' identities. Moreover, this was also true for SEND students and the differences they present, because both schools were as much mainstream schools as they were multicultural. According to Francesca:

“We have to be more supportive in a school or more like a social worker who accepts all children the same, as well as trying to teach and help children with SEND to feel good about themselves. So, if they don't feel good about us, they're not going to learn, because they're too

busy worrying about everything else as well. We have to make it a safe place in school for them to really learn.”

The requirement for schools to perform extra-curricular activities within the conditions specified in the Ofsted report is also reflected in the findings as part of the school culture. Such activities are closely related to the personal development and welfare of teachers and students. As a matter of fact, Helena mentioned the contributions of these activities as follows:

“We work hard as staff, which is why teaching here is very good. We’ve got lots of extracurricular stuff that we do, fashion shows and things that are going on in a few weeks’ time and there are some good trips that go on. There are some good events outside of the classroom that happen. I think we do a lot of things that really focus on those children and that allow them to achieve.”

It was found that each school has its own school culture and ethos. The school culture, affects the feelings and thoughts of the staff, determines their attitudes and shapes the teaching methods and techniques. It was the result of observation analysis that happy and peaceful staff perceived teaching as a vocation rather than an obligation and they supported the students accordingly. This data is illustrated by Alison's words that a welcoming school environment that motivates staff and students will lead to many changes and developments. *“I love my job because I love being here and I believe that I can make it better. I can't change the world maybe, but I can change my own world and that of my students as well.”*

7.2.4 School Leadership

During the interviews with staff, school leadership was demonstrated as one of the components of a successful school environment. Surprisingly, however, the two schools were completely different from each other in this regard. In Eastwood School, school leadership and the head teacher were defined as the most important factor of a successful school, while in Rainbow, that was depicted as a supporting factor only. School leadership was the most frequently mentioned success factor by all staff of the Eastwood School without exception. Francesca explained the reason for this as follows:

“When I came to this school, everybody was working hard, but not everybody was working for the same goal. And then the school became quite a difficult place: the children were confused, the staff were confused, confidence dropped, and it became very stressful. But with the right

management team and schools working together this school became part of a bigger picture, the leader being part of a supportive team of schools, not just one school struggling.”

The conversation with Francesca indicated that all staff considered school management to be important. The staff who thought that they were not well directed by the previous school principal and management team were able to compare and see the difference between that and the direction of the current team. Thus, they realized that staff and students can only be directed correctly with an effective leadership team. In fact, *“That's been significantly different (for teachers and students), because all of the sort of worrying issues are dealt with by the management so we can just teach, and children have support in the school as well.”* (Francesca)

The change in school management was actually reflected in Ofsted results. Eastwood School, which was deemed “good” in the inspection conducted in 2013, became “outstanding” after the school principal changed. This finding is suggestive that effective school management also affects school success. As Ofsted is a publicly shared form of inspection, the development of this issue was a driving force for the motivation of staff and school management. According to Helena, *“I know we get a lot of support from each other and from leadership as well. They push us in the right direction. I'm a better teacher than I was when I first came here, a lot better teacher. The head teacher worked really hard with me to put those ideas in place and to make sure that we can achieve.”*

On the other hand, when looking at the Rainbow school, it was seen that the staff did not rate their school leaders as importantly as did those in the Eastwood School, but instead depicted them as a supportive force. As stated in the previous sections, cooperation and solidarity at Rainbow School seemed to be the most important motivation to work, and Maria thought that they, *“Have a good senior leadership team. In our school, the teachers have a very good relationship. We're a really strong team, so we support one another. The support network is amazing.”*

As seen in the above quotation, staff at the Rainbow School do not consider the Leadership team as a separate concept from the team. From this point of view, it cannot be said that this view is not appropriate because the school leadership team is also a part of the school culture and is actually part of the team, although it is a structure that directs and supervises the education processes of the staff. According to Harry, the school principal is, *“The leader of the*

educational game,” and Harry loves this game more because the school principal supports his effort to remain himself. “Sometimes you are what people want you to be, rather than being who you want to be. The head teacher at the school allows me to be myself. I love this job since I like to be myself”.

7.2.5 Analysis of Contextual Factors

When the contextual factors that shaped the identities of the teachers were examined, it was found that the environment, the general cultural structures of the schools, the policies they had, and the leaders of the schools were prominent. Although all the staff are of the same opinion that the general aim of policy makers is to identify and make good the deficiencies in education, when it comes to involving staff in this process many staff said their opinions were not listened to. In the SEND policy of both research schools it is stated, *“To involve children/young people themselves in planning and in any decision making that affects them,”* but according to staff statements, this phrase is contradicted by the reality. It is of course a very positive policy, to aim to increase the participation of SEND students in every situation that concerns them, but that the same situation does not apply to staff is a matter that needs discussion, because the staff are the implementers of the education policies and state that they want to have a say in this regard. That the staff wished for this was also stated during informal conversations with the staff, and they indicated if that happened, it would have an effect on improving the self-identity and motivation of the staff.

On the other hand, the phrase, *“Each policy has an Inclusion Statement detailing access to that curriculum area for pupils identified with additional needs”* as stated in SEND policy, is aimed to provide full access for SEND students to the curriculum. However, in the same policy, there is no guidance or flexibility on how the teachers would make different IEP plans and neurotypical students' curriculum planning. Although support staff and TAs support teachers at the application stage, it has been emphasized by many teachers that planning alone is a tiring and time-consuming job.

Regarding the opinions of the staff about the type of school in which they teach, although there were staff who stated that they experienced the disadvantages of being in a multicultural and mainstream school, staff were found who saw this as an advantage for them and who thought that working in such a school improved their multidimensional perspectives. Although the number of students in classes and the increase in the number of SEND students has been evaluated in the category of coercive factors for staff, many staff have not stated that this has

had an impact on their identity. This finding showed that the factors I mentioned above are difficulties for staff to cope with. As a result of my observations, I saw that the staff developed an option for every contextual problem they faced and thus improved their practical thinking and problem-solving skills. It was one of the findings obtained from the observation data when the staff, who could adapt the contextual factors to their teaching, used effective methods.

When the opinions of the staff are evaluated in general, it is understood that the principals talk about instructional issues with both the staff and the students and listen to them and encourage them to develop. It was one of the most important findings of the research that the schools that have a new vision, together with new management staff, have a more positive, effective and successful school culture. In addition, it is understood that principals appreciate the success of teachers, while having experienced teachers on the staff enables them to watch the lessons of their colleagues, who have just started in the profession and encourages them to give feedback. This finding suggests that school leadership influences teachers' professional identities and teaching methods, and accordingly, students' desire to learn.

7.3 Professional Factors

Findings related to the professional factors that guide the teacher identities and that affect their practices are divided into five themes: “teaching experience, collaboration, PCK, curriculum, and assessment.” Each theme is separated into sub-themes as the findings are analyzed in more depth.



Figure 7.3 Professional factors of teacher identity

7.3.1 Teaching Experience

This theme is clarified below with a table showing how long the working life has been to date of the staff participating in the research, as well as how long they have been working in the research schools.

Table 7.2 Staff' Teaching Experiences

Staff Name	Years working (in general)	Years working in the research school
Alison (T)	3	1
Brad (T)	10	6
Betty (T)	21	7
Francesca (TA)	34	12
Helena (T)	16	9
Andrea (TA)	6	4
Olivia (TA)	9	7
Harry (TA)	15	2
Teresa (TA)	3	3
Maria (T)	12	9
Meghan (T)	1	1
Rachel (TA)	5	4

According to this table, the working life of the staff varies between 1 and 34 years. The staff explained their working years in two categories. The first is about the training they received during the study and the other is their own experience.

After almost all staff stated their length of working time in school, they indicated what training they had received if any. In fact, even though there was no such question or guidance in the interview questions, they wanted to explain the training they had received teaching children with ASC, especially because the research was related to students with ASC. For example, Brad, Betty and Helena can be shown as representative of this group of staff.

“I've been teaching for ten years, and I've had autism training led by the senior leadership team in the past various professional development sessions.” (Brad)

“Before I was a teacher, I used to work with adults with SEND, so have come across ASC in people as young as three all the way up to into adulthood and I’m in education and teach in my country as well.” (Betty)

“We’ve had training. We’ve been on autism training.” (Helena)

Since Brad saw himself as more experienced in many subjects, he responded to his views on this with great confidence. However, Alison and Meghan were the staff with the least experience of all staff, and both saw this as both an advantage and a disadvantage. For example, Alison saw this situation as an advantage since her knowledge is new, while the staff who have been working for a long time need to be updated: *“There’s not enough education for teachers, especially if you’ve been teaching for a long time.”* Meghan, on the other hand, stated that she knows that she has no problem in terms of knowledge, but she needs to gain more experience and be effective in classroom management.

In all of Maria’s 12 years of teaching experience, she had particularly worked with students with SEND, and was the most experienced teacher of the staff in this regard. After working in special schools for 3 years, she started to work in Rainbow School and said that her experience helped her in this process. The results of the observation showed me that Maria’s experience is beneficial, not only for herself, but also for less experienced staff, such as Meghan who works at the same school and was teaching under Maria’s guidance. In relation to supporting younger staff to be better equipped, Maria stated *“ensuring staff are trained well enough, especially younger or newer teachers”*. Meghan supported this view, stating that, *“the main challenge for the teacher is trying to know and access students’ needs and I need help.”*

TA Harry stated that even if he did not have teaching experience, his previous experiences affected his teaching practice. *“I worked in a factory environment in a managerial position. I think if you’re good at managing, no matter where you are, I think you’ll be able to transfer your skills, whether it’s with children, or teachers, or whatever it is. If you’re a good communicator, you will be able to support, and you’ll be able to fit in.”* Harry’s interpretation is valuable, because it supports the idea that the identity of the teacher is fed from teaching experiences, as well as other working experiences. Harry supported this view by clearly stating that he used his past working experience, from outside an educational setting, in his classroom management and authority. In addition, staff who do not have such an opportunity stated that their teacher identities are shaped, and their practice is directed through training and

experiences in the teaching process. Just as Brad stated, *“Actually, maybe teachers who haven't been teaching so long, need some more support with the kinds of strategies that they could use in class that were helpful here.”* With these words he emphasized the need for in-service training.

7.3.2 Collaboration

Interviews with staff and data obtained from the observation results showed that the staff worked in collaboration with 4 groups (parents, school leaders, other staff and students).

7.3.2.1 Parents

Five staff said that they work in cooperation with the families of their students during the teaching process and that supports the students' learning. However, the majority of the people who stated this were the main teachers while Teresa and Francesca were the only TAs who talked about the importance and role of the parents in the education process.

“At the end of each semester, I have a meeting with my class teacher and the student's family and SENCO, and I inform them about my progress by sharing my notes on him with them. It is very important for parents to attend these meetings in order to fully support the student.”
(Teresa)

Teresa explained that she worked with a student with ASC last year whose father died. She cooperated with the pupil's mother to reduce the impact of the bereavement on the child. *“If I hadn't known her father was dead, I would have continued to use teaching methods as I usually do, and I would feel unsuccessful when I could not get feedback from the student. However, I worked in collaboration with her mother and worked gradually with the student.”* Teresa's experience supports the fact that parents are effective factors in education, for both the teacher and student.

Families not only have some influence on the emotional state of students, but also, they are one of the most important assistants to teachers in their children's academic development. Both schools supported the family involvement in education process: *“To involve parents/carers at every stage in plans in order to meet their child's additional needs”* (SEND Policy). For example, Francesca stated that Hasan was far ahead of his peers in maths, so she was giving him additional homework. His family supports and controls the homework; thus, Hasan was supported on both sides.

Another teacher who drew attention to the role of families in the education of students with ASC was Maria. She especially pointed out the importance of meeting parents before starting to work with the student. *“I think it is useful knowing the child and having regular meetings with parents as well, which we do at the beginning of the year when we have a meeting with the parents. The first time I meet the students’ parents I find out what sort of things they do at home and what sort of challenges the parents face.”* Maria was aware that this was an advantage and stated that she shaped her methods accordingly. *“Then we looked at strategies to try to overcome them, such as things that we could both do in school and at home.”* This data created the impression that pre-determined strategies, as stated by Maria, could be more effective than randomly applied methods in supporting the learning of students with ASC.

7.3.2.2 School Leaders

Half of the staff mentioned the importance of working in cooperation with the school principal. Staff who have established a positive relationship with the school principal stated that they feel more comfortable, while working with students with ASC, and are not afraid to consult when they need help. For example, Helena has been working with the same school principal for nine years and she said that the head teacher *“is quite experienced with children with autism, so she’s always there to support if we ask her for ideas and need some support with that. We share ideas, it is great.”*

I have observed that the positive feelings of this cooperation have increased in the same measure as the motivation of the staff to work. *“The new teacher, Meghan seems to be impressed by the caring approach of the school principal and Meghan is not afraid to share her concerns. It seems that she wants to cooperate rather than try to prove herself. (Observation notes, 3 November).* Meghan verified my observation during the interviews and said, *“A leader who helps, eases my challenges. She works really closely with me; she’s got the experience and the expertise and the training.”*

The fact that all of the staff talked positively about the support they received from their school principals concluded that both schools had a positive atmosphere and an educational environment. As Olivia said, *“When the head of the school is happy to share her knowledge and experience with us, the school is being very communicative”.*

7.3.2.3 Other teachers

The data clarifies that the relationship between staff and their collaboration has an impact on the use of FA methods and supports the learning of students. The fact that some of the staff were very experienced, while some were less so, was an interesting and useful resource for analyzing their cooperation, because experienced staff are expected to guide those less experienced, in order to create an effective collaborative and positive school culture.

Brad, Betty and Maria were the most experienced staff. Brad stated that he has been working in different positions in school for many years and therefore has supported other staff: *“I want to help others, actually maybe teachers who haven't been teaching so long, and give some more support with the kinds of strategies that they could use in class and that are helpful here.”* Maria and Betty used similar expressions, while stating that they shared their experiences of education and behaviour management of students with ASC with newer staff. In fact, I have witnessed this many times during my observations. I observed that the education system highly supports the staff working in collaboration and is reflected in the education policies of these schools. In both schools, there were teacher mentors, responsible for new staff and they often received help from them. For instance, the collaboration between Meghan and Maria continued to be an element of my observation records. I think the fact that Maria taught Meghan's students in past years and knew every student may be a factor in the effectiveness of this positive cooperation.

There was also collaboration, between experienced and inexperienced staff, as well as among those staff who did not have such a hierarchy. It seemed that the support of the school policies increased the help and exchange of knowledge among the staff. For example, Olivia, Teresa, Francesca and Rachel stated that they worked in collaboration with both staff and other staff at the school. All without exception stated that they receive support from the SENCO, especially for students with ASC. *“There are lots of members of staff around school and we also have our SENCO. There is an autism specialist that comes in to observe these children every half term and we can contact her and get in touch if we need to inspire them. I think we have good support for the students with ASC in the resources and whatever I find.”* (Olivia)

A valuable finding of this research is that having a TA was the most important support and source of collaboration for staff. For example, Meghan, being a new teacher, was inexperienced in class management, and the TA was very supportive of her. She said, *“I've got support at the moment and my TA supports me all the time.”* It could be seen that the TAs were aware that

their own existence was important for the staff. Francesca thinks, *“As always support teachers and if they haven't got that how can they manage the time and classroom as well”* I mentioned in my observation notes about this on November 22: *“Alison's assistant teacher was not in class for about two hours and there was a noticeable change in Alison's behaviour. While she was quite understanding, she now has a hard time allocating time to him (student with ASC) and gets angry at some of his behaviour. Although she is a teacher who often uses verbal praise, she is only using warnings now and trying to devote time to other students.”* With this data I came to the conclusion that collaboration between staff eases their workload and that their skills in using effective teaching methods increases.

7.3.2.4 Students

The data shows that staff collaborate about students with ASC, not only with parents, colleagues or school principals, but also with neurotypical students. Although both schools are in the same academy trust, they differ in many policy applications, and collaboration with students is one of them. For example, two neurotypical students were selected for each student with ASC in the Rainbow School (these students changed over two-week periods) and took care of the students with ASC during the break, helping them to spend their time in the garden, dining hall or school corridors without coming to any harm. This was an application that I encountered for the first time, despite my years of teaching experience, and it was quite surprising. Maria explained the advantage of this situation, *“We have meetings with helper students to tell them how they are doing because students with ASC are being managed by an outside team as well. So, there's a lot of outside buddies as well as in school, making sure that the children are achieving.”*

In Eastwood School, every student was supported to communicate with SEND students through informal ways, to work together under the guidance of the teacher and to help them in some subjects. From time to time, staff had the opportunity to work with students with ASC by getting help from these students in guided reading lessons. However, there was no specially selected body of students in this school to do this. As a result, although there are different practices in both schools, it is possible to talk about the existence of student teacher cooperation in supporting the learning of students with ASC.

7.3.3 Pedagogical Content Knowledge

PCK is the most important piece of information that distinguishes a teacher's practices from a content knowledge. A knowledgeable teacher who does not know how to teach reduces the

impact of the information he/she has. That is why, it is seen that TAs have to get some training in this regard before they start working. Olivia and Rachel stated that they had been trained for one year to learn how to teach the students. In a similar discourse, Teresa, now working in the UK, had graduated in English Language and Literature in Turkey and according to the Turkish education system, was required to complete courses of pedagogical formation for two years in order to receive teacher status, otherwise, graduates can only be field experts. Teresa became a teacher after receiving the necessary training for two years but continued working in England. *“The pedagogy lessons I took in Turkey helped me a lot with how I should present subjects. Otherwise, how would I respond specifically to the needs of SEND students?”* For this reason, especially in the methods used to ensure that students with ASC learn, the PCK staff possess is very important.

The data shows that the great majority of staff had an idea about the importance of PCK. The fact that they stated that they used different methods, while explaining the same subject to different student groups, supported this finding, as indicated here:

One method for one person wouldn't necessarily be a good thing for another person, which is difficult when you have to teach them all and use different strategies. (Alison)

It's just adapting what you would expect from the other children to suit the needs of the child with ASC. Providing support to help them access what everyone else is doing. (Brad)

You need to be able to constantly know where children are around this. You've got to be able to get in and put interventions in place or change your lessons or change what you're doing as quickly as you can. Because if you don't adapt to it, it is too late, and you've missed that opportunity... It depends on the task, or it depends on the learning outcome. (Betty)

What's good practice for ASC children is good practice for the whole class and in theory a good lesson should provide that. So, they might need writing guides, or they might need differentiating in maths. I would adapt a lesson if it didn't work for that particular child. It's very individual with autism. It's so individual that you learn the strategies that work for them and adapt where you need to. (Helena)

In the quotations from staff, the topic that they have repeatedly mentioned is “adapted”, because as Harry said, staff *“use the same things that (they) use for normal students. They don't*

change what they use; they just adapt what they're doing, because each child is different.” Like Harry, Teresa pointed out that students differ and the methods to be used accordingly should be different.

“When we become a teacher, the first thing taught to us is that “every child is unique” and the perception and character of each child is different. In order for the learning to be permanent, we have to make the children a part of the education.”

The point that Teresa touches on is exactly the heart of the PCK, because every child has different learning skills, it emphasizes the fact that not every method will have the same effectiveness for every child. Therefore, staff with different identities provide education by making adaptations according to their own beliefs. Different practices for the same subject have different results and different reactions can be obtained even from the same student. In one of my observations on this subject, Hasan was working with a TA in mathematics, which is his favourite lesson, and he was having trouble. It was clear that something was not going well because Hasan was so restless and was constantly asking when the lesson would end. Then he started working with Alison, and she started explaining the same point, but with colourful cups. Hasan liked working with cups and when he left the teacher, he continued to answer questions using the cups. This observation clearly demonstrated the importance of PCK. Alison explained that the method she used in the lesson was so Hasan could learn and be successful in the end. In other words, students' learning becomes meaningful when staff integrate strategies used for pedagogical approaches.

7.3.4 Curriculum

According to the English education system, all students follow the National Curriculum at a level and pace appropriate to their abilities. Changes may be made to the curriculum from time to time and when appropriate. However, it may be difficult for a single teacher to use methods that are suitable for each students' ability and needs based on the curriculum. For example, year 4 teacher Meghan pointed out that *“sometimes they don't work at the same key stage level as they might be below that, so I try to keep on track of their learning at the same time as keeping track of 29 other children. So that's the difficulty of it. He's doing his own curriculum. So, nobody else is doing the same work as him”*. That is why she mentioned during our conversations that she often gets help and that it is good for other students as well.

However, staff are not the only group who faced some problems about curriculum and being overburdened with the curriculum. Similarly, students were crushed under the intense curriculum and there were times when they could not achieve all the goals. Brad explained the potential solution he found for the students with ASC by drawing attention to the difficulties in interpreting the mandated curriculum: *“I think sometimes they struggle to interpret it all. And if it’s all thrown at them in one big piece of information they struggle, whereas if it’s broken down, they find it.”* Of course, this solution is not a written rule in the curriculum or school policy, it is an application based on PCK. Thus, the curriculum, which has to be followed, is taught in a way that students can understand. On the other hand, Teresa stated that from a different perspective that the courses in the curriculum should be taught without any great expectations from the students. According to her *“After all, not everyone has to be a genius at mathematics. Especially, it is not right to train such students by squeezing them into a certain curriculum. We do not expect these students to do great work in mathematics and English. We try to include these children in life.”*

On the other hand, Maria did not agree with Teresa, although she had taught Kevin and Thomas at the same school before. According to her the curriculum is the guiding torch for staff in school, and without it both staff and students would try to find their way aimlessly (*Informal conversation with Maria*). As a result, after determining the levels of the students, they could take lessons according to the Year 1 curriculum even if they were in Year 4. However, this situation caused confusion for me, because if Kevin and Thomas were not the same level as Year 3 and Year 4 students, were they studying in these classes only because of their age? Maria answered this situation: *“They’re below the expectations of the curriculum. They’re just stringing simple sentences together, so need lots of practice of the same thing, with lots of repetition. Because they’ve got a different curriculum, we would look at developing their life skills and social skills and if you separate these students from their peers, they may feel sad, but actually they can see all their friends in different subjects.”*. Although this practice has been in place in the UK for many years and there has been no major challenge on this issue, the staff of this study expressed some concerns about this situation and in fact signalled that there was a contradiction behind what appeared on the surface. In other words, the findings showed that an educational application, which was thought to continue without any problems, was considered as an issue by those who applied it.

7.3.5 Assessment

When the TAs were asked for their thoughts on evaluation, all of them, except Teresa, treated this as a SA and made statements about it. However, Teresa stated that assessment is a map showing the progress of the students. On the other hand, Rachel kept the FA techniques she used constantly outside the concept of assessment by saying *“I don’t really assess, the main teacher assesses the children.”* Olivia mentioned that the evaluation papers were prepared by the main teacher and that they were practitioners. However, the fact that TAs considering themselves to be a person who only follows directives may cause them to see themselves outside of the assessment process and therefore they may face problems in interpreting the results and the process of the assessment. They may remain in a position to make points-based assessment, but as Brad said, *“students are a gripping novel”* and staff cannot read and understand the book if they only focus on the conclusion.

Alison and Harry were against the evaluation and critique of students with an instinct that came from their own student years. Alison: *“Apart from the data that it collects for the school and for the teacher, I don’t really see the point. I think it puts pressure on the child and it’s unnecessary, especially at a young age. I definitely don’t believe that they should be assessed in a way that they are graded. They are just children.”* But according to Brad, who guided Alison at the same school, and another experienced teacher Maria, *“assessment is important and really necessary to learn what they have learnt.”* This difference of opinion among the three staff was entirely based on their own student experience. Brad and Maria had a very good student life, and it was not a “nightmare” to be evaluated because they always got high marks. I think that was why they supported the evaluation of students of all ages, but I should also point out that Brad did not only consider evaluation as summative, but rather took into account all forms of evaluation.

Harry, on the other hand, was against perceiving assessment as an action for students to score points or to choose a respected profession in the future. *“A lot of time, we are telling children that we want them to be academic, but there are lots of successful people out there that use their hands. For me now, it’s not always about the academic, as it’s important that you learn to an extent that not everybody’s going to be a lawyer, not everybody’s going to be a doctor, and somebody’s got to build your houses; somebody’s got to repair your home.”*

With this quote, I can say that all the staff supported the evaluation of the students in some way, but most preferred that this should be aimed at supporting them. Among the important

findings of the research is that staff were against an evaluation method that puts students in a race, as SEND students are left behind and their self-confidence is damaged.

7.3.5.1 *Summative Assessment*

During the interviews with the staff, most of them compared SA with FA, even though they were not asked any questions about SA. For instance, Betty said *“FA is more useful than SA in some ways, SAs are more what you get to at the end of a term or a half term and you test the children in whatever way that is relevant You can have some score as a result of tests and these numbers show you the child”*. Betty's thoughts on numerical data can be supported by Teresa's very strong statement that students are not just numbers. *“If you think these students were just numbers, what would a new teacher think about a student with autism? Isn't it a child who is inadequate in every sense, lower than his age? So, do children with SEND deserve this definition? I think not.”*

Teresa's comments show that many staff believe that SA is a non-humanistic approach that makes all students similar. It was very interesting that Harry was determined on this subject. According to him *“Scores cannot promote students. As an example, there is a tree and you've got all different animals. If you say the fastest one to climb that tree is a winner, that is not fair. If you're a monkey, you will be the first.”* Harry implies that the individual differences of the students are not taken into account in SA and that such evaluation is not fair. Maria concurs with the belief in this injustice, as she thinks that SA puts pressure on students. *“We come to the end of term before we do our SAs, when we say if the child's achievement is age related or not. I don't really like those formal testing methods, because they put a lot of pressure on children. They don't best tell you the child's story.”* Just like Maria, Alison and Teresa think that SA could not tell the learning story of students and not understand the adventure of students. They explained this by connecting with their own student years. Both were trained with SA methods and were uncomfortable with this situation.

“I've known some old schoolteachers in my time that are used to SA all the way through, and it didn't make me happy, because I was not very successful because of my English and the teacher always looked at me after getting my results like I am stupid.” (Alison)

Teresa said, *“When I was a student, my esteemed number was 4, because I would always get 4 out of 5 in exams.”* These childhood memories of both staff had made an impact on their current assessment methods, and because of these experiences, both preferred to use SA less. This data

shows that TI is a sensitive concept that is open to all kinds of influences, including the assessment and evaluation practices that they themselves have undergone in their own education and training.

7.3.5.2 Formative Assessment

Definition of Formative Assessment

As I mentioned in the previous sections, staff specify and enrich their methods by defining the types of assessment they use. The definitions made by the staff are divided into four categories:

Table 7.3 Formative Assessment Definitions by the Staff

Staff name	In-process	Continuous learning	Individual learning/assessment	Propelling feedback
Alison (T)		✓	✓	
Brad (T)	✓	✓	✓	✓
Betty (T)	✓	✓	✓	✓
Francesca (TA)	✓		✓	✓
Helena (T)	✓		✓	
Andrea (TA)			✓	✓
Olivia (TA)	✓		✓	
Harry (TA)		✓		
Teresa (TA)	✓		✓	✓
Maria (T)	✓		✓	✓
Meghan (T)	✓		✓	
Rachel (TA)				✓

In-process assessment

According to this table, the majority of staff (8/12) stated that FA is an in-process evaluation, so they can receive and give immediate feedback and do not have to wait for the end of the course or semester to evaluate. For instance, Teresa stated, “*I can define it as a very long and daily process that allows me to follow the development of a student and support them.*”

Other staff in-process definitions agreed with this. Staff see this as an advantage, because they can make corrections without wasting time, or forgetting a lot of information and without getting diverted from the subject. From these advantages came the term continuous learning.

Continuous learning

According to four staff, FA is a learning situation. The learning of the students, who are constantly evaluated and corrected during the process, also becomes continuous. These four staff are among those who define FA as in-process. For instance, according to Brad, FA "*...is the assessment that takes place during the lesson so that the assessment is what the teacher is doing during the course of the lesson. It just gives you that kind of data that you can track, and you can see whether the children are making progress throughout the year at different points.*"

Alison gave a different definition, that FA is continuous learning process: "*It is a jigsaw puzzle that is built up over the year.*" In the informal conversations with Alison, she often stated that success could be achieved by placing the right parts in the right places during the teaching and learning process. She emphasizes here that every student can learn, but only staff know what method to use and how to use it, namely individual learning.

Individual learning

The view that learning and evaluating is an individual action was frequently expressed by ten staff. Olivia, one of these TAs, argued that methods should be determined according to the needs of the student, and stated that "*we have to differentiate their work depending on their needs and their ability.*" Interestingly, however, Olivia stated in the latter part of the interview that she did not need to use a different method for students with ASC, or even have different qualities as a teacher.

Francesca, who had been working at Eastwood School for about 12 years as a TA, explained that individual learning was shaped according to the needs of the students: "*in the case of a child with that need, support can be really helpful in making sure you're meeting their needs.*" The term of interest here in Francesca's definition was '*support*', because the aim of individual learning is to support the student, and it is gratifying that there is a TA who underlines this concept with awareness.

Propelling feedback

Seven out of twelve staff defined FA as propelling feedback which can be defined as a supportive and developer feedback. This was an unexpected result, because even after repeated reviews of the data, although each teacher talked about feedback improving and advancing both themselves and their students, the number of staff that included this in the FA definition was below expected. For instance, I observed that Meghan frequently gave written and verbal feedback during the day. *“Meghan gives a lot of verbal feedback in class. It enables the students to realize their wrong or missing answers with guiding techniques. Thus, Kevin found the right answer and moved on to the next step.”* (Observation notes, Year 3 Reading class, October 1st, 2019).

MEGHAN: What is this word?

KEVIN: a.

MEGHAN: No, you should read the right sound. They....

KEVIN: They return to fox's house.

MEGHAN: Well done. You have done it brilliantly.

As can be understood from this note, Meghan used FA as a developer and to give supportive feedback but did not indicate this in the interviews. However, Francesca stated that FA helps students progress. *“It's a shared assessment if you like. They know they're moving forward as well as making sure.”* Considering that the teacher and TA are in constant interaction in the same class and that most of the TAs carry out their work under the guidance of class staff, it can be said that many staff use FA as feedback to carry the students forward.

Analysis of Definition of FA

The interview data reveals the staff' own FA definitions. As each teacher has different experiences and knowledge and teacher identities are shaped by completely different factors, there are differences in understanding and defining the FA processes of each teacher. As a result of the examination of the data, it was seen that all of the class staff had ideas about FA and could make a valid definition, whereas except for one, the TAs did not understand what FA was. For instance, TA Rachel stated, *“I don't know what FA is. While I probably do know, but I don't know how to define it,”* while TA Olivia similarly stated that she did not know what

FA was, *“I don't know really”*. This finding was quite surprising and unexpected, because all of the TAs who could not define FA, were actively using at least 3 FA methods (Observation notes, 14th October 2019, Year 4; 19th November 2019, Year 3 and 20th November, Year 5). However, during the interviews, the TAs realized, only after I gave them a formal definition, that this assessment method was actually a method they used.

Teresa, who had completed her undergraduate degree in English teaching in Turkey, was the only TA who could define FA. She stated that the education she received at the university made her quite comfortable here and that she did not have difficulty in the lessons. She also commented about the other TAs that *“They use many FA methods without being aware of what it is. My advantage is that I've already undertaken higher education in Turkey and I'm more familiar with this concept, so I can say that my awareness is higher.”*

When I examined the school assessment policy with reference to Teresa's interpretation and other TA's interview records, I found that there was not enough guidance and explanation about FA and even a comprehensive FA definition was not found in the Ofsted report. The reasons for not being able to name an assessment method that the assistant staff actively use may depend on this. On the other hand, it is a pleasing finding that the staff' views on FA are predominantly focused on students, because there was no formal explanation or guidance in both the Ofsted report and school assessment policies that students should be included in the FA process, but it was clear that the staff saw them as an active part of the process.

On closer examination of the staff' comments, it was seen that Brad and Betty referred to four of the themes related to the definition of FA. They made the most comprehensive definition by defining FA as an in-process assessment, which is carried out in order to further individual learning based on the needs of the students. On the other hand, TA Olivia, stated that she did not have enough information to define FA, but was able to refer to two of the themes and that made me think that she was relatively knowledgeable. However, TA Rachel has shown that she has limited knowledge in this regard by addressing only one of the FA elements. Similarly, it has been surprising that like Rachel, Francesca, who has been a TA for a long time, has a lack of knowledge, because being in the educational environment for many years may bring with it many familiar concepts.

On the other hand, it was observed that Meghan and Alison were in the process of adaptation, because they were in their first year of working in school and therefore wanted to do everything

in a formal way. In other words, they could not blend their knowledge with the experiences yet. For this reason, their definitions were at a much more formal level than the other staff, since they brought these definitions from the knowledge that they learned from their recent educational lives. Maria, who worked at the same school as Meghan, was very experienced in both special and IE and that was obvious when she turned this experience into knowledge. Having knowledge about the method she used gave her confidence, so she did not hesitate to share information with other staff.

Types of Formative Assessment

The research data allowed me to reach some findings on which FA methods staff used and how. Staff expressed their opinions on this subject based on their professional experience and the level of ASC of the students.

Table 7.4 Types of Formative Assessment Methods Used by Staff (from interviews and observations)

Staff name	Verbal feedback	Written feedback	Body language	Self-assessment	Peer assessment	Questioning	Modelling	Team discussion	Rewards	Observation	FA charts	Post it notes
Alison (T)	✓	✓	✓	✓		✓				✓		
Brad (T)		✓			✓	✓		✓				✓
Betty (T)		✓			✓	✓				✓	✓	
Francesca (TA)	✓	✓		✓						✓		✓
Helena (T)		✓		✓		✓		✓		✓		
Andrea (TA)	✓	✓				✓					✓	
Olivia (TA)	✓	✓	✓	✓	✓		✓		✓	✓	✓	
Harry (TA)	✓						✓		✓	✓		
Teresa (TA)	✓	✓	✓				✓		✓	✓	✓	
Maria (T)	✓	✓		✓			✓	✓	✓	✓	✓	
Meghan (T)	✓	✓		✓	✓	✓		✓	✓	✓	✓	
Rachel (TA)	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	

Verbal feedback

Verbal feedback was one of the most used methods among staff. As seen in the table above, nine of the twelve staff stated that they frequently use verbal feedback. The feedback used by staff was mostly intended for praise, and it was observed that all students responded positively to it regardless of the degree of ASC. However, although only Olivia and Teresa stated that they used verbal feedback at times for warning purposes, it was observed that all of the staff gave verbal feedback using a tone of voice not for the purpose of praise.

Written feedback

Although it is a frequently used method for neurotypical students in the class, written feedback was often given to inform the family about the development process of the students with ASC, taking into account the reading and reading comprehension skills of these students. Written feedback for students was generally composed of 2-word sentences (Well done! Great!), pictures, or marking (Appendix 12). While eleven staff stated that they mostly used marking method as a written feedback, seven of them stated that they also benefited from other types of written feedback. TA Harry stated that because of the nature of the PE course, he did not use such a method, because it was not needed at all. *"I have never used written feedback since there was no need for a notebook in my class."*

Body language

The majority of staff stated that they could not give any indirect feedback to the students due to the difficulties in communication with the students with ASC and that they could not use much body language. However, Alison and Teresa stated that they have warned or praised students by changing their tone, and Olivia and Rachel stated that they gave feedback to the students by using exaggerated gestures. Teresa explained this situation as follows: *"I use body language frequently. I scowl my eyebrows, turn my back, touch the table several times with my finger so that the student understands that I have warned him and then he starts acting accordingly."*

Self-assessment

While half of the staff stated that they used the self-assessment method, just three of them said that they thought this method was useful in developing students with ASC. However, other staff mentioned that they had to guide them while practising self-assessment with students with ASC and that it took time. They therefore stated that self-assessment remains a limited practice

that can only be applied under adult guidance. For instance, Maria stated, *“I asked him to put it back into the sentence using a purple pen, so he was self-assessing. He's not doing it independently at the moment, as autistic children need lots of support and scaffolding initially,”* and this revealed the finding that there were significant problems in the use of self-assessment.

Peer assessment

Many staff commented that during informal conversations, students with ASC who had difficulties empathizing with others, could not be successful in evaluating the work of their friends. However, in Year 5 in Eastwood school, the first thing that caught my attention in this class and that I found novel were the purple pens on the tables. Each student, after completing their work, sometimes checks the work of his friends, and sometimes their own work with these pens, showing that the use of the FA method is supported by applying self-assessment and peer assessment regularly. Interestingly, however, five staff mentioned that they used peer assessment with these students. One of them, Meghan, mentioned, *“I am using peer assessment for all students.”* However, my observation notes of her class on November 15th, say, *“Meghan asked students to evaluate each other's designs. In doing so, she gave papers on which the criteria were written. However, regardless of any criteria, Kevin said that his friend's design was very bad, even his own was better. Meghan warned him, and Rachel took him to the other room.”*

As can be seen here, some of the staff who said they used peer assessment encountered problems in practice and gave up using this method. In other words, just as all the staff who participated in the research stated, peer assessment was applied at a basic level just like the self- assessment.

Questioning

Although asking questions is one of the most used methods among the staff, when it comes to students with ASC, it was seen that staff use this method less than with neurotypical students. While seven staff said that they support students' development by asking questions, some staff suggested that this method is difficult for these students who are lacking in critical thinking and analytical skills. For instance, Brad pointed out, *“I may be asking a question in a slightly different way to Jordon than to some of the other children. I'd maybe need to question Jordon a little bit more to actually pull out what he actually knows.”*

As Brad said, when asking questions to students with ASC, the content and clarity of the questions needs to be adapted to the student, while five staff mentioned that they asked extra supportive questions or increased the waiting time. Even Teacher Betty is “*going to ask them a question. If they can't answer that question, I'm going to keep them back for a couple of minutes and just go over it again, to make sure that they've got the understanding of it.*” Thus, it was found that students were encouraged to respond by giving additional time.

Modelling

There were five staff who thought that they had to model the behaviours expected from students with ASC in advance. In fact, even though this was not mentioned during the interviews, there were more staff who applied this method in classroom activities, especially in PE and Art classes, where a modelling technique was frequently used. PE teacher Harry pointed out the importance of being a model in his class and stated, “*First I would tell, then I would show then I would encourage. I would probably have to show them a few more times.*” This finding indicated that the frequency of use of the model may vary according to the course content.

Team discussion

Staff talked about this method in two ways. In the first, the staff worked in a team to support the education of the students with ASC (staff led the process by working in teams at both schools and new staff in the profession worked in cooperation with experienced staff), and the second was the work with the students in groups (the students shared their learning in the classroom in reading and mathematics classes by using the team discussion method). There were five staff who thought that students with ASC were successful in this method. On the other hand, Alison, Teresa and Betty say that they do not want to use this method, because they think it will not be useful for these students who are not active in group discussions.

Rewards

Six staff working in the Rainbow school mentioned that objective rewards, such as being allowed time on the iPad or playing with toys are used to support learning. The interesting thing is that these staff were only using objects for this purpose and did not state that other types of feedback can be used for reward purposes. The Eastwood School’s staff stated that they could not use the objects as a reward due to the school policy. This different application of two schools with the same assessment policy was a surprising result. Teacher Alison commented on this situation as follows, “*The policy of the school is that we don't give rewards or special prizes to any one child and don't treat anyone differently.*”

On the other hand, there was no such restriction in the Rainbow school and the staff were very pleased with this situation. Olivia stated, *"I think the main thing that we use is our reward system, which is very useful."*

Observation

As a result of the research, it was observed that one of the methods most used by staff is observation. Ten staff stated that observing students with ASC, especially in non-verbal situations is very informative about the learning process. Thus, the staff became the voice of the students who could not express their opinions clearly. Four of these staff said during the informal conversations, that the observations were recorded daily in the students' files so that their families could be informed.

Formative Assessment Charts

All staff used an activity chart as well as a sticker or star chart to enable students with ASC to follow daily routines. Thus, students could mark their completed activities on these charts. On the other hand, seven staff talked about self-development charts, such as rainbow charts and smiley charts (Appendix 12) to support the learning of students. For instance, Maria stated, *"I believe that the students become more active in the learning process with such visual illustrations."* Thomas and Kevin are students who use rainbow charts, although they are in different classes, and both made more effort to get their names onto the rainbow. However, during my observations, I saw that these tables were sometimes used as a reward and sometimes as a warning.

Post it notes

Only two staff mentioned that they used post it notes. This was not surprising to me, because I noticed both during the observations and informal conversations that staff favoured using marking instead of post it notes. They mentioned that the students could see their mistakes or achievements and that this was more permanent. However, TA Francesca said that *"post it notes can be used as instant feedback"*, so she preferred this method. However, TA Rachel, mentioned that she did not use this method because she thought, *"post it notes can be ignored."*

Analysis of Types of Formative Assessment

Having both schools run by the same academy trust, caused them to have the same assessment policy. However, for the same reason, neither school had guidelines for the use of FA for the purpose of evaluating SEND students, especially those with ASC. Therefore, the use of FA

was largely left to the initiative of the teacher. It was observed that the staff recorded their general assessment processes and the FA methods they used, but this was not related to the school's assessment policy.

According to the table above, Maria utilised ten methods, the most of all the staff. The fact that Maria was the most experienced teacher of students with ASC of all the staff in this sample, may explain this finding. Betty, who of all the staff has been working for the longest time in the same school, said that she used nine methods and worked most closely to the school's assessment policies. Because of this, she was able to use many methods, even if not specified by Ofsted and the assessment policy. On the other hand, the new staff, Meghan and Alison, mentioned that they used eight evaluation methods. Although Meghan has received guidance on many issues, it has been seen that she has a lot of knowledge about FA methods. Meghan attributed this to the fact that her knowledge is still very new, and she is willing. Although Alison has worked at several schools before, she applied many methods in parallel with the school's evaluation policy. This finding concluded that she was in the process of adaptation.

Although Helena and Brad were two staff sharing the same class, it was observed that they generally applied different assessment methods for the same student. While Brad's previous project about 'question method in classrooms' on asking questions, led him to use this method more, Helena preferred to give marking and written feedback. Although Brad mentioned six evaluation methods, Helena mentioned only four methods.

Three TAs, Harry, Teresa and Francesca, talked about using five methods. While Harry's football coaching history led him to use more verbal and visual methods, Francesca had established her methods with experience over the years. Despite the fact that Teresa stated that her educational background was strong, it was a surprising finding that she used five methods, because during the time we spent together she frequently expressed how knowledgeable she is about this. However, it was observed that she remained comparatively weak at the application stage. This can be explained by the fact that readiness of the student may be a stronger factor than the content knowledge of the staff.

Olivia and Rachel have been TAs for nine and five years respectively, but the studies show that they have little knowledge of FA. It was interesting to see that they used many methods, even though they did not know their name. However, they apparently continued to practice without

trying to improve themselves in an educational sense, and without diversifying the methods they know.

Remarkably, the most used methods by staff were marking/written feedback and observation. This finding may be the result of the ease of use and practicality of these methods as frequently expressed by the staff, and the communication problems of the students with ASC.

Student Responses

Within the scope of this research, not only the FA approaches of staff but also responses of students with ASC were investigated. The research data shows that four of the students responded to the methods used by the staff in five ways. The table below contains interviews and observation data about the responses of students with ASC to FA methods:

Table 7.5 Students' Responses to Formative Assessment Methods

Staff name	Verbal responses	Written responses	Body language	Symbols	Behaviour
Alison (T)	✓	✓	✓		
Brad (T)	✓	✓	✓	✓	
Betty (T)	✓	✓	✓		✓
Francesca (TA)	✓		✓		✓
Helena (T)	✓	✓	✓		✓
Andrea (TA)	✓		✓		✓
Olivia (TA)	✓		✓		✓
Harry (TA)			✓		✓
Teresa (TA)	✓		✓		✓
Maria (T)	✓	✓	✓		✓
Meghan (T)	✓	✓	✓		✓
Rachel (TA)	✓		✓		✓

Verbal responses

In cases where students with ASC are verbal, like other students, they often use verbal feedback. A large majority of the staff (11/12) who participated in the research stated that the

students responded verbally to the methods used, so it is easier to understand them. Rachel said, *“He uses verbal communication and I think might be easier with that to give some feedback or get a response from him.”* When students participate verbally in FA methods, the functionality of the method becomes more practical. Because of this, staff often stated that it is easier to work with verbal students in informal conversations.

Written responses

Half of the staff stated that the students participated in this process in writing at the basic level. The point to be noted here is that students with ASC give a limited amount of written feedback. However, even this limited reaction had become such an important development for staff that six staff talked about this happily. For instance, *Kevin was generally a distracted student and had difficulty in fully participating. While TA Olivia asked other students to write four sentences, she waited for him to participate by writing only two sentences. Thus, she could have an idea about the achievements of Kevin.* (Observation notes, 5th November 2019). Olivia also stated, *“...he goes away, and he will write two more sentences for me, so he can understand what is expected from him and my method works.”* In other words, while the written responses included the students in the process, they also gave feedback on the method used by the teacher.

Body language

All staff stated that students with ASC give feedback by using their body language. TA Teresa summarized the advantage of reading the body language of these students. *“Of course, if we know the student sufficiently, we understand what he means in his body language and sometimes we can agree even if we don't speak.”* Alison even stated that she can read their body language much more easily because she has a brother who has ASC, so she can meet the needs of the students. As a matter of fact, all the staff thought like Teresa and Alison and did not ignore the body language of the students.

Symbols/pictures

Only Betty stated that the students attended the lesson and evaluation process with symbols/pictures. *“Sometimes he uses quite a lot of pictures, which is perfect, because it's a good way of assessing somebody's understanding, as without them we would need to use verbal cues all the time.”* This result was surprising to me, although I witnessed it in my observations. Kevin and Hasan gave feedback in many lessons using photographs and symbols. Since Kevin liked trains very much, the teacher encouraged him to use smiling and sad facial expressions

on pictures of trains to respond to her. However, this application was not referred to by the staff during the interviews.

Behaviour

The participation and feedback of the students was referred to as their behaviour by ten staff. The behaviour of the students, whether angry, happy, aggressive or cheerful influenced the staff' approach to them and their use of certain methods. The common opinion of these staff is that students do not want to do anything when they are aggressive, angry or unhappy, so they wait for them to calm down by giving them time instead of forcing them. According to TA Harry, *“It's not the language; it's the way to be more understandable.”*

Analysis of Student Responses

When I looked at the table, I saw that the staff talked mostly about body language and verbal feedback. All the staff stated that they received feedback from the students by interpreting the body language, however, behaviours, written responses, and symbols were named by fewer staff. It was not easy to interpret these findings, because it was not clear how much the staff really could understand students' responses. Could student answers be easily noticed by a person who is not a teacher, or is it necessary to have a professional TI for this? These questions were answered only when I considered the whole data collection process.

When I visited schools before I started doing research, I had the opportunity to have conversations with the staff. When I asked them about the feedback of the students, I realized that many of them were not really sure. Many staff thought for a long time, and some even passed it off with evasive answers. For this reason, I prepared an observation schedule and recorded what kind of feedback students gave.

Table 7.6 Students' Responses to Formative Assessment Methods

Student name	Body language	Symbols	Verbal responses	Behaviour	Written responses
Kevin	✓		✓	✓	✓
Thomas	✓	✓	✓		
Hasan	✓		✓	✓	
Jordan	✓		✓		✓

According to the data obtained from the observation form, since all students were able to communicate by talking, they gave mostly verbal responses. Nevertheless, it was observed that they responded to staff using their body language as they still had communication problems. All the students expressed themselves very slowly in writing, but nevertheless Kevin and Jordan used written responses. While Kevin also responded to staff with his behaviour, Hasan was another student who used this form of responding. The most interesting data that emerged from the observation reports was that the symbols were used only by Thomas. But it was surprising that none of Thomas' staff mentioned this.

7.4 Task Perception

In this research, as a result of the observations and teacher interviews with 16 staff, many factors that affect the identity of the teacher were identified. The data shows that some elements that shape TI also affect their perceptions. In this respect, in order to understand the role of TI and its effects, it is important to analyze the perceptions of staff about the education and mainstreaming of students with ASC and the FA methods used for the education of these students.

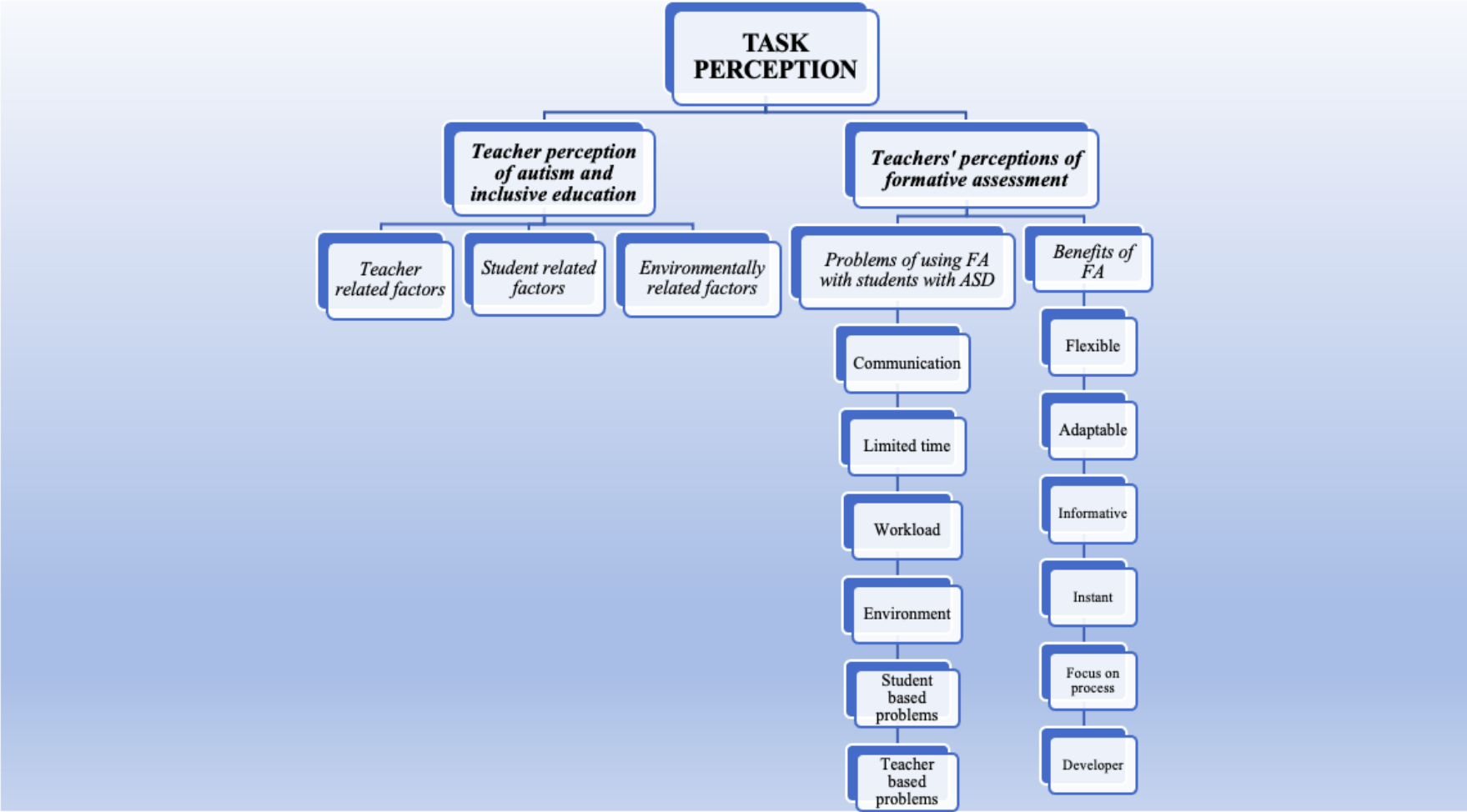


Figure 7.4 Teachers' perception of inclusive education and formative assessment

7.4.1 Teacher Perception of ASC and Inclusive Education

In the first interviews with the staff, when asked about the thoughts about teaching the students with ASC in the mainstream class, it was seen that they gave answers about both satisfaction and anxiety. Classroom observations also confirmed these answers. The analysis of the second interviews concluded that the teacher attitudes about the education of these students in the mainstream classes were influenced by three factors (teacher related, student related, environmentally related) especially regarding the effects the students with ASC had on their teacher identities.

7.4.1.1 Teacher related factors

Data obtained from interviews suggested that “knowledge, experience, in-service training, preparation and emotions” affected the attitudes of the staff towards providing education to students with ASC. The Table 7.7. below indicates to which factors the staff refer.

Table 7.7 Teacher Related Factors Affect Teacher Perceptions

Staff name	Knowledge	Experience	Training	Preparation	Emotions
Alison (T)	✓		✓	✓	✓
Brad (T)	✓	✓	✓		✓
Betty (T)	✓		✓	✓	✓
Francesca (TA)		✓	✓	✓	✓
Helena (T)	✓				✓
Andrea (TA)	✓	✓	✓		✓
Olivia (TA)		✓	✓	✓	
Harry (TA)			✓		✓
Teresa (TA)	✓	✓	✓	✓	✓
Maria (T)	✓	✓			
Meghan (T)	✓			✓	
Rachel (TA)		✓			✓

According to the table, emotion is a factor that affects teachers' perceptions and their attitudes accordingly. Nine staff stated that while teaching students with ASC, they approached them with emotion. The most frequently expressed feeling of these staff was empathy and patience. For instance, Alison stated that she was able to empathize with these students because she had a brother who was on the autistic spectrum and that enabled her to be more patient with them, while Harry stated that *"patience is the only way to gain their trust."* Teresa and Helena said that there were times in the mainstream classes when it was difficult to work with students with ASC and at those times *"empathy with them makes me feel good and calm down"* (Teresa). Only nine staff talked about their feelings of anxiety. Andrea has linked this to her lack of information on ASC and emphasized her need in this regard, *"I'm sure I wouldn't be so worried if I knew more about them."*

Indeed, some of the staff (5/12) stated that the lack of information on ASC also affects their perceptions. However, I was surprised that two staff in this data doubted their knowledge: Alison and Meghan. Both were new staff and as Meghan said, their *"information was very fresh."* However, they stated that they did not consider themselves sufficiently knowledgeable about ASC. The reason behind this view was clarified by Alison during the informal conversation: *"theory and practice are two different concepts and I understand this every day a little better."* On the other hand, all the TAs except Rachel and Francesca stated that they do not have enough knowledge about this subject, since they are not teacher graduates. However, Francesca and Rachel said that they have learned many things, since they have been working as TAs for a long time and it is an advantage for them to have experience.

In fact, eight staff commented on the knowledge needed, but of these staff, Brad, Betty and Maria talked about the deficient knowledge of other staff, not their own, because they thought, like Francesca and Rachel, that they also had experience that made them knowledgeable about ASC. According to Brad, *"I have been teaching for 10 years and this experience gives me sufficient knowledge about autism and mainstream. Actually, maybe teachers who haven't been teaching so long need to get some training to understand these students."*

Training, which Brad said was necessary, was emphasized by eight other staff, especially Teresa and Alison. They stated that although they are teacher graduates, the information changes every day and therefore in-service training should be increased.

“There's not enough education for teachers, especially if you've been teaching for a long time. And I'm brand new. I've got all the new information, but information is changing daily so we need to get training.” (Alison)

“I am a teacher graduate, and my knowledge is very new, but being in class is so different. Although I had six weeks training here, I only received practical training over two weeks and for four weeks I was observed by the nurse, who looked at how I did and guided me through it. So, I think we should get constant training.” (Teresa)

Looking at the table, it was noticed that Francesca, Olivia and Harry did not express an opinion about knowledge, but they expressed an opinion about training. Even Olivia had not received enough training, *“I do not know how to deal with some situations, and this is reflected in my communication with SEND students.”* In fact, although Olivia did not state that she was inadequate in her knowledge, she implied that she felt that way. On the other hand, Meghan did not comment on training, although she said she needed to know more, because she needed *“more support and experience,”* rather than new training to increase her knowledge.

Among the factors affecting teachers' perceptions, the least mentioned item was the preparation. Six staff had to do extra preparation for students with ASC before the lesson and said, *“We need extra resources and time for preparation for lessons. We need to do more planning and activities for students,”* (Helena). Meghan even supported Helena's view, saying, *“Completely different planning and preparation is very tiring for me.”*

7.4.1.2 Student related factors

The staff' discussion of student related factors covered four themes that influenced their perception of teaching students with ASC in mainstream classes. The table 7.8 below shows the combination of factors that affect each teacher.

Table 7.8 Student Related Factors Affecting Teacher Perceptions

Staff name	Behaviour	Degree of ASC	Social interaction /Communication	Emotional understanding
Alison (T)		✓	✓	✓
Brad (T)		✓	✓	
Betty (T)		✓	✓	✓

Francesca (TA)		✓	✓	
Helena (T)	✓		✓	✓
Andrea (TA)	✓		✓	
Olivia (TA)	✓	✓	✓	✓
Harry (TA)	✓		✓	✓
Teresa (TA)	✓	✓	✓	✓
Maria (T)		✓	✓	✓
Meghan (T)	✓		✓	
Rachel (TA)	✓	✓	✓	

According to the table, it was observed that all staff, without exception, mentioned that the difficulties experienced by students with ASC in social interaction and communication affects their own perceptions and approaches. Teresa remarked about this:

“Especially if I need to talk about the students, I have taught myself, there is a problem of dialogue between us, because some of them cannot speak, because they cannot express themselves, so, it affects my behaviour. I am thinking about new ways to communicate rather than teaching.”

Staff can sometimes have negative perceptions because they have difficulty communicating with students. For instance, Hasan's failure to react while working with Andrea, or to refuse to communicate, can sometimes make Andrea unhappy or angry (observation notes, 6th December). However, Harry, believes that there is always a way to communicate with the students, especially if he *"doubts that they are listening to me, because they can't establish eye contact."* According to Teresa, over time, students were teaching their own ways of communication to staff. However, the available data shows that few staff are of this opinion therefore have some negative perceptions due to communication problems.

Eight of the staff link the reason for these communication problems experienced by the students to the degree of ASC. Olivia stated that it is much easier to work with a student who has fewer autistic traits and added, *"It is less tiring to work with Kevin, because he can talk and understand a lot of things."* On the other hand, Hasan has high-functioning ASC and is

academically more successful in some areas than his friends. Therefore, his participation in the classes was quite high. However, the two staff working with him had different opinions. According to Alison, "*Hasan was a very successful, easy-to-communicate student,*" but on the other hand, according to Andrea, "*it was very difficult to communicate with him.*" One of the other staff said they were astonished about this and said, "*Others look at my way of teaching and especially with where I am with him and say that it is unbelievable.*" From the different thoughts of the two staff on the same student, it can be concluded that the communication with the student depends not on the degree of ASC, but on the approach of the teacher and the effect it has on the student. Indeed, Alison used her moderate and empathic TI quite effectively with Hasan and skillfully calmed him down.

There were seven staff who thought that their perception of students also affected their behaviour and emotional understanding. According to these staff, sometimes the students' aggressive behaviour in the classroom, or the fact that they could not make sense of the attitudes of the teacher, created a negative perception. It is of course a difficult task to establish authority and create an effective teaching environment in the classes where there are both neurotypical and SEND students, such as in the mainstream classes. Here, the impulsive behaviours encountered at this point may reduce the positive perceptions of the staff towards those students and affect the teacher's behaviour and thoughts. In this case, it may be inevitable for the teacher to decrease their motivation and reflect it to the student. Student behaviours that affect teachers' perceptions will become more understandable with a few vignette examples presented below.

Vignette 1: Teacher and Student Empathy

One of the best examples to be given on this subject was that of Meghan and Rachel. While Thomas was a student who was always known for his quiet and calm behaviour, one lesson he became bored and started to look for something to entertain himself. However, all his belongings were in a drawer out of sight, he could not reach them and was very angry. He started shouting and hitting his teacher. At first Meghan tried to calm him down, but when she could not, she became angry and left him. Following that, Rachel brought Thomas' teddy bear and hugged him and started to sing. After a while, Thomas calmed down (Observation notes, 8th October). In this case, there were two staff and two different approaches. Meghan responded with her own aggression to his aggressive behaviour, suggesting that her perception towards Thomas changed. However, Rachel empathized with him and calmed him. This data led to the

finding that the fact that both staff gave different reactions was closely related to the identity and feelings of the teachers, as well as the behaviour of the student.

This evidence could be an example of a two-way interaction between teachers and students, because while it is clear that the teacher's identity, and the reflections on teaching practices made under its influence, affect and shape student behaviours. On the other hand, it is seen that student behaviours and reactions can also shape teaching practices by influencing teachers' attitudes and identity perceptions. As stated in social identity theory, people's identities are shaped by being influenced by environmental factors. As seen in the example above, the empathy and perceptions of the two teachers who receive different reactions from their students also differ. This situation, which is named with concepts such as attitude and perception in the short term, becomes a part of self-confidence of the teacher identity over time and takes a permanent form. For this reason, students' behaviours are important factors that shape teachers' attitudes first and then their identities.

7.4.1.3 Environmentally related factors

The last factors that staff think affect their perceptions are environmental factors. The staff stated that the working environment, supportive sources, collaboration and class size and number of SEND students affect their perceptions of teaching students with ASC in the mainstream class.

Table 7.9 Environmental Factors Affecting Teacher Perceptions

Staff name	Teaching environment	Supportive sources	Collaboration	Class size/ number of SEN students
Alison (T)		✓		
Brad (T)		✓		
Betty (T)	✓	✓		✓
Francesca (TA)	✓	✓		
Helena (T)		✓		
Andrea (TA)	✓	✓		
Olivia (TA)	✓	✓	✓	✓
Harry (TA)		✓	✓	

Teresa (TA)	✓	✓	✓	✓
Maria (T)	✓	✓	✓	✓
Meghan (T)	✓	✓	✓	✓
Rachel (TA)		✓	✓	✓

The first remarkable finding in the table was about supportive sources. All staff mentioned that it is easier to work in schools where they have resources to support them and that these resources are especially important to them meeting the needs of students with ASC. According to Teresa, *“We mostly use the resources of companies that come to school, the promotional books that get sent and games for children. These are really useful to support these students and they are all around the school.”*

Considering that ASC students' interest in technology has a significant impact on supporting the methods used, Maria stated that their schools support them as much as possible. The staff of both schools reported that if the resources were insufficient, they would have to produce alternative solutions, and this could lead to them feeling negative about the students with ASC. While all staff in Rainbow School talked about supportive sources, they stated that being supported by the school staff also affected their attitudes. Collaborative work *“makes me feel more comfortable and secure,”* (Meghan). Maria emphasised that there was cooperation with the most helpful staff and that this increased the motivation to work with Kevin, because it reduced the workload.

One of the most interesting pieces of data in the table is the effect of class size on teachers' perceptions. Especially in the mainstream classes, class size and the number of SEND students was very important to teachers. However, interestingly, all staff who reported on this subject, except Betty, were at The Rainbow School. During informal conversations, these staff drew attention to crowded classes and increasing numbers of SEND students. Even according to Meghan, *“I can't imagine being alone in this class without any help, because it is really crazy to deal with 30 students alone.”* In The Rainbow School, only Harry did not think that the classes were crowded, because he said, *“PE lessons do not need a classroom and we are often working in small groups with students with autism.”* Therefore, he did not have to do much work at the same time as the other staff and this did not affect his attitude.

As a result, the available data showed that there are many factors that affect the teaching of students with ASC in their mainstream classes, and that these factors are important in shaping their TI and determining their attitudes. The staff stated that they believed that mainstream education was beneficial for the academic and social development of students with ASC, but they also thought that this would be beneficial for developing awareness of neurotypical students and improving teachers' understanding. As a result of the data analysis, it was found that none of the staff are against having students with ASC in their class, regardless of their perception.

The next section explains and gives evidence to describe what the attitudes are of these staff towards the FA methods they use in the teaching of students with ASC.

7.4.2 Teachers' Perceptions of Formative Assessment

For the purpose of the research, staff specified interrelated factors that could affect the adoption and use of FA. In general, it was seen that the majority of staff had a positive opinion about FA and they supported its use. However, it was included in the research findings when staff expressed some problems in the use of FA for students with ASC. Therefore, teachers' perceptions of FA use were analyzed under two headings: problems of using FA with students with ASC and benefits of using FA with students with ASC.

7.4.2.1 Problems of using FA with Students with ASC

Although staff have stated the advantages of FA, it has been observed that they cannot ignore some of the problems they face, especially in applications with students with ASC. The table below shows how staff name these problems.

Table 7.10 Teachers' Problems of using FA with Students with ASC

Staff name	Communication	Limited time	Workload/ effort	Environment	Student based	Teacher based
Alison (T)		✓	✓	✓	✓	✓
Brad (T)	✓			✓		✓
Betty (T)		✓	✓			
Francesca (TA)		✓	✓	✓	✓	
Helena (T)		✓	✓		✓	

Andrea (TA)	✓				✓	
Olivia (TA)		✓	✓	✓	✓	
Harry (TA)	✓	✓		✓	✓	
Teresa (TA)	✓	✓	✓		✓	✓
Maria (T)	✓	✓	✓			✓
Meghan (T)		✓	✓	✓	✓	
Rachel (TA)		✓	✓	✓	✓	

Communication

Five staff mentioned that communication is a big problem in the FA methods they use to support the learning of students with ASC. They stated that the difficulties they faced, such as having eye contact, making sense of what they say and giving feedback, even if their students are verbal, posed problems while applying many methods. For instance, Maria, who has the most experience in the education of students with ASC, said, *"They respond most of the time, but I am not always sure if they understand me, because it can be difficult to communicate directly."* On the other hand, Harry, with the least experience in this regard, said communication problems were important. *"If a child doesn't understand you as a teacher in class, you can teach to your 30 children, but if that child's not going to look at your face and doesn't want to be distracted from something else. It could be quite difficult to communicate with him and teach."* The opinions of the other three staff are in parallel with these examples.

Limited time

The vast majority of staff (10/12) mentioned that there was not enough time to use FA methods. A few sample quotations on this topic are as follows:

It's your time to make resources as well. So, we're not just doing it in our own time. We are being given a little bit of extra time. (Francesca)

I think I like FA. I think it's good, but it takes a lot of time. On the whole, I think it's a good thing although it takes a long time. (Meghan)

But there are so many areas. FA is massive and there are so many different areas that I would love to implement in the class but not enough time. (Alison)

In summary staff suggested that there are too many FA methods, and there is limited time for implementation, therefore, staff save time by choosing the most practical and easily applicable methods.

Workload

Looking at the table, it can be seen that all nine staff, who stated that they needed more time for FA applications, also said they had extra workloads. For instance, while Alison said, *"It is about trying to make many adaptations and it's a lot of effort,"* Maria stated, *"Whole day sit down and have some extra time to do something like one to one, more formative work. The workload is just crazy."* It is of note that only Harry did not associate the limited time with the extra workload. In a PE lesson on October 14th, 2019, he stated, *"I have a different time for these students, so it doesn't give me any extra work,"* and that it did not create any more workload for him, because he did a separate study with students with ASC.

Environment

More than half of the staff (7/12) thought that the classroom environment created problems in applying FA methods. This was particularly the case when providing education in the mainstream class, where there are many different needs and different students together, causing the staff to have difficulties in implementing FA practices suitable for each student. Francesca stated that she had difficulties in applying individual assessment methods in this mixed class structure, even though she had years of experience as a TA in both special and mainstream schools. Alison made statements to support this view:

"There are other disadvantages in FA, or challenges that maybe you face, especially in mainstream classes. Not that there is anything that I can't get over. There's nothing that is so much of an obstacle, but it'll be a bit difficult, because it's just that you change it if it doesn't work. "

Rachel and Olivia looked at the classroom environment issue from another perspective and highlighted the number of students in classroom. They stated that it is not always possible to use these methods in crowded classrooms. Therefore, it would be a fairer approach to apply a few efficient and effective methods for all students, rather than trying to apply many methods (*Informal conversation with Alison, 5th December*).

Student based problems

Nine staff stated that the student-based problems, such as their different needs, constantly changing moods and the behaviours they exhibit accordingly, originated from the student. Because of these problems, it seemed to be a common view that it is difficult to provide discipline in the classroom, or to make adjustments according to the changing psychological situation of the student. For instance, Helena mentioned, "*I suppose you have to make sure that the children can access it. It's got to be relevant and able to be accessed, which I guess some of our children might find more difficult. It's also a lot of effort,*" while Teresa stated, "*I think regardless of the method you use when you do a study with children with autism, its success depends on the state of communication between you. Sometimes if the student feels unhappy and does not want to do anything, all the methods you use may be ineffective.*"

Vignette 2: Teacher Motivation and Identity

Here, as I mentioned in the '*Student related factors*' section, the two-way interaction between the teacher and the student comes to the fore. It is clear that the feedback between them affects both sides, especially considering that FA is in a bridge position between teacher identity and students with ASC. For example, a teacher like Meghan, who, despite being inexperienced, has just completed her education and has a lot of field knowledge, did not receive any feedback, or was met with negative and reluctant feedback, although she used many FA methods and changed her practices during her works with Thomas (*observation notes*). This situation may negatively affect Meghan's professional identity by reducing her motivation to work.

Motivation affects and shapes the identities of individuals, as advocated in identity theory and social identity theory. Working with a student who causes a decrease in teaching motivation can cause a lack of self-efficacy and self-confidence in the teacher, leading to a feeling of inadequacy. Such a situation can greatly affect the identity of the teacher. Teachers who are faced with this and a similar situation may experience behaviours such as having hesitations about working with students with ASC, feeling unsuccessful and therefore preferring to stay in the background. In other words, the identity of the teacher can be shaped by the feedback received from the students. That is, the interaction in the teaching and assessment process is bidirectional, and formative assessment mediates this process. Teachers and students interact in the learning and teaching process by giving feedback to each other through formative assessment methods, and they also play a role on each other's identities through the same methods. Although Meghan stated from her own experience that the student-based problems

"may be a difficult factor in adapting and applying the FA approaches.", these words are also proof of how she and her teacher identity are affected by this two-way interaction.

Teacher based problems

The most remarkable result encountered regarding the use of FA methods were teacher-based problems. Only four staff stated that they might have problems arising from using FA methods.

Many of us do not know many methods, so we do not use them. We have to get more education on this subject. (Teresa)

We haven't actually developed an assessment method as a staff and face problems implementing FA. That's something that we need to work on and get some training maybe. (Maria)

There's not enough education for teachers, especially if you've been teaching for a long time. I've got all the new information but teachers that have been here for ages just rely on the school for training. (Alison)

It's just ensuring staff are trained well enough to deal with those questions, especially as a younger member. (Brad)

The common point of these views is that staff need training for the development of their assessment skills and knowledge, which are part of their professional identity. This is an opinion that can be evaluated both in self-criticism and in the expectation categories.

7.4.2.2 Analysis of Problems of Formative Assessment

Limited time is the most frequently mentioned of the problems encountered during the implementation of FA with students with ASC. This situation does not allow staff to apply all methods, especially in mixed educational environments, such as inclusive classes. Seven staff already mentioned that environmental conditions are not suitable for the use of FA in mainstream classes. A large majority of staff (9/12) also stated that they had some time-consuming assessment tasks that had to be done in their personal time, because they had limited time in school, and they had to make extra efforts to do this. Moreover, there were many different methods in this form of assessment, which meant confusion and additional work for staff. In addition, the crowded classes and the need for one-to-one training needs for students with ASC were the equivalent of extra effort and workload. TAs (Francesca, Teresa, Rachel

and Olivia) frequently especially expressed this opinion not only in the interviews, but also in the informal conversations.

It was surprising that only half of the staff noted the communication problems, although these problems were quite frequent among students with ASC. However, the observations and field notes showed that a much larger number of staff could not implement many methods due to communication problems. Although Alison and Teresa said that students with ASC in general were only students with different needs, they were staff who stated that they had the most problems in FA practice. Betty, who has been teaching for about 21 years, indicated that she had time issues regarding reaching the subject targets since there were some different curricula and IEPs, and because of that the workload was too high. Therefore, she specifically pointed out two problems which are limited time and workload.

When the problems experienced by teachers in formative assessment are considered, it is seen that student-based problems affect the other issues that were mentioned by staff. Communication problems especially affect the motivation of teachers, and also reduce their positive identity perceptions. Formative assessment methods, which are the source of bidirectional feedback between the teacher identity and the student, cannot be used effectively due to the problems experienced with the students, and the feedback obtained can make the teacher feel unsuccessful and inadequate.

Staff had developed alternatives to solve many problems they faced and prevent have negative self-esteem and teacher identity. For instance, they preferred to concentrate on several FA methods to save time, and to use easier and fewer preliminary methods to avoid having to make more effort. In order to prevent the negative conditions of the large classes, or where several disability groups are together, they tried to answer the changing needs of the students in the most appropriate way by doing a job division with other staff.

7.4.2.3 Benefits of FA

Although the staff stated that they encountered many problems during the use of FA, the same staff also said that they found FA useful for students with ASC as well as themselves. While the staff who participated in the interviews stated that FA is important, necessary and beneficial for students with ASC, they emphasized the function of this evaluation and the benefits for staff and students. Staff saw the function of FA as being flexible, being adaptable to the needs of the student, seeing the students' progress and determining whether achievements were, or

were not, made and the reasons why, as well as the fact that they focused both on the student and the students' improvement. The table 7.11 below summarizes the comments of the staff on this subject.

Table 7.11 Benefits of Formative Assessment with Students with ASC

Staff name	Flexible	Adaptable	Informative	Instant	Focus on the process	Development
Alison (T)	✓	✓	✓		✓	
Brad (T)		✓	✓			
Betty (T)	✓	✓	✓		✓	✓
Francesca (TA)		✓				✓
Helena (T)		✓	✓	✓	✓	✓
Andrea (TA)			✓	✓		
Olivia (TA)		✓	✓	✓		
Harry (TA)			✓			✓
Teresa (TA)	✓		✓		✓	✓
Maria (T)			✓	✓		✓
Meghan (T)		✓	✓	✓		✓
Rachel (TA)		✓	✓			✓

Flexible

The least advantage to the staff was the flexible aspect of FA. Only three staff (Alison, Betty and Teresa) mentioned this advantage. However, during informal conversations, there was a large number of staff who said that they could only balance a strict curriculum with a flexible assessment method. The opinions of Alison, Betty and Teresa on this subject are as follows:

It's all to do with the difference in having a choice of what you're doing for a lot of the time and in the flexibility of the methods of FA. (Betty)

The FA method gives me a very wide and flexible space. I support and evaluate the student in a very different way. (Teresa)

So, it just gives you the opportunity to be flexible in your teaching, and adapt your teaching appropriately. (Alison)

These views reveal the finding that FA methods generally enhance staff confidence and lead them to behave more flexibly. Also, the last point that Alison touched on, the adaptability feature of a flexible assessment method, was another feature that was seen as an advantage by the staff.

Adaptable

More than half of the staff saw that FA could be adapted to students' needs, content of the subject, or the diversity of the methods, especially as an advantage for the education of students with ASC. Eight staff stated that this advantage increased their motivation and desire to use FA methods. For instance, according to Betty, *"it's part of your teacher instinct. It's very easy to adapt and put another step in or jump a step when the children have gone past where I need them to go in a lesson."* Similarly, Helena pointed out, *"It's adaptive and changing, using what they've learnt to inform the next step."* Other staff made references to support these two views. This data showed that formative assessment can be adapted according to the interests and needs of the students, and thus, increase the motivation of the teachers.

Informative

The most stressed advantage (11/12) by staff was the informative nature of FA methods for both students and themselves, which was mentioned by all staff except Francesca. After the great majority of the staff commented on the informative advantage about the achievement of goals, they said that the students too were informed about their own success. For instance, according to Brad, *"You can see whether they're on target to achieve or whether they're not on target. And if they're not on target, then what are you going to do to make sure they catch up? From that you can pick up whether they've understood it or not and they're the key reasons why I would use for FA."*

Similarly, Meghan expressed her views with the following sentence: *"With FA being at the end of every lesson, we see who's got it, who hasn't got it and then you target the children that haven't got it"*.

So far, we have noticed that both staff have informed themselves that FA is seen as an advantage. Meghan continued as follows, emphasising that students were active in this process:

“You can see instantly what the children have learned and see where the gaps are.” On the one hand, staff can learn about the development of the students, and on the other, students can also follow their own learning processes. Because of this, the staff reported very positive opinions about the informative nature of FA methods.

Instant

Almost half of the staff (5/12) stated that they gave quick and immediate feedback on FA, so that the evaluation can be done on a daily basis. However, during the observations, I have seen that this instant feature of FA is beneficial to all staff every day and in every lesson. However, this was not mentioned much during the meetings. In particular, Andrea stated that instant feedback is very suitable for her hasty personality and *“it is definitely a fit to me.”* Olivia said that this is an advantage for students, *“It happens quite quickly, so they're not having to wait a long time.”*

Focus on the process

Alison, Betty, Helena and Teresa stated that they were able to focus on the teaching process thanks to FA methods, and that this was an advantage in real understanding. According to Maria, *“I think FA is a daily assessment and is what tells a better story of students.”* Helena, on the other hand, stated that evaluation is a process and that *“you'd have to support them through that process”*.

Thus, the process of development of the student can be followed and an appropriate assessment can be made. For this method, which is believed to be very beneficial for the student and the teacher in following the development of the student from beginning to end, Teresa said, *“It is a great thing to observe the development of these children, to record them and to accompany them in this learning journey.”*

Development

The last advantage of FA to the majority of staff (8/12) was that FA is a method for developing students and teachers. However, while the staff emphasised the development of the students in general, a few staff stated that they developed along with the students. According to Francesca, *“They can see what they need to be doing in that topic at that time. You can support that child further.”* Rachel also pointed out that FA is used *“to improve his learning and just to see where he is now and what he needs to do better.”*

The discourses of both staff were about the development of the students. However, in order to explain how this affects and improves the staff, Teresa said, *“The feedback from the student guides me about what I can do. It's like a loop. It is like a cycle that continues between me and the student.”* This cycle that Teresa mentioned supports the idea that formative assessment methods have a structure that changes and develops students and teachers. *“Teresa leaves Kevin alone for the first few minutes before she starts the lesson, observes his behaviour and determines his current mood and needs accordingly. She then does warm up activities with him for a while and adapts her method according to the feedback she receives.”* (Observation notes). This feedback loop between the teacher and the student becomes a bridge that develops the teacher's identity and represents the bond between the teachers and the students with ASC.

7.4.2.4 Analysis of benefits of FA

Staff stated that they use FA not only to measure students' academic achievements, but also to measure their learning and achievement of the intended learning outcomes. In other words, teachers' perceptions about the benefits of FA methods, which cover both themselves and students, were very close to each other. Betty and Helena were the staff who attributed the most to FA advantages (5/6), while Brad, Francesca, Andrea and Harry were the staff who were the least likely to do so. This cannot be interpreted solely on the basis of the interview results, because according to their observation reports, most of the staff who refer to a small number of FA methods in the interviews have used more and various methods in the classroom. Only Andrea consistently referred to the fewest FA methods and used few methods according to both informal interviews and observation reports.

Alison, Teresa and Meghan, on the other hand, showed similarity by referring to four benefits. When examined in more detail, it was the common view of these staff that FA being adaptable and informative is a benefit. Regardless of the method to be used when students with ASC are in question, the importance of informing the teacher about the results and the achievement of the student was noticed by these staff. Similarly, the only commonality of opinion between Olivia, Maria and Rachel, in referring to three benefits, was about the informative aspect of FA. This finding showed that staff valued the beneficial feature of FA being extremely informative. As a result, staff who are informed while the learning is going on also respond, apply and take feedback from the AfL process accordingly. As Alison said *“I think your classroom will be a nicer environment, with more of a safe space kind of communicative like feel. And there's no judgment. I mean, I don't mind friendly competition, that is good, but it*

shouldn't be judgmental. I don't think children should be worried about getting 100% on tests. Being treated as a human rather than a number”.

As a result, FA was a method that was frequently used by staff to contribute to the learning of students with ASC, and they were largely aware of this contribution. Staff saw this method as not only useful in evaluation, but also as part of the learning process. Considering that the common point of all the benefits mentioned is feedback (from teachers to students with ASC and from students with ASC to teachers), it is quite clear that the results obtained shape the learning process. The feedback given from both sides of the learning process, by the teachers and students using formative assessment methods, helps students to structure their learning, as well as helping teachers to reconsider the methods they use, through it affecting their identities. This feedback loop ensures the continuity of the FA bridge between the teacher and the student. However, the ways in which they deal with many problems in practice, and their ways of tolerating the difficulties, vary depending on the reflection of the identity of the teacher in the behaviour they choose to show, and these differences emerge as teacher perception.

CHAPTER 8

DISCUSSION

Prior to Discussion of Findings

The three main themes that affect teachers' identities (TI) are presented in Chapter 7. In the first theme, it was seen that teachers' identities were influenced more by their personal characteristics such as their past lives, feelings, and roles. The subjectivity of teachers' personal lives has become an essential factor in differentiating their identities. Primarily there is a crucial interaction between their own student life and their choice of the teaching profession.

The second theme found that teachers' identities can be shaped depending on environmental factors. Their context can affect their attitudes towards inclusive education and autistic students studying in their classes. Due to factors such as school culture, economic issues, and policies, teachers have been in a situation that alternates between searching for a positive sense of self and the problems caused by environmental factors.

In the third theme, it was revealed that one of the most critical factors affecting teachers' identities and the use of formative assessment (FA) methods is professional factors. It has been found that pedagogical knowledge has an influential role in teachers' teaching and assessment methods. That is why teachers need a more flexible and realistic policy in mainstream classes, especially when it comes to students with ASC. Such a policy and arrangement has also shown that teachers will be able to use teaching and assessment methods that are more appropriate for students' needs.

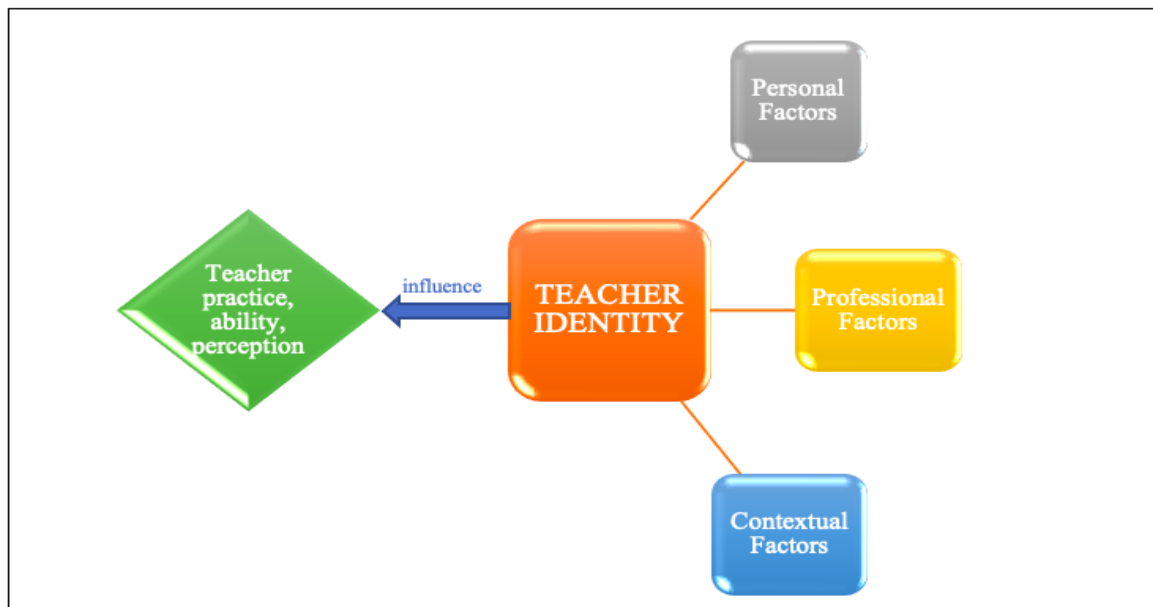


Figure 8.1 Components of teacher identity and the impact on teachers' attitude

The three main themes presented by this study support that, teachers do not have a specific way to use FA to evaluate students with ASC and support their learning. However, instead, they apply many methods influenced by their own identities and for formative purposes by keeping the students' needs in the foreground. In other words, the FA approach is not rigid, but on the contrary, it is an assessment and teaching method that can be shaped and changed by being influenced by the teachers' instincts, beliefs, values, experiences and interaction with the environment. Therefore, it can be said that these factors are hidden elements in formative assessment methods for teachers.

A detailed review of all the elements highlighted by the research results allows the discussion of the effect of teacher identity on FA methods used in supporting the learning of autistic students with the help of three fundamental theories: identity theory, social identity theory, and sociocultural theory.

8.1 Personal Factors: Biographies Affecting Identities

The study's findings showed that personal factors affecting a teacher's identity affect the process of deciding to become a teacher. The link that teachers establish between their past life and their determination of their profession, at first glance, points to the formation of personal identity aligned to identity theory. As identity theory suggests, all the experiences teachers have had from birth until today make up their identities so that each teacher has his/her own unique identity. However, further analysis of the data highlighted elements/themes that were not just

attributable to identity theory, but rather had a wider scope that suggested social identity theory as a useful way of interpreting the findings. According to social identity theory, teachers have an identity that carries the traces of the being a member of teacher community. However, deciding to be a part of this group is not a momentary choice, but a long process based on experiences. Therefore, I can say that these research findings can become more meaningful by using multiple theories as a way of looking at and interpreting that help me to explain the data.

Family (Sugrue, 1997; Flores et al., 2006; Sari, 2007), student life (Flores et al., 2006), and the effect of relationship with children are the factors that made up the biographies, which all teachers referred to, sometimes in similar ways. Although the support of members of their family or positive interaction with children drew teachers in a similar way to their choice of profession, a more critical finding stands out here. My research found that teachers' own student lives affect their choice of teaching as a career, their individual and social identities, and even shape their teaching methods. Indeed, teachers who had a positive education experience generally try to resemble their teachers, positively affecting their teacher identities (Flores et al., 2006). On the other hand, it is more likely that teachers with poor student experiences abstained from the teaching profession or again assumed identities similar to their teachers (Britzman, 1986). However, it is a surprising finding that Alison adopted a teacher profile in complete opposition to that of the psychologically harmful teacher of her student experience and decided to choose teaching as a profession. However, since student experiences constitute a significant part of teachers' childhood lives, even teachers who have had bad experiences in their own student life can teach effectively by reshaping their professional identity.

Since teaching is a profession where emotions are experienced intensely, the emotional effects of good or bad experiences on teachers can positively and negatively impact their identities. At this point, I used identity theory to draw attention to the role of personal factors in teacher identity. The feelings and values of teachers constitute a significant part of the formation process of identities. The sense of identity created by emotions shapes the teaching environment accordingly.

In this study, teachers' positive feelings were foregrounded as much as their negative feelings. The fact that the participants felt empathetic, contented, confident, determined and excited in particular, enabled them to create a positive classroom environment by making accommodations to the needs of the students in the classroom (Lasky, 2005; Makhwathna et al., 2017; Fendler & Glaser-Zikuda, 2013; Taxer & Frenzel, 2015; Day, 2011). Emotions

provide teachers with a deep perspective in comprehending and making sense of their teacher identity (Yazan & Percy, 2016), which will form the basis for the self-esteem proposed by social identity theory.

My research showed that every experience creates an emotion in teachers and that all the feelings acquired have a place in their professional lives. Satisfaction changes according to a positive classroom environment, or feelings such as disappointment, and overwhelmingly influence the selection of the particular teaching methods used and applied. The emotions of the past blend with those of today and help teachers recognize themselves and realize their potential. It was seen that for all participants, the classroom environment reflected their self-esteem, from those who tried to be a better teacher than their own teacher to teachers using similar methods to the teachers they took as role models. Among the findings of this research is that teachers who have succeeded in getting through all internal conflicts with positive self-esteem, regardless of their role, aimed to raise students' self-esteem (Sari, 2007; Kuzgun, 2002). However, although teachers have gained their self-esteem and educate with positive emotions, they are likely to experience role conflict.

My research also found that having to carry out different and sometimes conflicting roles at the same time affects the identities of the teachers. According to social identity theory, teachers who are part of a group may also have in-group and out-group roles and may experience confusion between these roles. The functions that teachers have in and out of school may leave teachers in a dilemma, and they are also emotionally affected by this conflict, and as a result, they carry this situation into their professional lives (Bernardin, 2010; Ivancevich, 2010; Simsek et al., 2005; Daft, 2010; Ghorpade et al., 2011; Sabuncuoğlu, 2008; Day & Gu, 2010). It was observed that the participants, who had more than one role within the school, were stuck between what was expected of them and what they could do. Although this situation did not create a negative attitude and perception of identity in the participants, the findings suggest that it sometimes reduced classroom activity and meant that teachers needed more patience and empathy in tolerating the sensitive situations of students with ASC. It is essential at this point, that those teachers, together with their emotions and self-esteem, can adopt a professional attitude by internalising these emotions. On the one hand, while fulfilling the requirements of the profession, it can, on the other hand, be very challenging for teachers to be able to adapt their identity to these requirements.

From another perspective, my research found that as well as the difficulties of balancing their roles simultaneously, there were cases where some participants felt that one position supported the other. For instance, the roles such as assessor, observer, controller, organiser, and motivator (Simsek et al., 2005) have features supporting the teacher's identity. Although doing extra work causes teachers to experience overwhelming internal conflicts, the experiences gained by these roles, the benefits of these experiences to their professionalism and the developmental impact contribute to their teacher identities.

8.2 Contextual Factors: Reality of Working Environment

According to this research, contextual factors include the school context, school culture and ethos, the school leadership team, and the policies that have a guiding effect on all these components. These contextual factors are closely related to social identity theory and in this section, I will mainly discuss being a community member and the effect of school leadership on teacher identity in the light of social identity theory.

8.2.1 Belonging to a Teacher Community

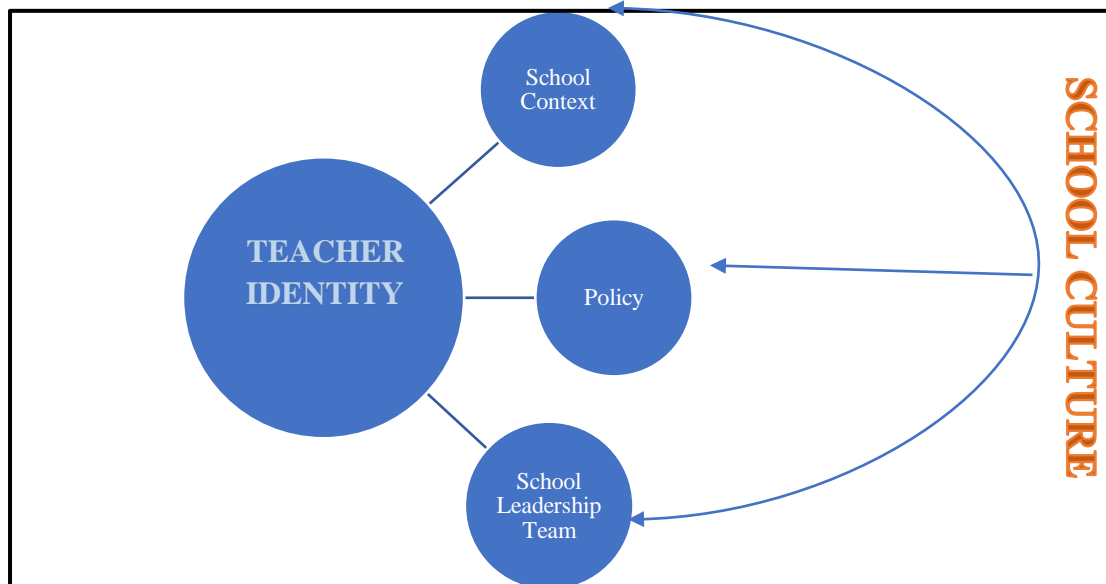


Figure 8.2 The relationship between school culture and teacher identity

As can be seen in the above figure, the components that form the contextual factors together constitute the school culture. Although this research handled the school culture as a separate factor, after analysing the data, it was seen that above factors formed the school culture. Schein (2010) emphasised this comprehensiveness while expressing that culture consists of emotions, norms, interactions, activities, expectations, assumptions, beliefs, attitudes and values, shared

by its constituent members. Many studies start from the context of the school to examine these factors that make up the school culture. The multicultural, mainstream and multilingual characteristics of schools are essential features determining how the schools will be in their theoretical and practical applications.

Thus, a large majority of the teachers spoke about the effects of the difficulties they face in working in such schools (Harris & Chapman, 2004) as a factor that enhances teachers' identity. Therefore, in a multicultural school environment, the difficulties faced by both students and teachers with the number of different languages being spoken, the fact that these schools are also inclusive and there are SEND students with additional needs, as well as other features of schools, affect teacher identity, their attitudes, and practices.

In my research, teachers also referred to these difficulties and described them as barriers, but they did not feel burnout caused by the challenges of mainstream education. When these factors, the barriers, are examined, it is revealed that most of them emphasise the school environment: cultural and environmental factors. As highlighted by both social identity theory and sociocultural learning theory, environmental factors are important in affecting the formation of the teacher's identity and the teaching and learning environment. While teachers are part of a professional group, they also become a part of the school culture. However, deficiencies in environmental factors can turn into barriers that affect the formation of effective teaching. Therefore, when discussing being a part of the teacher community, it would be more appropriate to emphasise teachers' social identities.

My research has reached findings that emphasise the effect of educational policies, which are strongly related to school culture and environmental factors on teacher attitudes. Those policies created and updated by the government and the policies prepared by the schools play a determining and guiding role in the teaching roles of the teachers. Challenges, such as teachers having to apply more than one curriculum in heterogeneous environments, can lead to the curriculum for students with ASC being not consistently implemented as planned, preventing achievement of educational goals. The participants in this study, who described themselves as policy practitioners (Grimmet et al., 2009), felt that general education policies, which are prepared by policymakers, should be aimed at reducing shortcomings in educational practices. However, my study found that policy practitioners criticised policymakers by pointing to the dense and rigid curriculum. According to the participants, education policies are created without considering the real school contexts in all dimensions, making them feel oppressed.

Whereas policies should enable the creation of curricula that guide the educators on the terms, level, and content of teaching, and should consider that the curriculum practitioners are teachers. However, when looking at education policies, there is no statement to say that teachers can act flexibly in this regard or that teachers should not be put under pressure. Whereas teachers who do not feel professionally under stress can be encouraged to teach in a more comfortable and flexible environment, taking into account the individual needs and learning time (how long they take to do a task) leading to increase in students' trust in teachers and motivation to work (Rogan & Grayson, 2003). Therefore, the policy makers' consideration of the practitioners when designing the curriculum and issuing regulations for implementation would allow them to set more realistic goals and provide the permanent exchange of information. Otherwise, the policy might be divorced from practice, leading to poor outcomes for both inclusive education and teachers' social identity.

My participants also agreed with this view that the purpose of regulations and education policies is to include policy practitioners in a "pattern of goal-directed actions" (Colebatch, 2002, p.85). In addition, there was a phrase in SEND policies of the schools that the different needs of the students should be taken into consideration. Accordingly, classroom teachers should do extra planning, and full access to the curriculum should be provided. This finding indicates that the rigid nature of general education policies was also reflected in school policies, and teachers were expected to have completed the curriculum. Teachers who do not meet the requirements of policies can feel inadequate, and this feeling reflects on their teaching and identity. Therefore, reducing the high demands expected from teachers (Lupton and Thomson, 2015) and acknowledgement of their actual teaching conditions by the government, may contribute to supporting teachers and their personal and social identities.

When we look at the educational policies of schools and the functioning of school cultures from a more critical and profound perspective, school funding is an essential aspect in the formation and continuity of all school culture factors. Having TAs and support staff in each classroom and providing sufficient resources for teachers and students can only be achieved by receiving adequate funds. With a fair distribution to schools by the government, teachers can more easily access the additional resources required in inclusive classes. O'Rourke and Houghton (2008) stated that money is an essential factor in obtaining sufficient resources for an effective IE. Despite the research findings that teachers are willing to provide effective IE by improving their knowledge and skills and therefore want to get more training, the restriction

in the funding provided to schools reduces the availability of such support for teachers. In this case, teachers work collaboratively and use the knowledge of more experienced teachers to make up for any shortcomings. Interestingly, according to social identity theory and sociocultural theory, this situation can be seen as a situation that increases the interaction between teachers and improves the school culture.

Providing adequate financial support at every stage of teaching increases the motivation of teachers to focus on the quality of education and prepare teaching methods accordingly. For this reason, the fact that schools are relieved of financial concerns enables teachers to take part in effective schools and increases the quality of education by improving working conditions. The statement in *A Guide to New Mainstream Free School Revenue Funding 2020 to 2021* (DfE, 2020, p.4) supports this view by saying, “Effective schools make the best use of resources, ensuring that every pound is used to have maximum impact for their pupils and the school.” However, this situation also shows uncertainty regarding the government’s decisions in the theory and implementation phases because meeting the expectations of teachers and schools to become an effective school and have maximum impact on students can only be achieved if schools are given sufficient funds. Moreover, teachers working for a well-funded school may feel a great sense of personal value and appreciation. Otherwise, giving excessive responsibility to teachers whilst expecting maximum effort and effect from them, with minimum support, cannot go beyond being a utopian expectation. Such a situation may cause teachers to negatively perceive their social identities due to environmental factors and experience burnout caused by feelings of fatigue and tiredness (Gal et al., 2010).

On the other hand, this research showed that these difficulties and features of schools added an indispensable and determining element to teachers' identities not to give up. Therefore, they continued to support each student's education. This situation reinforces the view that they strongly identify with the school culture and that this belief influences their practices (Ball, 2012; Wilkins et al., 2012; Mulki et al., 2008). Being a part of the school culture and shaping identity by this culture is a formation highlighted in social identity theory. According to SIT, different schools have different cultures, and this situation causes them to act by these differences in all factors that make up the school culture. Thus, both schools where the study was conducted had an individual school culture, although they were in the same academy trust and had similar missions and visions. They both carried the beliefs, values and norms of teachers, students, administrators, other staff and even families in their own school culture

(Sisman 2011; Hargreaves et al. 2007; Schein 2010). I can say that the multicultural features that exist due to the nature of the school contexts have guided the culture and ethos of the schools. Behaviours, such as respecting and accepting differences, are indicative of a positive culture and ethos. Encouraging students to work collaboratively by increasing the motivation of teachers and students through a positive school ethos and culture is a crucial factor in supporting students [socially] in their education process (Barnett & McCormick 2004; Celik 2011).

8.2.2 The Leadership Team from the Eyes of Teachers

My research highlighted that the school leadership team played a role in shaping the school culture positively or negatively, affecting the teacher's identity. The expectation of a headteacher to have the vision and guide their teaching practices in line with this vision motivates the teachers and direction to classroom practices. According to Devos et al. (2007), the school principal is the most important educational component that increases teachers' motivation to work in a well-equipped classroom. In other words, the effect of the school leadership team's organisation of the school environment on all its components of the identity of teacher and student success (Leithwood et al., 2006; Devos et al., 2007; Mulki et al., 2008) is apparent.

One of the most striking findings of this study is that the participants of both schools attributed different meanings to the role of the school principal and had different expectations from them. Participants in one school described the headteacher as supportive rather than guiding them in the teaching process. In contrast, the school principal was seen as the most critical factor in a successful school. The participants, who described the headteacher as supportive, stated that they created a successful and positive school culture when they were encouraged to work collaboratively. The school management team was not a separate concept but part of the education team. Indeed, relations and cooperation with the school administration can create a positive school atmosphere. Of course, in such an environment built under social constructivist principles, it is not surprising that teacher quality increases and their students' performance increase accordingly (Devos et al., 2007; Toremén, 2004).

On the other hand, the participants who viewed the school principal as holding a more vital position argued that the teacher and student relationship could only be guided most accurately by an influential school management team. Participants who thought that the previous school administration did not organise them well saw the headteacher as the leader of the educational

process. With the change of school management, the motivation of teachers to use effective teaching techniques to support students' learning increased students' academic success, thus making the "good" Ofsted report results "outstanding". Such differences in motivation and teaching quality in the same school and staff indicated the strong effect of school principal-teacher interaction on the teacher identity and the teaching process. The difference between the expectations of the participants of both schools can be related to the general framework of the teachers' past experiences and the school culture. While there is a supportive and collaborative school atmosphere in one school, the other is dominated by a school culture that tends to be influenced by previous experiences of poor management.

Similar findings were encountered in previous studies, which drew attention to the importance of school leadership in an effective educational process (Williams, 2010), and the effects of principal behaviour on teachers' motivation (Day & Gu, 2010), teaching practices, and student success (Toremen, 2004; Leithwood et al., 2006) were emphasised. However, these findings do not coincide with the results of Flores & Day (2006), who examined the effects of school administration on teacher identity. Flores and Day argue that teachers adapt to the school culture and lose their creative principles over time, which is why their practices were negatively affected by this situation and "became less progressive and innovative" (2006, p.229).

The participants of this study emphasised a circular influence between the participants and the key factors of education process (students, parents and staff) by internalising the school culture. They made adaptations by the student profile, rather than having an unconditional acceptance of the school culture and the commands of the school administration. In this case, the acceptance and dullness that Flores and Day (2006, p.228) called "from creativity to compliance" was an uncommon finding among the participants of this study. This difference between the two similar studies may be due to the difference in the educational experience of the participants, the school culture and the identity of the educational members that constitute it.

To sum up, environmental factors include components that are compatible with the idea that teachers should be part of a group and have the characteristics of that group, as predicted by social identity theory. However, this does not mean that teachers are entirely assimilated within the teacher community by subjugating their own identity into the background. Environmental factors enable teachers to take part in the teacher community, on the other hand, they affect their attitudes towards their profession, students and teachers. According to a common belief,

social identity theory requires people to believe that their career is privileged from other occupations. Still, it also includes questioning and criticism until it reaches the stage of full acceptance. Teachers who can criticise the school culture or the school administration, and at the same time internalise the values of this community with their selves, can come out of this process by completing their own identities. School culture is a concept that guides the educational process on the one hand and shapes all the components of this process on the other. Therefore, the increase in the working motivation of teachers by internalising positive school cultures that are collaborative, supportive, open to communication and prioritising ethical values, prepares the ground for a teacher identity with a high self-perception and therefore they are empowered to provide quality education.

8.3 Professional Factors: Traces of the Professional Components of Teacher Identity

In research about the identity of teachers, the concept of professional identity is frequently encountered. While teacher identity is a social identity for the occupational group of which it is a member, it also carries the characteristic of a professional identity regarding the competencies. Accordingly, teacher identity refers to a set of qualifications attributed to the teaching profession by individuals inside and outside the profession (Sachs, 2001). These qualities are also influential in teachers' job, performance, professional development, and ability to manage educational changes and reflect them in teaching practice. Thus, professional components that emphasise the content of teacher identity for education and training focus on teachers' field and pedagogical knowledge, experience, presence in the organisational structure and even the way they use assessment methods (Akkerman & Meijer, 2011). This study pointed out the five professional factors affecting and shaping their teacher identities and directing their teaching practices:

- Pedagogical Content Knowledge
- Collaboration
- Teaching experience
- Curriculum
- Assessment.

The effort to keep the interests and needs of the students in the foreground combines all the factors mentioned above at one point. My research findings revealed that teachers combined their content and evaluation knowledge with pedagogical knowledge and turned

them into practice. Therefore, the above professional factors will be discussed under the concept of pedagogical content knowledge. However, to create a more detailed understanding, academic knowledge and assessment information will be discussed under separate headings. During these discussions, the term ‘trace’ will emphasise the effects of educational and assessment methods on teacher identity and students' learning.

8.3.1 Traces of Educational Methods

With growing numbers of mainstream pupils identified as being with ASC, there is increased interest in how education is delivered to these students. A critical look at the English education system shows that it is extremely rare for a school with ASC pupils to adopt and follow only one approach or intervention. Schools often adopt an eclectic approach, and practice is influenced and developed due to the experience and expertise of staff, visiting professionals, such as speech and language therapists, educational and clinical psychologists, paediatricians, occupational therapists and physiotherapists (Davis et al., 2004). Data collected on the education and support methods used in support of students with ASC in general education classes showed that each student has different characteristics. Therefore, a single process cannot be applied to all. This practice is a generalisable judgment for both other SEND students and neurotypical students since, as the underlying philosophy in the UK, every student is considered an individual in education. SEND students and neurotypical students need a teaching method that is suitable for them since they have different abilities and different learning needs. Therefore, considering both the complex characteristics of ASC, and other types of disabilities that can be experienced in addition to ASC, the same method is not expected to be effective, even in similar students also identified with special needs as with those with ASC. According to the sociocultural learning approach, knowledge is individual and socially structured (Vygotsky, 1978). In other words, if the teaching methods prepared by considering the students' individuality are used in a social learning environment, the knowledge can be constructed permanently. For this reason, social environments and school communities can be used as a critical part of the education of students with ASC.

The figure below shows the educational methods teachers use to teach and support students with ASC, linking with the teacher identity and possible challenges.

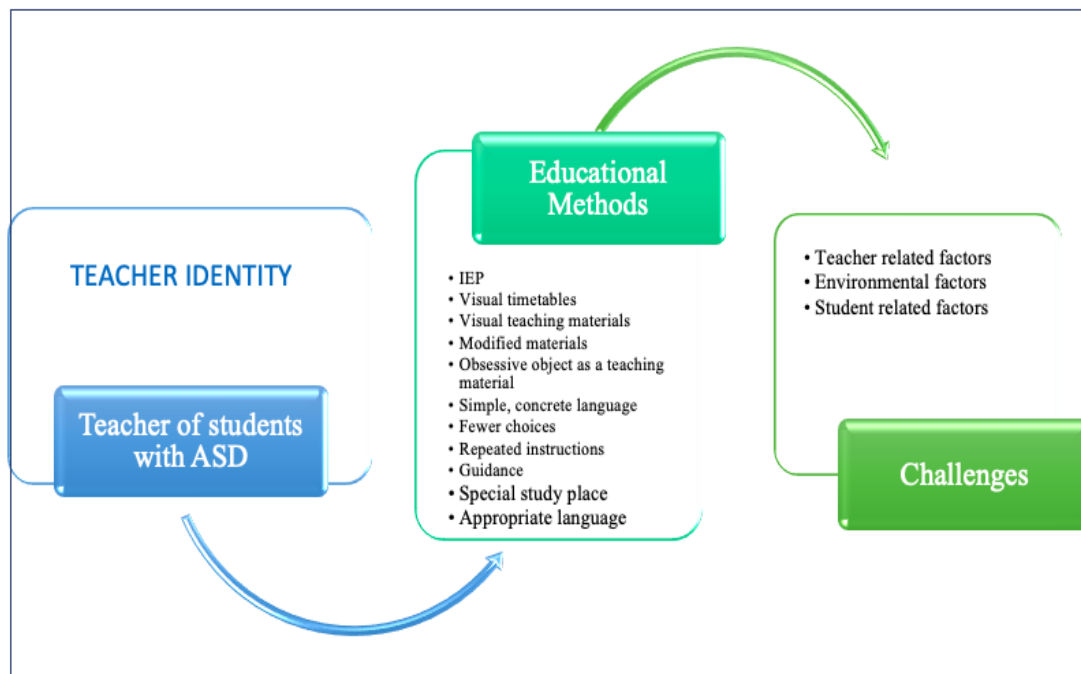


Figure 8.3 The relationship between the education of students with ASC and teacher identity

The contents of these methods and how often they are used have been previously explained in detail (see Chapter 7). However, the main issue that needs to be discussed here is how these methods are used in accordance with the needs of the students and what the roles of teachers are in this process. The existence of a critical theory, sociocultural theory, here helps to understand the needs of the students and the realities behind the approaches of teachers. According to sociocultural learning theory, teaching is a part of a multi-faceted process, just like learning, and teaching methods make knowledge permanent when supported by the social environment. The figure below is crucial, as it shows which components of learning and teaching come together.

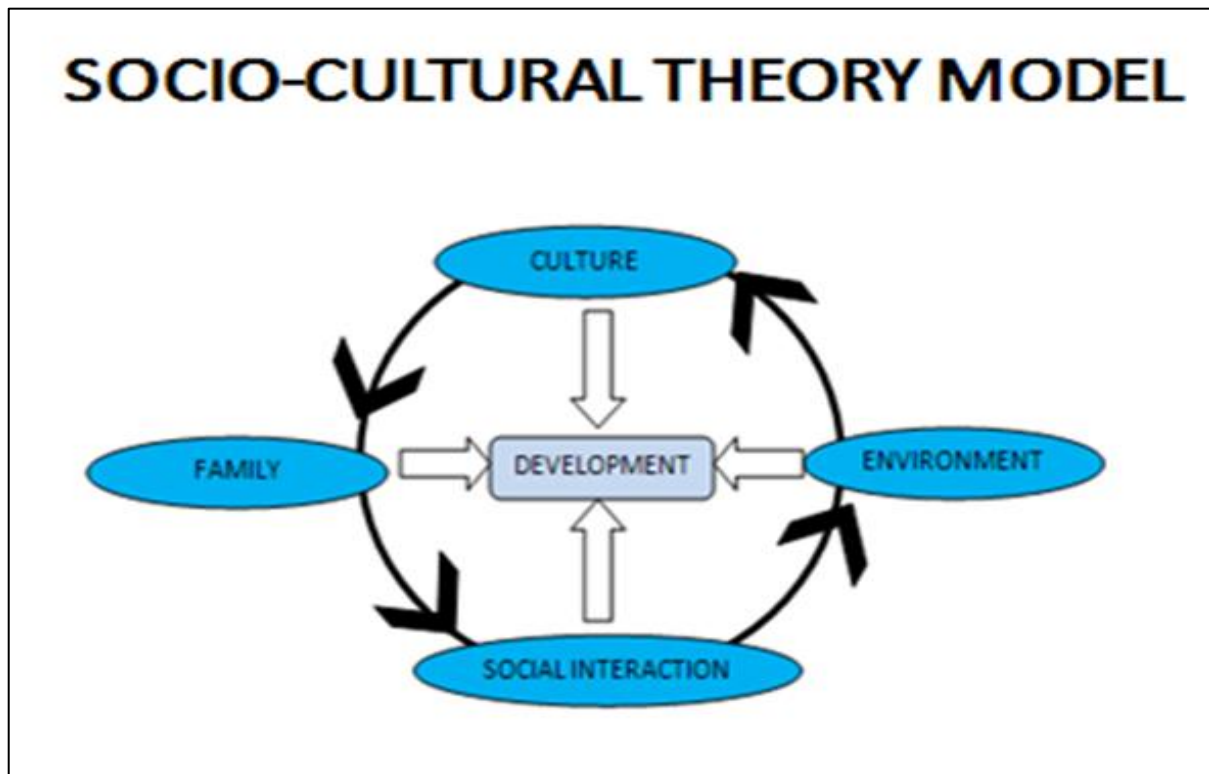


Figure 8.4 Components of socio-cultural theory model (Vygotsky,1978)

When looking at this model, it is seen that learning and development accordingly are formed by contributions from culture, family, social interaction and environmental components. Although teachers are not considered a separate component at first glance, it is possible to see the roles and traces of teachers in all four elements. It is impossible to exclude them from this process, as teachers guide effective learning and development in social environments, including family and culture. Teaching can become effective when the teacher can determine the needs of students in this critical position, by considering the above components within the framework of the roles of their own social identity.

Pedagogical Content Knowledge

My research found that, teachers sometimes consciously and sometimes spontaneously formed practices that addressed the learning needs of students and combined their content knowledge with pedagogical methods in the teaching process. Of course, all these factors that shape teachers' professional identities are also influential in determining and using available teaching methods. However, PCK has an essential place in forming identities and the effective presentation of methodologies used. Therefore, it is crucial to consider how teachers present their information according to the student's needs and level, rather than how much they know (Pompea & Walker, 2017). As Palincsar (1998, p.368) agrees that “social constructivism offer

potentially powerful alternatives to traditional measurement (teaching) procedures to the extent that they reveal not only what has been learned but also how and why learning has occurred”.

In this research, teachers sometimes supported the learning process of students with ASC by explaining the formation of sentences within topics of interest, e.g., trains, sometimes by defining mathematical operations with cups of different colours, establishing short and understandable sentences, and visualising the questions. Despite the inclusion of participants who did not know that their practice was related to PCK, the data showed that all teachers had insights about PCK in making adaptations for students with ASC. Even the participants with insufficient knowledge of the content made adaptations to the needs and interests of the student while teaching strengthened this insight. These integrated studies of the participants' teaching process were perceived as an indication of the teachers' strong belief in education (Yeo, 2008; Segall, 2004).

The findings of this research also paid attention to the methods used in the education of students with ASC in using the objects according to student interest. The excessive attachment to a particular object seen in many students with ASC can be used as a resource to support education in the classroom environment (Thabtah & Peebles, 2019; Adams et al., 2018). However, what needs to be considered is not using the object for reward or punishment but supporting the teaching process by including it in teaching. I believe that only teachers who are secure in PCK in classroom activities can do this. In light of the data obtained from the research, I can say that some teachers aim to change behaviour by using a tablet, which I believe can be used very effectively in the education of students with ASC, rather than just for reward or punishment. However, considering their interest in technology, students' interests with ASC can be kept alive, and their learning can be supported with educational games or lessons on technological devices. In other words, the findings of this research show that teachers used student interests to encourage engagement and learning and used them as rewards.

In some studies (Reagan, 2012; Valencia et al., 2019), it was determined that students with ASC were included in education with the help of technology. I must say that I support these initiatives in the education of students with ASC. For instance, an example can be drawn from the difficulties experienced by students with ASC in writing. Computers and tablets can be used for students like Hasan, who find it challenging to write and therefore write poorly and slowly. They can learn by having fun with using engaging software in the classroom, thus blending technology with curriculum and transforming educational opportunities into equality.

However, in the classrooms observed, the students with ASC could not take advantage of this opportunity as the teachers transformed the use of tablets into an object for motivation after completing work through other means. Examples like this underline the importance of teachers having sufficient knowledge about the disability and individual needs of the students they teach. This study emphasised the importance of determining students' individual needs for effective education, especially by addressing this issue.

Challenges

The current study also found that mainstream teachers of students with ASC have difficulties using PCK in education processes. In addition to some barriers brought by teachers' limited knowledge and experiences (Segall, 2004), factors such as in-service training, support systems, characteristics of ASC and the level of students with ASC (Darling-Hammond et al., 2020) and attitudes formed by teachers affected by these factors (Flewa & Khan, 2015), can be shown among the problems faced in the education of students with ASC. Findings from the current study collected these factors under three headings:

- Teacher related factors (knowledge, experience, training, preparation and emotion)
- Environmental factors (classroom environment, supportive sources)
- Student related factors (behaviour, communication problems, ASC level).

When teachers do not have sufficient information about some behaviour and communication problems that arise due to the characteristic structure of ASC, they may be weak in developing appropriate methods for these students. Although they have gained experience in dealing with some student-related problems and developing techniques that can support the education of students with ASC, they still need more support and education. The skills of understanding students' needs, determining the ways of learning; developing and applying appropriate methods can be a result of teachers' identities from their own experiences and their social identities required by the teaching profession and the education and support in this process.

My research found that the staff did not feel sufficiently competent in determining students' individual needs with ASC and making appropriate plans. Even the new graduate teachers have difficulty adapting suitable materials for these students in the actual classroom environment, although their knowledge is unique. The underlying reason for this might stem from the difference between "inclusion rhetoric" and "class reality" (Humphrey & Lewis 2008, p. 138) because, as many staff said, *"the real classroom environment is different and more complex*

than seen from outside". Teachers' limited understanding of the needs of children with ASC has been associated with students' academic failure and increasing school exclusion (Emam & Farrell 2009; Jindal-Snape et al., 2005). The results of Jindal-Snape et al.'s (2005) research with parents showed that families think that teacher knowledge is necessary to accurately determine children's learning and assessment needs. However, the absence of any regulation that ensures the qualifications and expertise of teachers working in mainstream schools regarding providing education to students with ASC prevents teachers from being fully equipped in the use of content knowledge. In this case, it would not be wrong to say that teachers try to address their limited knowledge with external support and training. This finding is similar to the results of The NASUWT (National Association of Schoolmasters Union of Women Teachers) survey conducted in 2012. According to this research, over 70% of mainstream teachers in the UK stated that they did not receive sufficient training about teaching SEND students in mainstream classes in their teacher education, so they were not comfortable when doing so.

Teachers' viewpoints on their level of knowledge and its impact on in-class practice might be more complex when it comes to students with ASC because while teachers teach many different types of disability groups in the inclusive class, the difficulties experienced by students with ASC in social communication, turn into additional barriers. This situation forces teachers to have to overcome the existing communication barrier in an effective way. However, teachers who have limited knowledge about dealing with these problems in students with ASC have problems understanding, communicating, and regulating their behaviour accordingly (Emam & Farrell, 2009; Emerson, 2016; McGregor & Campbell, 2001; Fleva & Khan, 2015).

In my research, it was concluded that the teachers who were most comfortable in dealing with these problems were mostly experienced teachers who had worked with students with ASC before. Teachers who were less experienced or new to the profession received support from experienced teachers. This collaboration has strengthened the finding that experience and knowledge work hand in hand in teaching students with ASC in mainstream classes (Segall, 2004; Fleva & Khan, 2015). This result is significant because the findings of previous studies indicated the opposite, and they concluded that teachers felt lonely in this process (Batu, 2013). The reason behind such a finding, being incompatible with many studies in the literature, is entirely related to the culture and ethos of the schools where the research was conducted. Even schools that have adopted similar policies, or have similar practices make them different

through the culture and ethical values they have created for themselves. It is no coincidence that teachers, who are a part of the school culture, bear the traces of that culture, and implement appropriate practices. The social identities of teachers in a school culture, where cooperation and support are prioritised, are formed in accordance with such an approach. Thus, adopting and encouraging a system that supports teachers to work together increases teachers' motivation (ibid).

Collaboration

As emphasised by social identity theory, it is possible that teachers, who are a component of the school culture, bear traces of this culture. Research findings have shown that both schools in the study have a collaborative cultural structure. The study participants collaborated with four groups in the teachers' educational process for students with ASC: parents, school leaders, neurotypical students and other teachers.

Firstly, cooperation with families is essential, especially to understand students' characteristics, habits and individual needs. Families' guidance in introducing students and informing teachers about any issues beforehand makes teachers feel more comfortable and confident in making preparations (Hargreaves, 2019). It would not be surprising that teachers who have sufficient knowledge about the habits, attachments, interests, fears and concerns of a student with ASC are more willing and influential in working with such a student. The assistance and cooperation that families provide to teachers in this process enable teachers to positively perceive identity in their approach to teaching (Adams et al., 2016; Bektas & Kucuktur, 2020).

In this study, it was also concluded that the relationships and cooperation of teachers with each other affect the teacher's identity. As mentioned in the previous section, less experienced teachers needed support in classroom management, pedagogy and dealing with problems, although their field knowledge was very new and up to date. It was found that the participants with more experience in the teaching profession were comfortable with these issues but needed support for new methods and changing theoretical knowledge. In other words, experienced and inexperienced teachers have problems with different issues; thus, both need help (Williams, 2010; Karayel, 2019; Wolff et al., 2017). Therefore, inexperienced participants of the study also contributed to the development of teacher identities while learning to use in-class teaching methods effectively and purposefully under the guidance of more experienced teachers. Thus, this guided support contributed to the formation of a higher self-confidence and better-equipped identity. This is precisely what Flores and Day (2006) meant when describing

experiences that play a crucial role in the formation, harm, or regeneration of TI. It increases the motivation of teachers to seek help, have solidarity and work together, and turns their collaboration into a school mission. Increasing teachers' self-efficacy supported by colleagues, reduces their burden and improves their teaching quality (Hattie, 2015; Williams, 2010). According to Johnson (2013, p.343), “important emotional and psychological benefits associated with working closely with colleagues in teams”.

The findings of this study indicated that teachers could be working in collaboration with neurotypical students in the classroom while teaching students with ASC. In general, it is seen that the concept of cooperation is limited between teacher-parent and school administration in most research (Lasky, 2005; Makhwathna et al., 2017). However, in this study, it was concluded that cooperation with the students improved teachers' professional identities, their skill in giving responsibility to students increased. Thus, the students' development was supported by the duties given to them. Student-teacher cooperation, implemented in different ways in both schools, played a shaping role in teachers' in-class activities. Accordingly, many arrangements, such as focusing on group studies, encouraging students with ASC, under the support of their peers, to be active in these studies, or giving weight to social communication activities, were the products of cooperation with neurotypical students. One application that attracts my attention in these findings and that I would like to especially mention is the helper students determined to support students with ASC. These students took care of the students with ASC during the break, helping them spend their time in the garden, dining hall, or school corridors without being harmed.

This is a helpful practice to avoid students with ASC being alone during the TAs mealtimes and rest periods and protected from possible dangers, thus, giving TAs the opportunity for a break. In addition, according to the nature of mainstream education and principles of sociocultural learning theory, it supports the idea that students with ASC should be in contact with different students and learn within society. In addition, this practice allows neurotypical students to accept SEND students without discrimination. Moreover, “developing peer mentor schemes which involve students with ASC as well as neurotypical mentors will also enhance the chances for these students to be included in the academic and social context” (Tolikas & Perepa, 2018, p.36). On the other hand, it was unclear whether neurotypical students were ready to take on this responsibility or how they were prepared to be ready. As I mentioned in Chapter 5, these students are part of the peer support programme, but they are also quite young, and

they might not want to spend all their time with the same person. Moreover, from the perspective of students with ASC, who are sensitive to their routines, the fact that students are changing every two weeks could be problematic for them. As a result, getting used to a new student could create challenges for these students and build in the opportunity for them to develop flexibility.

Summary

As a result, solidarity and cooperation characteristics in school cultures help teachers feel more comfortable and have a positive sense of self. According to Graven (2005), teachers' selves are an essential part of their identity, and positive self-perception brings about the formation of a positive identity. The findings of my study looked at the importance of the school culture by considering the factors of cooperation and solidarity among the staff and found that the collaboration might help forge feelings of being a member of the school culture and a social group for teachers. The fact that cooperation and solidarity become a part of the school culture is one of the essential classrooms and school environment features, also highlighted by the social constructivist approach (Vygotsky, 1978). Thus, teachers and students can work in a positive teaching and learning environment by getting the necessary support, which causes them to have high self-perception.

Teachers who teach students with ASC in mainstream classes and support them in the learning process also bring their professional teacher identities to the education. However, most of the previous studies (Emam & Farrell, 2009; Rafferty & Griffin, 2005; Adams et al., 2018) do not support the findings of this study in that teachers revealed that the difficulties faced are an influential factor in strengthening their professional identities and being more effective. These previous studies argue that teachers are prejudiced against students with ASC due to these difficulties and low teaching motivation. That is why they have a negative perception of the education of students with ASC in mainstream classes. However, as a result of this research, it was found that teachers adopt a very positive and supportive approach in this regard. The fact that TI can be accommodated with abilities, such as patience, understanding, and empathy that can educate students with differing characteristics, and that teachers can apply their professional actions, accordingly, is the main reason that the participants have led the research to such a different finding: one that is very important in terms of gaining a new understanding of the literature.

Within the scope of this study, students with ASC are educated in mainstream classes through the educators considering certain factors and most of the methods applied are determined according to students' needs and problems. However, the education environment is an IE class. Some learning barriers that develop due to ASC cause some disruption to the intended education process; teachers' efforts to cope with all these factors and support students with ASC play a role in shaping a teacher's identity. Some teachers see these factors strictly as barriers, while others call them steppingstones in their development. The view of Costley et al. (2016) that students who are supported in academic, social and behavioural dimensions can cope with existing problems also highlighted the importance of teachers' perspectives and identity. Having a teacher who understands, accepts and supports them is the beginning of a step forward for students with ASC.

8.3.2 Traces of Formative Assessment

In terms of its general structure, this section was built on learning the teachers' views about formative assessment and discussing how they use these methods in the education of students with ASC. In this way, it will be possible to develop a different perspective on using an assessment form as a teaching method by explaining how autistic students respond to these methods. The figure below shows the FA usage process by explaining this relationship between FA, TI, and students with ASC based on social identity theory and sociocultural learning theory.

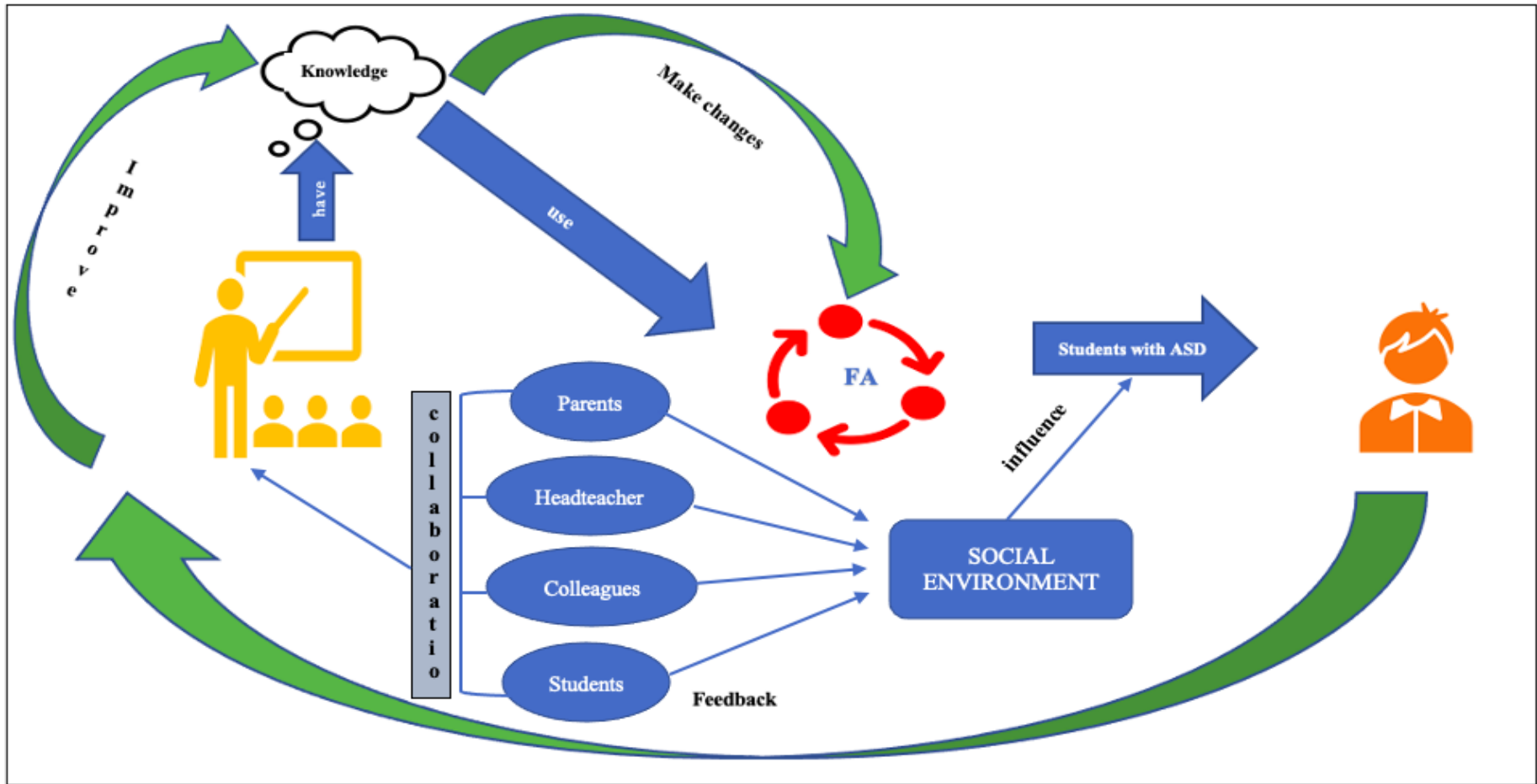


Figure 8.5 Formative assessment usage process

According to this diagrammatic representation, formative assessment is a form of assessment that can be maintained in a social environment for teachers and students in interaction with the components that make up this environment. Teachers' presentation of the information they have by adapting it according to the needs of the students and working in cooperation with the social environment in this process supports the learning of autistic students. Teachers can see the progress of the process with the feedback they receive from the students and reshape their practices according to this feedback. In this process, where teachers create their social identities in cooperation, students structure their learning by interacting with the same social environment in accordance with the aims of social learning theory. The details of this entire AfL process will be discussed in the following sections and will become more transparent and more understandable.

Knowledge of formative assessment

My study found that the teachers, who felt that the correct planning guided the delivery of their curriculum, also noted the impact of this planning on the assessment methods they chose. Assessment methods selected according to the unrushed curriculum and course content may likewise be flexible and purposeful. In this research, the concept of general assessment is associated with summative assessment (SA), which is believed to provide the understanding of the overall performance of students and to evaluate more than one subject for all students at the same time. Assessing all students with a standard assessment method at the end of the term or subject creates an opportunity to implement the curriculum while saving teachers' time. However, the great majority of participants agreed that SA does not measure the students' learning process but their exam results.

Teachers, whose achievements were measured by SA in their own student lives, emphasised that this assessment method also caused many important details about them not to be noticed because it did not enable the whole picture of students' progress to be seen. This finding stands out in the evaluation literature because it seems unjust for teachers who witness a student's entire learning performance during the AFL process to then evaluate them only according to their performance on a specific day at a certain time and to set new goals based on this (Harlen et al., 2002). Although research considers SA to be the most accurate type of assessment that can be used in a fast-moving age (Adediwura, 2012; CERI, 2008), I strongly reject this and claim that this form of assessment alone will not be effective. Black and William (2003, 2004),

two of the most experienced researchers in AFL, support this claim by stating that SA could be used together with FA to become a more effective form of assessment.

This research showed that since the experience, training, related knowledge and professional identities of each of the teachers differed, there are also differences in their understanding and definition of FA. However, these definitions of FA made by the staff within the framework of 4 basic concepts showed that they have common views on this issue. Therefore, FA is ‘in-process’ (Black & William, 2003), ‘continuous learning’ (William & Leahy, 2015), ‘individual learning/assessment’ (Wilkinson & Twist, 2010), and ‘propelling feedback’ (McMillan, 2014).

The results of this research and previous research show that teachers treat FA as an ongoing process that considers the students' needs in the process and gives them instant feedback. Costley et al. (2014) stated an opinion in line with these findings, saying that better student results can be achieved with systematic assessment and continuous improvement processes. Although the teachers made a valid definition of FA, it was surprising that the TAs had difficulty producing a definition because of all of the TAs used at least three different FA methods in the classroom. This indicates that they could use FA spontaneously without theoretical knowledge and through instinct. However, since previous studies (Husain, 2013; Bennett, 2015) have generally focused on teachers' understanding of FA, there was no study specifically examining the knowledge status of TAs on this subject. Therefore, this research carries the value of gaining a different perspective from that of the literature in this respect.

When the assessment policies of the schools are examined, it is understood why the TAs lack knowledge on this subject. There is a lack of a directive that encourages and guides teachers in the use of FA methods. Instead, expectations for the formal recording of student progress affected the frequency and variability of the participants in using FA in the AfL process. On the other hand, the fact that the participants, who have been TAs for many years, have not developed themselves academically, emphasised the lack of in-service training on this issue. The problems faced by teachers to make good their shortcomings appear as a powerful factor that can reduce the efficiency of the evaluation process and the teaching. As Black and William (1998; 2003) state, teacher training is a significant part of the successful use of FA.

The participants of the study mainly referred to the ability of FA to enable individual learning showing that an assessment style can also be used to support learning by making adaptations. Indeed, determining how much students can benefit from the personal evaluation process and

how active they can be during the process, which is one of the points that William and Leahy (2015) draw attention to in the definition of FA, has been a factor that distinguishes FA from other types of evaluation. The fact that the participants prioritised the individual needs of the students (Clarke, 2008; Black et al. 2002; Harlen, 2003) and preferred parallel methods (Bell and Cowie, 2001) suggests that they saw students as an active part of the learning process (Brookhart, 2001; ARG, 2002).

Formative assessment methods as a meaning of teaching

This research determined that the following techniques were used to evaluate students with ASC. They are expected to be active in the learning process and are therefore supported in many ways.

- Verbal feedback
- Written feedback
- Body language
- Self-assessment and peer assessment
- Questioning
- Modelling
- Team discussion
- Rewards
- Observation
- FA charts
- Post-it notes

Seeing the use of various methods was a welcome finding, as formative assessment is a flexible form of assessment that allows the use of many different ways. However, another result indicated that the staff used similar methods of FA for students with ASC and neurotypical students.

At first sight, it appears that this situation is in accordance with the principle of educational equality but is unfair when taken from a more subjective perspective. Considering the differences in students' perceptions and learning with ASC, it is a surprising finding that they were evaluated with a similar method to other students. While it is a principle emphasised by the English education system that every student has individual ways of learning, and methods

appropriate to their needs should be used, teachers' ignoring this made me question whether there was any inconsistency between what the teachers said and what they did. However, as a result of detailed analysis of the data, it was understood that although the FA methods used by most of the participants were the same, they argued that the ways of using these methods (i.e., questioning, self-assessment, peer assessment, verbal and written feedback) were different for students with ASC and neurotypical students and enabled this finding to take on a different perspective.

For example, peer assessment and self-assessment methods, which were included in the most effective FA methods by Hodgson and Pyle (2010), were also used for neurotypical students and students with ASC. Still, students with ASC generally performed this more passively, under the guidance and assistance of the teacher. On the other hand, neurotypical students were assessed more individually, simply following instructions set out to be fit for purpose. Both student groups have different needs, and the skills of students with ASC to perceive details, criticise and evaluate the events are weaker (Aidonopoulou-Read, 2017) causing the same methods to be implemented with different approaches. In parallel with this, integrating pedagogical information into content knowledge and presenting it in accordance with the needs of the students are applied similarly in the assessment process. For example, verbal feedback, which the participants mostly cited, was used in a short, clear, straightforward and understandable way (Brookhart, 2013) in studies conducted with students with ASC, while it was used in a more complex way for neurotypical students. Another example is that written feedback is prepared in more detail for neurotypical students, while short sentences or more visuals are used with students with ASC. In both cases, it was concluded that the same assessment method was used in accordance with the needs of different student groups.

While some of the methods (rewards, charts) used by the participants were influenced by behaviourism (Aidonopoulou-Read, 2017), some of them were methods based on the constructivist approach and aimed at the students' learning by structuring the information (questioning, self and peer assessment, team discussion). In particular, there may be questions, such as how far the methods are formed within the framework of the behavioural approach compatible with the AFL process and whether FA serves the purpose. However, some of the participants used these methods to support the constructivist approach and not just for reward or punishment. The participants who did not use such methods, only aiming to change behaviour rather than to form knowledge in children with ASC, call it FA. Still, these methods

are outside of this definition because they do not construct knowledge. Although FA is a very comprehensive type of evaluation (Black & Wiliam, 1998), it is a part of the AfL process that supports the learning process and whose limitations are drawn within this framework.

Teachers used several of these methods daily to support students in constructing knowledge in this process. As long as students were willing to interact with their teachers, they were mostly successful. The critical point in this interaction is the students' willingness because even the best quality teaching methods cannot be effective if they do not meet the interests and needs of the student. As I mentioned earlier in this section, teachers should be able to master PCK by combining their pedagogical knowledge with content knowledge. Remarkably, although the teachers were willing to use an assessment type that includes many different methods, such as FA, they had conflicts about learning, adapting and applying all techniques. The communication problems of students with ASC either did not allow many methods to be used (Ruiz-Primo, 2011) or required many adaptations, which was the main reason for teachers' conflicts within them.

Student responses to feedback

The findings of this research drew attention to the importance of feedback and responses from students in determining how effective the methods they use are and focused on five types of student feedback and responses such as verbal responses, written responses, body language (Hodgson & Pyle, 2010), symbols and behaviour (Porter, 2008).

Among these kinds of feedback, verbal responses and body language were most mentioned by teachers. The fact that all of the students were verbal and therefore able to give a verbal response allowed teachers to perform the applied FA methods in mutual interaction. However, the fact that the students are verbal does not mean that they can use language fully (Ruiz-Primo, 2011); the main feedback was taken through body language. The participants used the observation technique to understand it. That the observation technique is a method that can be used both practically and continuously and does not require prior preparation, may have caused teachers to use this method frequently, but the point to be aware of is how well the body language of the students is understood and interpreted by the teachers. As Ruiz-Primo (2011) stated, body language is an important language that can be used as informal FA, and it is very effective when interpreted correctly. For instance, Alison, a teacher with a family history of ASC, felt more confident in this matter as she had long become familiar with many aspects of body language, making it easier to communicate with her students. Some informal and non-

verbal communication styles that are not understandable to everyone can be highlighted by the correct interpretation and attention of experienced, knowledgeable, and well-equipped teachers in working with ASC. Previous studies highlighting the importance of students' non-verbal communications (Kana, 2015), and body language interactions in teacher-student communication (Kroncke et al., 2016), also support this finding.

On the other hand, reading the intentions or non-verbal behaviour may be insufficient to claim that the students do these behaviours deliberately. Although non-verbal behaviours can be used as FA (Ruiz-Primo, 2011), it is not possible to make any comment on whether each behaviour is deliberate feedback or not. Thus, teachers should distinguish students' responses from their feedback because the term *feedback* refers to the purpose, and as a result, behaviours are expected to change. In contrast, the verbal answer is a simple statement to respond to a previous statement. So, are teachers aware that when communicating with students with ASC, they only respond or do not give feedback? For example, Thomas sometimes makes sounds during the lesson, when he tries to explain to the teachers during the learning process. Are these vocalisations perceived by the teachers as a sign of willingness or indifference towards the lesson? However, this type of behaviour may be uncontrollable, and sometimes it has no connection with the task. In this situation, since this type of behaviour may be involuntary and arising from the characteristic features of ASC, teachers should not see it as feedback received from students during the teaching process (Aidonopoulou-Read, 2017).

On the other hand, facial expressions are also part of the communication process between teachers and students in this research. A relaxed, smiling face and ability to make eye contact, suggests being interested in the lesson, while an indifferent facial expression, with avoidance of eye contact, was generally considered as a sign that the student did not want to attend the class. Such expressions are known to be deliberate and purposeful when considering neurotypical students, and it is usually perceived as feedback. However, whether students' facial expressions with ASC are deliberate or not is unknown (ibid). Indeed, it must be mentioned important research about this issue. In Dawood, Turner and Perepa's (2018) study to capture and extract the affective-cognitive states of AS students in real time, a new emotional model was created, which was expanded without the need for wearable devices. "The prominent role of facial expressions in emotion recognition integrated with eye gaze and head motion, was a rich source of information to capture affect and cognition states especially in subjects with verbal impairment" in this model (ibid, p.67032). This kind of technology can be

an advantage in the education of ASC students both in terms of cost and ease of use and can be used to understand the effect of FA methods according to student responses.

In the circumstances that the use of this technology is not possible, one thing the teacher can do is prevent the student from falling into passivity by deliberately and meaningfully handling all forms of communication to encourage learning and enable FA. Leahy and Wiliam's (2015) assumption that FA can be modified and used as a corrective strategy to assist student learning, supports my idea that FA does not always have to aim to improve learning, but more importantly, is for adapting strategies to support learning. While teachers support students' learning, they establish meaningful relationships with them and try to include them in the process by applying different methods. However, in this process, they certainly do not have a goal of advancement; on the contrary, they aim to make the student a part of the education. On the other hand, teachers who aim to improve the students' learning are certainly eager to see progress at the end of the support given to the student and of all efforts. However, when it comes to students with ASC, it may not be possible to witness their progress all the time. For these reasons, I can say that supporting learning is more important than improving education.

Another important finding from the research is that teachers did not record the students' verbal and body language feedback (neurotypical students and students with ASC), but instead used only written feedback as evidence of the learning process. This may be an acceptable practice for neurotypical students, because the feedback from these students in the FA process was recorded, and the stages of the learning process were followed in this way. Although it is time-consuming for all students and requires more work, considering the low number of students with ASC and their shortcomings in their written feedback, it is important to record their verbal and body language feedback, because evidence from student performance and feedback can be used to improve learning (Popham, 2006). However, the act of recording is not a FA method on its own in the education of students with ASC, unless it is used to share information about students' feedback and to shape planning accordingly.

However, when looking at the teacher dimension of the assessment process, it is seen that they often had to interpret the feedback and responses received from the students and then make adaptations accordingly, and they became the leader in the FA process. Although this does not overlap with the general objectives of the AFL process, it can be welcomed when it comes to students with ASC. On the other hand, it was found in this research that when the participants were working with neurotypical students, they were only directing, and monitoring roles and

the students were very active both during the assessment and learning process. Thus, my study suggests that students' proactive role in the FA process should be supported by their teachers and that students should structure knowledge (Hansen, 2020).

However, the results of this study also reveal that teachers experience some problems such as communication, limited time, workload/effort, environment, student-based and teacher-based difficulties in using some FA methods when students with ASC are concerned. Despite these problems, teachers mentioned that there are a large number of FA methods, and therefore they do not have time to apply them all, but the observation notes show that teachers already use a few strategies and choose the least demanding. This choice of teachers can be taken as a measure to reduce the existing time problem and the responsibility to study further, or it can be associated with teachers' inadequate knowledge of FA. Previous research suggests that the second assumption may be the stronger reason (Amoaka et al., 2019; Alotaibi, 2018). However, interestingly, the least mentioned problem among the participants of this study was teacher-based problems, including their subject knowledge. In other words, although the participants all know that they need to learn more, their belief that this can only be solved through in-service training and that schools are responsible for this issue, suggests that they exclude themselves from the independent educational development process. My belief that their knowledge can be renewed, not only with in-service courses, but also independently, made me critical of the participants at this point. This criticism was not limited to my research, as the literature findings (Amoaka et al., 2019; Arrafi& Sumarni, 2018; Alotaibi, 2018) show that teachers generally associate their knowledge problems with lack of training courses.

8.4 The Role of Teacher Identity on How FA is Used to Support the Learning of Students with ASC

All the discussion above provides a backdrop, and therefore a greater understanding of, the main research question. The education provided by participants in the mainstream classes; their attitude towards the education of students with ASC; the content of the education; the preferred methods; how often these methods were used; and which factors were influential in determining these methods, have been clarified. All the data showed that teachers used some assessment methods while educating students with ASC, paying attention to their learning needs that differ from neurotypical students. Although the participants conflated the concept of assessment with SA, it was concluded that they also used FA during their teaching. Although the participants stated that they used SA more, the observations showed that FA was frequently

used in the teaching process, especially in work with students on the spectrum, but many participants did not see it as an evaluation form. This showed us that teachers perceive the concept of assessment as an application that measures students' achievement in a specific time (Birgin & Baki, 2012), rather than a concept that is included in the teaching process and supports student learning.

The fact that teachers use FA during the teaching and learning process and make changes to the methods they use based on feedback and student needs can be shown as the reason why teachers might not be aware that they are using FA as an evaluation method (Browne, 2016). Most of the participants did not see FA as an assessment tool for students with ASC, but rather as a form of continuous support that allowed them to contribute to their development. Due to this perception, all participants frequently used FA when working with students on the spectrum.

Another important research finding on this issue relates to how the participants used FA. As mentioned in the previous section, some FA methods were adopted by all participants that matched certain criteria. These criteria can be listed as follows:

- Suitable for the level of students
- Suitable for students' interests and needs
- Easy to understand
- Appropriate classroom physical environment
- Adequate tools and equipment
- Suitable for the content of the subject
- Concrete
- Ensure effective use of time
- Suitable for individual difference
- Not difficult to reuse
- Does not complicate classroom management.

The above criteria actually show the common features of both the methods used by the teachers and the constructivist approach that determines how these methods will be used. Of course, when choosing the methods and techniques they used, teachers paid attention to these criteria, as well as student readiness. However, it was determined by the findings of this study that the

methods they presented to the students were being influenced by their own experiences and perceptions (Flores et al., 2009) and, therefore, determined their approaches accordingly. In other words, teacher identities played a role in determining the methods, as well as how they were used.

Although participants were not specifically asked about the role of teacher identities on how they use FA methods, it was seen that teachers associate their teacher identities with their personal-professional stories and experiences and that their classroom practices are based on these experiences. Therefore, it can be said that the participants' identity development has a social (SIT) and emotional (IT) context. Thus, the teaching profession considered within the scope of this study was not only a professional career, but a personal choice and teaching practice were also carried out in a personal dimension. The findings suggest that the use of FA methods during the teaching of students with ASC, also including a very personal dimension, is completely related to teachers' experience and identity, and is compatible with many studies in the literature (Zuber & Altrichter 2018; Alzeebaree & Hasan 2020). However, the difference in the inclusion of FA as a teaching method, and managing the connection with students on the spectrum, adds a more enlightening feature to this study.

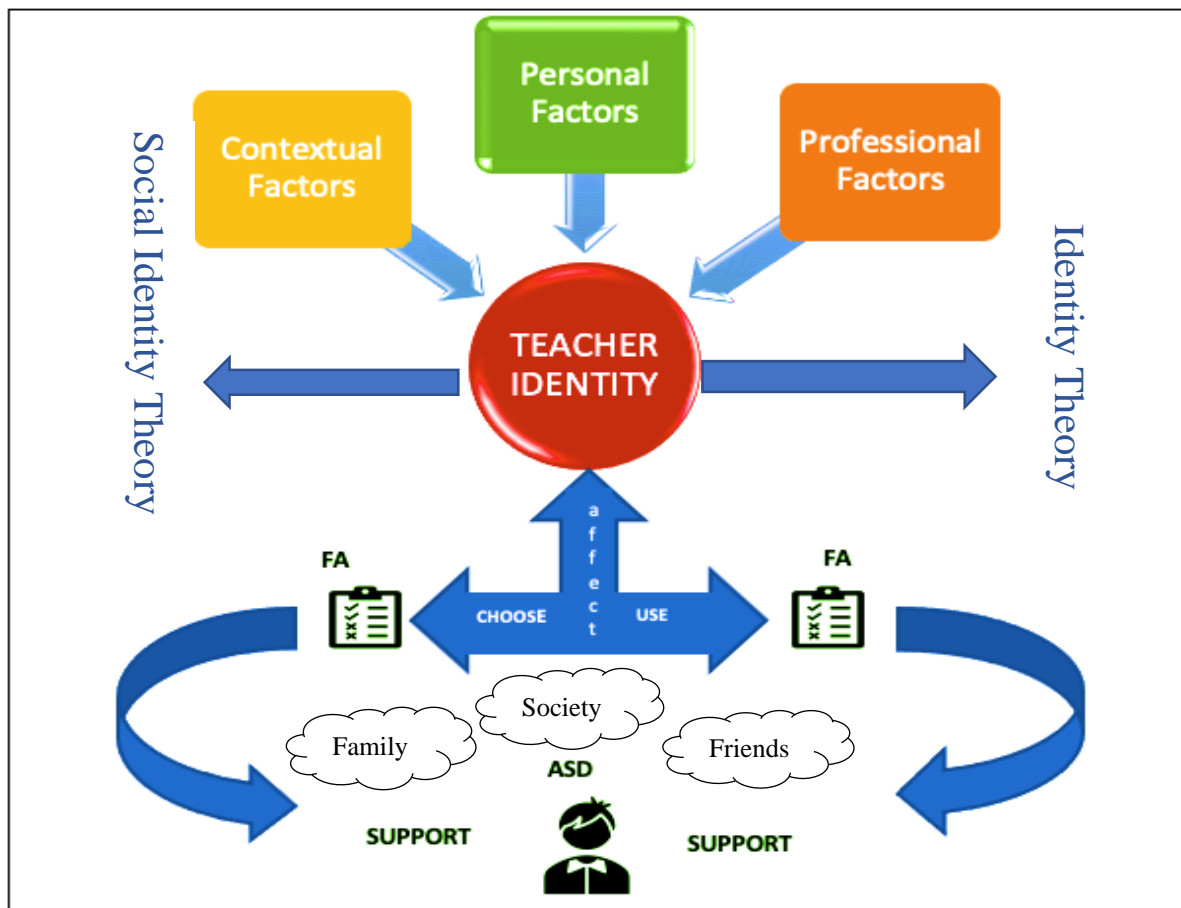


Figure 8.6 Sociocultural theory and the role of teacher identity on using FA to support the learning of student with ASC

I refer to a final figure (8.6) in order to take a closer look at the impact on teacher identity and practice, the relationship between sociocultural theory, social identity theory, and identity theory, that constitute the theoretical framework of this research, and of course, all the discussions in this chapter. In fact, this presents an idealised formative assessment model by linking teacher identity and learning styles of students with ASC, to social constructivist principles. Thus, although all of its elements are ultimately derived from the definition of the concepts, it is more intuitive than descriptive as a whole. As can be seen in the figure above, the research findings reveal that teacher identity is a concept that is formed by the combination of many factors and the development of which, is continuous. These factors enable teachers to become aware of who they are in the classroom, understand how they see themselves (Beijaard et al. 2004), and shape their attitudes towards students with ASC.

In my argument above, I emphasise the importance of the formation of teacher identity and its impact on the education of students with ASC. Therefore, I have clarified their positions in the

sociocultural learning and teaching process by including the multiple identities of teachers and students. As identity creates a bridge between social and individual factors (Pryor & Crossouard, 2008), teachers become part of a group culture by merging all these factors, while forming their own identities.

In line with the general perspective of this research and the researcher, Tsui (2003) stated that identity is not a fixed characteristic of a teacher, but a process that develops, changes or resists as they gain experience through classroom practice and increase their professional and experiential knowledge. Therefore, the process of forming a TI allows teachers to have more insight into the effectiveness of the methods they use. This is because teachers who are extremely knowledgeable about FA but who cannot integrate it with their own TI cannot be expected to use these methods effectively. In this case, my research indicates that TI has a very effective role in deciding which method will be used for which student and how. Especially being aware of how to use these methods can make a great difference to support students with ASC in the AfL process because using a suitable teaching approach can develop the students' understanding. In other words, choosing the correct method for the right student and presenting these methods most appropriately is completely a part of teachers' identity, and in this way, it helps students to construct their knowledge.

It can be said that “the learning theory approach which underpins AfL, is probably best described as ‘social constructivism’” (Stobart, 2008, p.151). Accordingly, FA practices and TI have a good fit with constructivist learning theories. Vygotsky's theoretical tradition maintains that the roots of identity are social. This means that we become who we are by joining the communities around us through many different situations and experiences. In other words, identity is a concept that sits at the intersection of individual and social factors. Therefore, learning/teaching and identity are inseparable. Instead, in a constantly reconstructed understanding of identity, teachers can use formative assessment as an important tool that utilises the different relationships between their individual, social and professional identities. Thus, a reflective AFL process is carried out in mutual ways with the responses given by students with ASC. However, teachers can achieve this competence only by realising their identity in the classroom.

In the framework of this research, the goal of determining whether teachers are aware of the existence of their TI has been successfully established. The study results provided a clear insight into the development of TI as the participants gained teaching experience, their work

with students with ASC increased, and the methods used were diversified. This finding supports the findings of a study investigating the relationship between identity and profession by Tickle (2000). In his research, Tickle argued that identity is embodied by professional characteristics. In this case, it would not be wrong to say that identity, which is an intangible concept, becomes tangible through teaching and assessment methods.

As a result, this study showed that teachers use FA to support the learning of students with ASC as well as evaluate them and make decisions in line with their own teacher identities. During the use of each FA method, the participants combined this method with a piece of their identity and presented it to the student. The way each teacher devised and explained the method differed and took a subjective form, as it was directly influenced by their identity. However, the typical finding among all these differences is that the teacher identities of all participants played an essential role in the FA methods used while working with students with ASC, and when effectively used, could also be preparation for a quality teaching process. It can be said that the harmonious combination of TI and teaching methods are indispensable factors of quality education. Just as Palmer et al. (2007, p. 104) said,

“Good teaching cannot be reduced to technique; good teaching comes from the identity and integrity of the teacher. ”

Summary

This section discusses all findings from the research and compares them with the results of previous studies. Most of the findings of this study were generally in line with the findings of the majority of similar studies in the literature. However, there were also findings that did not correspond to the literature. For instance, many factors influence the teacher identity and accordingly, the same factors influence their FA practices. Another example is that although teaching assistants frequently use formative assessment methods in classroom activities, they are not aware that this is an assessment method used to support the education of students with ASC in the classroom. These findings are related to this study's subjective and unique nature, and these areas were highlighted, and reasonable explanations are given. All research questions relating to understanding the role of TI in how to use FA methods to support the learning of students with ASC, were meticulously answered in the light of the social constructivist approach, social identity theory and identity theory. As a result, the arguments contained in this study, relating to the understanding of TI's effective role and importance on the use of FA methods with students with ASC, can now gain a place in the literature.

CHAPTER 9

CONCLUSION

9.1 Summary of the Findings

This study investigated how students with ASC who are educated in mainstream classes are supported by using formative assessment methods, and what role teacher identity played in how these methods are used. Five research questions were formulated for this purpose.

1. What is the role of teacher identity on how formative assessment is used to support the learning of students with ASC?
2. What are teachers' perceptions of working in mainstream classes?
3. How are children with ASC educated and supported in mainstream classes?
4. How do personal, professional and contextual factors influence teacher identity?
5. What do teachers know about the use of FA methods to support the learning of students with ASC?

In parallel with these research questions some important results have been identified. First of all, it was concluded that the participants generally had a positive attitude towards inclusive education and although they faced some problems in this process, they still found this practice necessary. The fact that the participants, who approached inclusive education with a positive attitude, did not express a contradictory opinion regarding the education of students with ASC in this environment, showed that this group of students were accepted in the inclusive classes. The existence of instructional methods used in accordance with the level and needs of students with ASC helped to answer the second research question about how these students received education in mainstream classes.

The study also revealed that teachers had sufficient knowledge about FA, while TAs had less understanding and used many methods randomly. This may explain why TAs used a limited number of FA methods while working with students with ASC. This illustrated that TAs will not be able to provide consistent educational feedback to students with ASC and support their learning if they do not improve their own content knowledge.

The findings obtained from this study show that teachers shaped their identities within the framework of three different dimensions (personal factors, contextual factors, professional

factors) with all the factors included in these identities being effective in many stages of the process, from the selection of the methods they used, to their application. This finding suggested that the construction of teachers' identity was an ongoing process and that different lives created different identities. This result obtained from the research reveals that teacher identities played a very important role in the choice of FA methods that teachers prefer to use to support the learning of students with ASC and that their teacher identities interacted differently when preparing the ground for different assessment practices.

9.2 Contribution to Knowledge

This research contributes in many ways to both discussions and research involving inclusive education, formative assessment, the education of students with ASC, and teacher identity. The study fills an important gap in the literature, as it is the first study to examine the role of TI on how to use FA methods to support the learning of students with ASC in mainstream classes, and to convey the importance of this role. The fact that the research led to the conclusion that TI plays a determinant and influential role in the effective use of FA methods, will be important in demonstrating to teachers the power and influence of their identities, thus potentially shaping their future practices.

Contrary to some academic opinions (Mulki et al. 2008; Avradimis & Norwich 2002), this study is also important in showing that despite all the difficulties teachers face, they have a strong sense of responsibility and adopt an understanding of ethics appropriate for the purpose of the profession and for supporting the education of students with ASC in mainstream classes. Proving the existence of teachers with this view and revealing their motivation to work, supports and reinforces the idea that the effective use of FA is also possible with students with ASC.

This research contributes to practical applications as well as theoretical. For instance, since the observation form used in the study can also be used by teachers, it shows which teachers use which FA methods and how often, and how students on the spectrum respond. It is directly related to practice as it enables teachers to see students' answers more clearly and use FA more effectively. In fact, since it may be possible to design and implement a more effective assessment method for this group of students, this study also encourages such an application.

From a methodological point of view, the case study method used as a type of qualitative approach in the research, produced rich data. The use of the interview method provided

teachers with the opportunity to examine their knowledge of FA and to recognize and correct their deficiencies, whilst at the same time, giving them the opportunity to capture the relationship between the factors that affect their identity and the methods they use. Thus, it contributes to the field of case study research by comparing it to the studies of researchers such as Yin, Merriam, Creswell. In addition, the use of observation forms also contributes to ideas about how to involve students with ASC, whose opinions we often cannot discern exactly, in the data collection process (Clark, 2011; Thompson, 2008).

In examining the documents, some shortcomings and issues that need to be improved were noticed in the policies obtained from schools and the government. The results of the document analysis are a resource that can be used by policy practitioners for the academic and personal development of teachers, FA, ASC and mainstream education. In other words, in emphasizing the importance of TI and the development of FA methods, such a study not only creates awareness for teachers, but also has the capacity to contribute to the structuring of formal regulations.

The findings of the research are based on the ideas that children with ASC should receive effective education in mainstream classes and that the teaching and assessment methods used should serve this purpose, and will contribute to the knowledge of institutions, researchers and organizations, such as the National Autistic Society (NAS), Autism Speaks and The Alliance for IE (ALLFIE) who support these ideas.

In summary, this research has important results in terms of both theoretical, methodological and practical applications. The findings can significantly contribute to the development of the most appropriate FA methods for students with ASC and the improvement of teachers' presentations of these methods with their identity awareness, especially if more research is conducted. Therefore, to the opinion of Aidonopoulou-Read (2017) and Ruiz-Primo (2011) who carried out similar studies suggesting that FA methods can be used for SEND students, I also add the view that the identity of a qualified teacher is of great importance in supporting a more effective use of FA methods for students with ASC. In this way I encourage the possibility of more researchers being able to explore this issue and to address it in different ways.

9.3 Limitations of the Research

While trying to close a gap noticed in the literature, this study also aimed to eliminate the limitations of previous similar studies. However, as in all studies, this study also faced

limitations to the scope of the findings and suggests more subjects for research. These are related to the choice of participants, research methods, time and resource constraints.

The first striking limitation of the study is the number of participants with whom the research was conducted. A total of 16 participants were involved in this study, which was conducted in two mainstream schools in Nottingham. Although this number has served the purpose of the study, it is likely that with a wider group of participants there are more opportunities to understand, interpret and compare the identity of the teachers. However, although there is a reasonable possibility that the participant group consisted of teachers at the beginning, middle, and end of their careers, the small number of new teacher participants made it difficult to think more deeply about their teacher identities and to establish the connection of their identity with the use of FA, whereas having opportunities to work with more new teachers could mean having a richer participant profile for research by uncovering other factors affecting the identities of developing teachers.

The second limitation of the study is the time allocated for the research. The fact that school principals allocated a 3-month period for research meant that the time spent in the school and the classroom was constrained. During this period, although important evidence was presented to carry out the research in accordance with its purpose and to answer the research questions, to enable different aspects of this to be dealt with, more time could have been spent with the participants to reflect continuously on the key issues, such as TI, and the question of how teachers' identity effectively supports using FA methods.

Since the research was limited to the classroom environment and certain areas of the school, I could not participate in everyday and natural situations, such as the conversations between teachers and teacher meetings. Therefore, the use of such data collection methods is another limitation of the study. Whereas Miles et al., (1994, p.11) state, "Qualitative data is the focus in naturally occurring, ordinary events in a natural setting...[it] has emphasis in people's lived experiences, are fundamentally well suited for locating the meanings people place on the events, processes, and structures of their lives and for connecting these meanings to the social world around them". Thus, TI and FA are an issue that goes beyond the classroom setting when it comes to students with ASC and collecting data in all-natural environments where they are present would give the research a broader perspective.

9.4 Implications and Recommendations for Practice

The data obtained from this study have implications for five different groups that play a role in the education of students with ASC. These implications are generally related to understanding TI, the connection with how FA methods are used, and practical applications that will enable the use of FA methods in inclusive classes to be more effective.

9.4.1 Policy Makers

As a result of the research, it was concluded that the policy makers did not provide adequate support in teacher education and development, and therefore teachers had problems in developing their professional identities. However, activities aimed at giving teachers a deeper understanding of professional ethics, culture and values before becoming teachers can contribute to the development of their understanding of identity. In addition, insufficient in-service training provided during the teaching process interferes with the professional identity development of teachers. In this case, with this study, it is recommended that policy makers place more importance on training and include current practices on PCK. In this way, teachers would be supported to present the methods determined in accordance with the level and needs of the students and a more effective educational environment would be developed.

Interviews with teachers present some implications for the lack of communication between policy makers and policy practitioners. Therefore, the curricula and evaluation policies prepared without considering the real environment of the mainstream classes contribute to a competition that in many cases can only be won by teachers ignoring many recommended methods due to the problem of lack of time. This situation can cause teachers to feel under pressure and worthless. Therefore, policy makers should prepare more flexible plans, taking into account the complex structures of classes when drafting the curriculum and assessment policies and include teachers' opinions in this preparation process.

9.4.2 School Leaders

Incomplete and insufficient guidance in school assessment policies, which are prepared in accordance with general assessment policies, cause teachers to act individually in formative evaluation. Therefore, the school leaders, in cooperation with SENCOs, need to put statements containing the definition, scope, and types of FA method in school assessment policies, and to add encouraging directions for its use with SEND students. This could enable teachers to include these methods more confidently in the classroom environment. This situation motivates teachers by increasing their knowledge of FA usage, and consequently their self-advocacy. In

addition, in-school practices to increase teachers' motivation not only to evaluate, but also to work, will support their adoption of school ethics and values by enabling them to see themselves as a part of the school culture. Thus, teachers who have a positive attitude towards the school can be encouraged to create an effective educational environment. This has implications for the importance of recognising and working on the development of healthy and collaborative school cultures.

9.4.3 Teachers

The results of the study concluded that teachers prefer to use some FA methods more frequently, depending on individual and social factors. However, the state of continuous development and learning within the qualifications required by the teaching profession is not suitable for such a vicious circle that teachers repeat themselves. Therefore, teachers should participate in training to improve their professional identities, improve themselves by following up-to-date information about their fields, and to avoid a repetitive habit in FA. Integrating their content knowledge with pedagogical approaches will help teachers prepare an educational environment that is more suitable for the needs of students.

9.4.4 Teaching Assistants

The lack of knowledge that TAs had in many areas, from the definition to the types of FA, has important implications and possible suggestions for them on this issue. First of all, TAs needed to eliminate the lack of knowledge about FA to support the development of students with ASC during the learning process. They should blend more conscious and purposefully selected methods with pedagogical approaches and teach to students with ASC by using these pedagogical methods. More specifically, the reward method, which is frequently used by some TAs, is not suitable for the character of the FA and AfL process to ensure learning. Choosing and using this method often may cause a behavioural approach to come to the fore. However, the behavioural approach enables students with ASC to just reinforce targeted behaviour rather than supporting their learning. Due to this reason, if TAs have enough knowledge in this regard, they can use the rewards as objects that mediate the structuring of information rather than as enforcers given to teach behaviour (Witzel & Mercer 2003). Thus, reward methods can be used more effectively as a type of FA in the AfL process.

9.4.5 Parents

Although this study does not include parents as a participant group, it does not completely exclude them from creating implications for the use of FA methods. Considering that students

with ASC need to be supported both inside and outside the school within a social constructivist approach, parents should also have a role in the use of FA methods. For this reason, in order for students with ASC to gain more efficiency from this process, families should be given information about this subject by working in cooperation with teachers and supporting students with some methods for this purpose outside of school. Thus, the support process of a student with ASC in and outside of school will become a more comprehensive and mutually supportive process.

9.4.6 Students

One of the aims of this study is to be the voice of students with ASC and to make their voice heard. Therefore, the results obtained from this research have important implications for both students with ASC and neurotypical students. However, all my recommendations, of course, will be realised with the support of teachers and the creation of suitable environments for students. Both student groups should be in a close and natural relationship in order to create an effective mainstream environment and to support students' learning in this environment. Creating such a relationship between students ensures that the effectiveness of the methods used in the learning and teaching process is increased. For this purpose, peer counselling and subsequent peer assessment applications should be more widespread in classrooms. In this way, the advantages of FA for student development will be utilized, both academically and psychologically.

Neurotypical students will especially contribute to their own academic development by sharing the knowledge with their autistic peers and evaluating them, while at the same time increasing their own awareness and respecting differences. In addition, thanks to these methods, students with ASC will be able to work with their peers, learn from them, and feel better psychologically by increasing their socialisation skills. In parallel, interaction between autistic and neurotypical students can be supported through group discussions, which is another practice that can be widespread in classrooms. In this way, it can be ensured that students with ASC have the skills to establish connections between subjects and ask questions, and thus to express themselves. Using the curriculum and assessment methods in parallel, as mentioned above, will allow students to structure knowledge by means of FA methods.

9.5 Implications for Further Research

This study looked at some of the milestones from past experiences of the participants to date, to provide a deep understanding of the identity of a teacher and its role in how FA methods are

used. In addition, how students with ASC respond to the FA methods used was included in the areas of study. However, such multidimensional research was impacted because it had to be carried out within a limited time frame. Therefore, future research could be undertaken over a longer period of time enabling more comprehensive research to be carried out. To do this, a study could be conducted in which the factors affecting TI are examined in more detail by using ethnography, which is a longer-term research method. In addition, a richer data archive could be obtained in this way by involving teachers in meetings and events they attend, not only in the classroom but also elsewhere in the school environment.

This research was carried out in inclusive classes where teachers were faced with more complex situations. Thus, it was observed how the identities of the participants differed according to their different student needs and the atmosphere of the inclusive class environment. However, future research could be carried out in specialist SEND schools or in classes with only students with ASC. Thus, by examining the role of the identities of specialist SEND teachers on the use of FA methods, comparisons with current research results could be made. In fact, the focus student group can be identified as students with other types of disabilities besides ASC, and the research could be viewed from a different perspective.

Finally, this research explains the critical role of TI with the use of FA, explaining the reactions of students with ASC, thus providing important information to the field in theoretical and practical practice. However, the more active participation of this group of students in future studies (including data to be obtained through interviews or activities) may be an important source of data for interpreting the identity of a teacher from the perspective of students with ASC.

9.6 Reflection on the Research

It was an absolute privilege to have the time and professional opportunity to observe the learning struggles of children with ASC in the classroom and to witness the teachers supporting them to overcome their challenges. It was a great honour to be admitted to the classroom, to be a short-term part of the learning environment, and to be able to look at my profession as an outside researcher after years as a teacher. For me, it was fascinating to look at the classroom environment from a different perspective and to establish a different relationship with teachers and students. I have had the privilege of seeing this interaction at many levels and in different situations, from the student Hasan responding differently to two teachers, to the use of Kevin's emotional connection with trains in teaching and evaluation, and the informal conversations in

which Alison describes her satisfaction with working in a multicultural school. Trying to find all the factors affecting the identity behind teachers' practices was like completing a jigsaw puzzle. I felt that each time I completed a piece, I was going one step further and getting closer to seeing the big picture. Sometimes the hesitations of teachers who were integrated and committed to their profession were mixed with their professional satisfaction. However, their determination to do the right thing, despite everything was worth seeing.

Qualitative research and case studies are intense, and the many different forms of research used to explore different situations render objective research impossible. However, the willingness of the researcher to be transparent about their empathy and emotional connection with the participants in the long time spent in the same environment adds to the validity of the subjective research. Although I was able to take a step back and assume my researcher identity in most situations, there were times when I found myself trying to justify or challenge a teacher about her/his behaviours, it was quite difficult. However, I believe that being a researcher, even in the classroom environment that I have been in many times before as a teacher, gives me a unique opportunity to look at myself from an outside perspective and to get to know a new culture.

My research aims to promote the presence of students with ASC in mainstream classes during the AFL process by using FA and emphasising the importance of teachers' identities. This study highlights the importance of using FA as an effective tool in the learning process and helps to make the voices of students with ASC heard.

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APPENDICES

Appendix 1: Information Sheet for School Headteachers

1. Information Leaflet for the Teachers and TAs of Inclusive Classes and School Managers

Formative Assessment of the Learning of Students with SEN in Mainstream Classes

Researcher: Sercan Aslantas

Doctoral Student in the School of Education, University of Nottingham

Information Leaflet for Teachers

I am conducting a research study as a doctoral student in the School of Education at the University of Nottingham. I would appreciate it if you could read this information and think about giving me permission to do research in your school/class. If, after reading this information sheet, and having the opportunity to ask questions, you are willing to take part in the research, I will request that you sign the attached consent form.

Aims of the research:

The aim of this research is to explore the role of formative assessment methods used to support the learning of students with SEN. This research also aims to determine how students respond to the formative assessment tasks which are used by their teachers.

During the research

I would like to collect data by being a participant in your class (es) for two days each week for 6 weeks. I would be observing the class (sitting somewhere in the class that do not disturb the teacher and students and video recording and taking notes), taking field notes, taking photographs of displays and pupils' work, collecting documents related to formative assessment methods, lesson plans, and making some audio-recordings (if possible). I plan to decide with the teacher about when and in which lessons I can use video observation before data collection and would only do this with parental and school consent. I would like to focus particularly on 1-2 case study children with SEN and observe them in detail. Also, I hope to conduct interviews with teachers before and if necessary, after my research. Each interview would take approximately 30 minutes.

Anonymity of the personal information:

As with all research, there is a slight chance that confidentiality of the information I collect about you could be breached – I will take steps to minimize this risk, as discussed in more detail below in this form.

Data will be stored in a password protected UoN OneDrive file. The only person knowing the password will be myself, the researcher, and I and my two supervisors will be the only people to have access to it. All data will be stored for a period of no less than 7 years after completion of the research project in line with the regulations of the UoN data protection and GDPR policies. After 7 years, I will delete the data.

All data will be retained by UoN after completing the doctoral thesis and data will not be shared with anyone outside of the research team which consists of the researcher and the two supervisors.

In any publications that arising from my research, there will be no personal information that could lead to the identification of participants. All participants and their institutions will be anonymised, and pseudonyms will be used in the resulting thesis and any publications.

Benefits and demands of taking part in the study:

I intend that the findings from my study will contribute to understanding of the role of formative assessment which is used to support the learning of children with SEN in inclusive classes in England. The findings of the study may be used to support and develop teaching and learning of SEN students.

On the other hand, I am aware of potential risk of my research. During the research, there is a slight possibility that taking photographs or video may affect the behaviour of students with special needs. I will discuss with teachers and the parents in advance about how much this situation might affect them. I will stop taking the video or photo if it appears to be causing any negative reaction.

Your rights as a research participant

Although I would be very grateful for your support in this area of my research, I would like to assure you that your participation is entirely voluntary. You will have the right to withdraw from the research project at any stage you wish with no consequences.

Findings of the study:

The results of the research will be written in my doctoral thesis. A summary of the study and its results will be presented to the participating school and parents.

Thank you very much for sparing the time to read this information leaflet. If you have any questions, I am ready to explain the study in more detail. My contact information and that of my supervisors is given below. The details of the School of Education Research Ethics Coordinator are given below should you have any complaints about how the research is conducted.

Contact information:

Sercan Aslantas

E-mail: sercan.aslantas@nottingham.ac.uk

Phone number: 07438073548

Supervisors: Debra Costley, Debra.Costley@nottingham.ac.uk; 0115 951 370

Anne Emerson, Anne.Emerson@nottingham.ac.uk ; 0115 748 4347

School of Education Research Ethics Coordinator: educationresearchethics@nottingham.ac.uk

Appendix 2: Headteacher Permission Letter

The University of Nottingham School of Education

Debra Costley
School of Education
University of Nottingham
Tel: 0115 951 3706
Email: Debra.Costley@nottingham.ac.uk

Anne Emerson
School of Education
University of Nottingham
Tel: 01157484347
Email: Anne.Emerson@nottingham.ac.uk

Sercan Aslantas
PhD student
University of Nottingham
Tel: 447438073548
Email: sercan.aslantas@nottingham.ac.uk

School of Education Research Ethics Coordinator: educationresearchethics@nottingham.ac.uk

Dear [REDACTED]

I am currently studying for a PhD at the University of Nottingham, which explores the role of teachers' identity on the formative assessment which they use to support learning of students' with SEN in particular, those with ASC in mainstream classes. The purpose of the study is to "explore how teachers use formative assessment methods in the classroom; how students with autism give feedback to their teachers". The resulting report will be in the form of a thesis for examination.

I am writing to ask if I might carry out research in your school. I would like to conduct the research by observing in year 3-4 class (es), which includes students with autism, for two days each week for six weeks. As a teacher myself, I am well aware of the workload that all teachers have to cope with and want to take up as little as possible of teachers' time. I would like, if possible, to undertake the following:

- 1) Interviews with teachers and teaching assistants who have students with ASD in the class at least once but possibly twice with the teacher's agreement. Interviews are expected to take around 30 minutes.

2) Visit classrooms to observe teachers' formative assessment methods with students on the autism spectrum and the response and behaviour of those children including informal conversations with teachers and teaching assistants if appropriate. I will always be sensitive to the needs of teacher to be focused on their class.

3) Identify 1-2 children with autism and gain parental permission to observe them during a particular subject and time (to be agreed with the school and teacher). During that time, with permission from participants and parents, I would like to use video observation methods to record the reactions of students with autism. In this way, I will be able to catch all responses of students with autism which I may miss during the implementation of formative assessment. However, if it is not possible to video I can go ahead with teacher and TA interviews and observe students without using video recording.

Naturally, I will observe ethical guidelines at all times to ensure that everyone who takes part does so willingly. I will provide an information sheet and consent form for the participants. I can also assure you that all data will be anonymised and shared only with my supervisors prior to publication. Furthermore, the local authority, school, individual teachers and children will not be identified, thus ensuring confidentiality.

Although, children are not likely to have any direct benefit from being in this research study, it is hoped that the findings from my study will contribute to understanding of the role of formative assessment which is used to support the learning of children with ASC in inclusive classes in England. The findings of the study may be used to support and develop teaching and learning of students with ASC.

On the other hand, I am aware of potential risk of my research. During the research, there is a slight possibility that taking photographs or video may affect the behaviour of students with special needs. I will discuss with teachers and the parents in advance about how much this situation might affect them. I will stop taking the video or photo if it appears to be causing any negative reaction.

If you require any further information about specific aspects of my research referred to above, or the research more generally, please feel free to contact either myself, or my supervisors Dr. Debra Costley and Dr. Anne Emerson, whose details are included at the head of this letter. In addition, the details of the School of Education Research Ethics Coordinator

are given at the head of the letter should you have any complaints about how the research is conducted. I would be happy to come to your school to answer any queries you might have and, if you consider it appropriate, to confirm possible arrangements in more detail.

I should be very grateful to be allowed to carry out this research.

Yours sincerely,
Sercan Aslantas.

Appendix 3: Participant Consent Form for Teachers & Teaching Assistants

2. Consent Form for Teachers and TAs of Inclusive Classes Formative Assessment of the Learning of Students with SEN in Mainstream Classes

Researcher: Sercan Aslantas, Doctoral Student in the School of Education, University of Nottingham

Please read the statements below and sign the form, if you are willing to participate in the study.

1. I acknowledge that I have read the information sheet and understood the study and its detail. I have had the chance to raise queries related to the study and have my questions answered.
2. I understand that I am free to withdraw from the research at any stage, participation is entirely voluntary and there are no consequences if I withdraw.
3. I understand that the researcher will ask for the consent of all participants, including children, depending on their capacity to understand, and will ensure the presence of a guardian where necessary.
4. I understand that I will be audio recorded during the interview.
5. I understand that some parts of lessons will be video recorded during the implementation of formative assessment.
6. I understand that the researcher will be observing and making field notes and taking photographs in lessons.
7. I understand that my personal information will not be included in any parts of the research findings and my personal information will remain confidential.
8. I understand that the documents collected will include observational notes, teaching plans, teaching materials that teachers, pupils, and parents will share with the researcher.
9. I understand that all recorded data will be stored in a password protected UoN OneDrive file and only the researcher and two supervisors will be able to access the data. All data will be stored for a period of no less than 7 years in line with the regulations of the UoN data protection and GDPR policies.
10. I understand that it is possible for me to agree to just some of the options below.

Do you agree to take part in the above study? YES NO

Interview & observation YES NO

Sharing documents YES NO

Video observation YES NO

Name of Teacher _____

Signature of Teacher _____

Date _____

Contact information:

Researcher: Sercan Aslantas, sercan.aslantas@nottingham.ac.uk; 07438073548

Supervisors: Debra Costley, Debra.Costley@nottingham.ac.uk; 0115 951 370

Anne Emerson, Anne.Emerson@nottingham.ac.uk; 0115 748 4347

School of Education Research Ethics Coordinator: educationresearchethics@nottingham.ac.uk

Appendix 4: Information Sheet for Parents

3. Information Leaflet for Parents of Children to do Classroom Observation

Formative Assessment of the Learning of Students with SEN in Mainstream Classes

Researcher: Sercan Aslantas

Doctoral Student in the School of Education, University of Nottingham

Information Leaflet for Parents

I am conducting a research study as a doctoral student in the School of Education at the University of Nottingham. I would appreciate it if you could read this information and think about giving me permission to do research in your child's school/class. If, after reading this information sheet, and having the opportunity to ask questions, you are willing for your child to take part in the research, I will request that you sign the attached consent form.

Aims of the research:

First of all, I would like to explain the definition of formative assessment in order to clarify and better understanding of my research purposes.

Formative assessment refers to a wide variety of methods that teachers use to conduct the evaluations of student comprehension, learning needs, and academic progress during the lesson. The general purpose of formative assessment is to collect detailed information that can be used to improve instruction and student learning while it's happening.

Your child is being asked to participate in a research study exploring the role of formative assessment methods which are used to support the learning of students with SEN. This research also aims to determine how students with SEN respond to the formative assessment tasks which are used by their teachers. Although I am specifically interested in children with a special need, I am looking at whole class interactions and therefore seek consent from all parents.

During the research

I would like to collect data by being a participant in your child's class (es) for two days each week for 6 weeks. I would be observing the class (sitting somewhere in the class that do not disturb the teacher and students and video recording and taking notes), taking field notes, taking photographs of displays and pupils' work, collecting documents related to formative assessment methods, lesson plans, and making some audio-recordings (if possible). I plan to decide with the teacher about when and in which lessons I can use video observation before data collection and would only do this with parental and school consent. Also, I hope to conduct interviews with teachers before and if necessary, after my research.

Although I am specifically interested in children with special needs and how they respond to formative assessment methods with the aim of finding out how these methods support their learning, I need to look at whole class interactions and therefore, this would include observation of your child. Participation will take about 6 weeks of the term in order to do in-depth research.

I would like to video record [or audio tape] your child as they perform on formative assessment tasks, to make sure that I generate accurate information. I am looking for consent to either video, audio, or just observe and make notes.

Your child's participation in this study does not involve any physical or emotional risk beyond that of everyday life.

Anonymity of the personal information:

As with all research, there is a slight chance that confidentiality of the information I collect about your child could be breached – I will take steps to minimize this risk, as discussed in more detail below in this form.

Data will be stored in a password protected UoN OneDrive file. The only person knowing the password will be myself, the researcher, and I and my two supervisors will be the only people to have access to it. All data will be stored for a period of no less than 7 years after completion of the research project in line with the regulations of the UoN data protection and GDPR policies. After 7 years, I will delete the data.

All data will be retained by UoN after completing the doctoral thesis and data will not be shared with anyone outside of the research team which consists of the researcher and the two supervisors.

In any publications that arising from my research, there will be not any personal information that could lead to the identification of participants. All participants and their institutions will be anonymised, and pseudonyms will be used in the resulting thesis and any publications.

Benefits and demands of taking part in the study:

Your child is not likely to have any direct benefit from being in this research study. I intend that the findings from my study will contribute to understanding of the role of formative assessment which is used to support the learning of children with SEN in inclusive classes in England. The findings of the study may be used to support and develop teaching and learning of SEN students.

On the other hand, I am aware of potential risk of my research. During the research, there is a slight possibility that taking photographs or video may affect the behaviour of students with special needs. I will discuss with teachers and the parents in advance about how much this situation might affect them. I will stop taking the video or photo if it appears to be causing any negative reaction.

Your child's rights as a research participant

Although I would be very grateful for your support in this area of my research, I would like to assure you that your participation is entirely voluntary. Your child will have the right to withdraw from the research project at any stage you wish with no consequences.

Findings of the study:

The results of the research will be written in my doctoral thesis. A summary of the study and its results will be presented to the participating school and parents.

Thank you very much for sparing the time to read this information leaflet. If you have any questions, I am ready to explain the study in more detail. My contact information and that of my supervisors is given below. The details of the School of Education Research Ethics Coordinator are given below should you have any complaints about how the research is conducted.

Contact information:

Sercan Aslantas E-mail: sercan.aslantas@nottingham.ac.uk Phone number: 07438073548

Supervisors: Debra Costley, Debra.Costley@nottingham.ac.uk; 0115 951 370

Anne Emerson, Anne.Emerson@nottingham.ac.uk ; 0115 748 4347

School of Education Research Ethics Coordinator: educationresearchethics@nottingham.ac.uk

7. Information Leaflet for the Parents of the Case Children to Do Individual Observation

Formative Assessment of the Learning of Students with SEN in Mainstream Classes

Researcher: Sercan Aslantas

Doctoral Student in the School of Education, University of Nottingham

Information Leaflet for Parents

I am conducting a research study as a doctoral student in the School of Education at the University of Nottingham. I would appreciate it if you could read this information and think about giving me permission to do research in your child's class. If, after reading this information sheet, and having the opportunity to ask questions, you are willing to take part in the research, I will request that you sign the attached consent form.

Aims of the research:

I would like to explain the definition of formative assessment in order to clarify and better understanding of my research purposes.

Formative assessment refers to a wide variety of methods that teachers use to conduct the evaluations of student comprehension, learning needs, and academic progress during the lesson. The general purpose of formative assessment is to collect detailed information that can be used to improve instruction and student learning while it's happening.

Your child is being asked to participate in a research study exploring the role of formative assessment methods which are used to support the learning of students with SEN in mainstream classes. This research also aims to determine how students with SEN respond to the formative assessment tasks which are used by their teachers.

During the research

I would like to collect data by being a participant in your child's class (es) for two days each week for 6 weeks. I would be observing the classroom (sitting somewhere in the class that do not disturb the teacher and students and video recording and taking notes), taking field notes, taking photographs of displays and pupils' work, collecting documents related to formative assessment methods, lesson plans, and making some audio-recordings (if possible). I plan to decide with the teacher about when and in which lessons I can use video observation before data collection and would only do this with parental and school consent. I would like to focus particularly on 1-2 case study children with SEN. Also, I hope to conduct interviews with teachers before and after my research.

Your child's lesson will be observed to find out how children with SEN respond to the formative assessment methods used in their classroom with the aim of finding out how these methods support their learning. In this research, I am focusing the participation of SEN children in lessons to gain clearer understanding of how they interact with their teachers use of formative assessment. Participation will take about 6 weeks of the term in order to do in-depth research.

I would like to video record [or audio tape] your child as he/she performs on formative assessment tasks, to make sure that I generate accurate information. I am looking for consent to either video, audio, or just observe and make notes.

Your child's participation in this study does not involve any physical or emotional risk to your child beyond that of everyday life.

Anonymity of the personal information:

As with all research, there is a slight chance that confidentiality of the information I collect about your child could be breached – I will take steps to minimize this risk, as discussed in more detail below in this form.

Data will be stored in a password protected UoN OneDrive file. The only person knowing the password will be myself, the researcher, and I and my two supervisors will be the only people to have access to it. All data will be stored for a period of no less than 7 years after completion of the research project in line with the regulations of the UoN data protection and GDPR policies. After 7 years, I will delete the data.

All data will be retained by UoN after completing the doctoral thesis and data will not be shared with anyone outside of the research team which consists of the researcher and the two supervisors.

In any publications that arising from my research, there will be not any personal information that could lead to the identification of participants. All participants and their institutions will be anonymised, and pseudonyms will be used in the resulting thesis and any publications.

Benefits and demands of taking part in the study:

Your child is not likely to have any direct benefit from being in this research study. I intend that the findings from my study will contribute to understanding of the role of formative assessment which is used to support the learning of children with SEN in inclusive classes in England. The findings of the study may be used to support and develop teaching and learning of SEN students.

On the other hand, I am aware of potential risk of my research. During the research, there is a slight possibility that taking photographs or video may affect the behaviour of students with special needs. I will discuss with teachers and the parents in advance about how much this situation might affect them. I will stop taking the video or photo if it appears to be causing any negative reaction.

Your child's rights as a research participant

Although I would be very grateful for your support in this area of my research, I would like to assure you that your participation is entirely voluntary. Your child will have the right to withdraw from the research project at any stage you wish with no consequences.

Findings of the study:

The results of the research will be written in my doctoral thesis. A summary of the study and its results will be presented to the participating school and parents.

Thank you very much for sparing the time to read this information leaflet. If you have any questions, I am ready to explain the study in more detail. My contact information and that of my supervisors is given below. The details of the School of Education Research Ethics Coordinator are given below should you have any complaints about how the research is conducted.

Contact information:

Sercan Aslantas, sercan.aslantas@nottingham.ac.uk; 07438073548

Supervisors: Debra Costley, Debra.Costley@nottingham.ac.uk; 0115 951 370
Anne Emerson, Anne.Emerson@nottingham.ac.uk ; 0115 748 4347

School of Education Research Ethics Coordinator: educationresearchethics@nottingham.ac.uk

Appendix 5: Participant Consent Form for Parents

4. Consent Form for Parents of the Children to Do Classroom Observation

Formative Assessment of the Learning of Students with SEN in Mainstream Classes

Researcher: Sercan Aslantas
Doctoral Student in the School of Education, University of Nottingham

Please read the statements below and sign the form, if you want to participate in the study.

1. I acknowledge that I have read the information sheet and understood the study and its detail. I have had the chance to raise queries related to the study and have my questions answered.
2. I understand that I am free to withdraw my child from the research at any stage, participation is entirely voluntary and there are no consequences if she/he withdraws.
3. I understand that the researcher will ask for the consent of all participants, including children, depending on their capacity to understand, and will ensure the presence of a guardian where necessary.
4. I understand that my child's personal information will not be included in any parts of the research findings and my child's personal information will remain confidential.
5. I understand that the documents collected will include observational notes, teaching plans, teaching materials that teachers, pupils, and parents will share with the researcher.
6. I understand that the researcher will be observing and making field notes and taking photographs in lessons.
7. I understand that my child will be video recorded during the implementation of formative assessment.
8. I understand that all recorded data will be stored in a password protected UoN OneDrive file and only the researcher and two supervisors will be able to access the data. All data will be stored for a period of no less than 7 years in line with the regulations of the UoN data protection and GDPR policies.
9. I understand that it is possible for me to agree to just some of the options below.

Do you agree to your child taking part in the above study? YES NO

Observation YES NO

Video observation YES NO

Name of Child _____

Name of Parent _____

Signature _____

Date _____

Contact information:

Researcher: Sercan Aslantas, sercan.aslantas@nottingham.ac.uk; 07438073548

Supervisors: Debra Costley, Debra.Costley@nottingham.ac.uk; 0115 951 370

Anne Emerson, Anne.Emerson@nottingham.ac.uk; 0115 748 4347

School of Education Research Ethics Coordinator: educationresearchethics@nottingham.ac.uk

8. Consent Form for Parents of the Case Children to Do Individual Observation

Formative Assessment of the Learning of Students with SEN in Mainstream Classes

Researcher: Sercan Aslantas

Doctoral Student in the School of Education, University of Nottingham

Please read the statements below and sign the form, if you want to participate in the study.

1. I acknowledge that I have read the information sheet and understood the study and its detail. I have had the chance to raise queries related to the study and have my questions answered.
2. I understand that I am free to withdraw my child from the research at any stage, participation is entirely voluntary and there are no consequences if she/he withdraws.
3. I understand that the researcher will ask for the consent of all participants, including children, depending on their capacity to understand, and will ensure the presence of a guardian where necessary.
4. I understand that my child's personal information will not be included in any parts of the research findings and my child's personal information will remain confidential.
5. I understand that the documents collected will include observational notes, teaching plans, teaching materials that teachers, pupils, and parents will share with the researcher.
6. I understand that the researcher will be observing and making field notes and taking photographs in lessons.
7. I understand that my child will be video recorded during the implementation of formative assessment.
8. I understand that all recorded data will be stored in a password protected UoN OneDrive file and only the researcher and two supervisors will be able to access the data. All data will be stored for a period of no less than 7 years in line with the regulations of the UoN data protection and GDPR policies.
9. I understand that it is possible for me to agree to just some of the options below.

Do you agree to your child taking part in the above study? YES NO

Observation YES NO

Video observation YES NO

Name of Child _____

Name of Parent _____

Signature _____

Date _____

Contact information:

Researcher: Sercan Aslantas, sercan.aslantas@nottingham.ac.uk; 07438073548

Supervisors: Debra Costley, Debra.Costley@nottingham.ac.uk; 0115 951 370

Anne Emerson, Anne.Emerson@nottingham.ac.uk ; 0115 748 4347

School of Education Research Ethics Coordinator: educationresearchethics@nottingham.ac.uk

Appendix 6: Information Sheet for Children

5. Information Leaflet for Children to do Classroom Observation

Hello all,

I am Sercan. I am a student at the University of Nottingham. I am interested in how you are learning in your lessons and sort of things that the teacher does help you. For this reason, I will visit your classroom 2 days each week for 6 weeks and watch you in the class.

Things you need to know

When you are doing activities in the **class**, I will record you with a video camera.



You can **always** ask any questions to me.



I will take a photo of the work/pictures/materials you make so I can study how you learn in your lessons. If I write anything about you, I will not use your name.



You can **stop** at any time. You don't have to give a reason, and nothing will happen to you as a result.



If you are happy with this and want to take part in the project, have a chat with your parents/guardians and colour smiley faces on the **Consent Form**.



If you are unhappy with this and want to take part in the project, have a chat with your parents/guardians and colour sad faces on the **Consent Form**.

If you decide you don't want to take part at any time, please remember you can tell your teacher. This will not affect your learning.

Thank you very much for reading this information leaflet. If you have any questions, I am ready to explain the research in more detail. I have asked your parents for permission to ask you to help with my research.

Contact information:

Sercan Aslantas

E-mail: sercan.aslantas@nottingham.ac.uk

Phone number: 07438073548

Supervisors: Debra Costley, Debra.Costley@nottingham.ac.uk; 0115 951 370

Anne Emerson, Anne.Emerson@nottingham.ac.uk; 0115 748 4347

School of Education Research Ethics Coordinator: educationresearchethics@nottingham.ac.uk

Appendix 7: Participant Consent Form for Children

6. Consent Form for Children to Do Classroom Observation

Formative Assessment of the Learning of Students with SEN in Mainstream Classes

Name of Researcher: Sercan Aslantas

Doctoral Student in the School of Education, University of Nottingham



1. Have my work looked at,



2. Be observed,



3. Be videoed

Contact information:

Researcher: Sercan Aslantas, sercan.aslantas@nottingham.ac.uk; 07438073548

Supervisors: Debra Costley, Debra.Costley@nottingham.ac.uk; 0115 951 370

Anne Emerson, Anne.Emerson@nottingham.ac.uk ; 0115 748 4347

School of Education Research Ethics Coordinator: educationresearchethics@nottingham.ac.uk

Appendix 8: Interview Questions

Interview Questions for Teachers and Teaching Assistants

1. Please can you tell me about your teaching experience? (i.e., How long have you been teaching and how long have you been at this school?)
2. Please can you tell me about the issues or challenges you face teaching students with ASC in the mainstream classroom and how is it affect your teaching?
3. Do you think you need different qualities for student with ASC?
4. Please can you tell me about the support systems and resources are in place to aid you as the teacher of a student with ASC?
 - Are there any resources you feel would further support your teaching role that are not available or currently being offered to you?
5. Could you please clarify how does being a teacher in a mainstream class affect your perception of teaching?
6. I am interested to know what your views are on assessment in general and formative assessment in particular?
7. Could you just how do you define formative assessment?
8. Can you give me some examples of formative assessment used in your class?
 - Do you have any methods of your own?
 - What is it that makes the methods of assessment you describe formative?
 - What is the most common formative assessment method that you use in your classroom?
9. Do you have any experience self-assessment and peer assessment? If yes, what about your opinion for using to support the learning of students with ASC?
10. How do you communicate to the student what they need to do next in order to improve?
 - In which situations do these strategies differ for students with autism?
11. How do you decide on which formative assessment strategies to use when supporting students with ASC?
 - How do you think children with autism respond to these strategies?
 - What is the most common feedback/response that is used by students with ASC in your class?

- How do you know which methods work for students with ASC?
12. What are the advantages or disadvantages of formative assessment? Could you give me some examples from your experiences?
- Would you use formative assessment differently in different subjects?
 - Why do you think that is the case?
13. Is there anything else would you like to tell me about formative assessment and using it to support learning for students with autism?

Follow-up Interview Questions

1. What were the reasons you decided to become a teacher?
2. How do you think your family, education and social background affect your teacher identity/ role?
3. Has your perception of teaching changed since you have been in the classroom? If it has, could you tell me how?
4. I would like for you to think about your experiences that have influenced your beliefs about teaching. Please describe an experience or experiences that have significantly influenced your beliefs about teaching?
5. What factors do you think contribute to successful teaching in your class/ school?
6. How do you feel about the use of formative assessment during lessons? Are there some subjects where it works better than others? How this makes you feel?
7. How do you feel about the responses that you have received from the students with ASC?
8. How can this group of students (special needs student) influence your understanding of teacher identity?
9. How do you think that the subject matter you teach plays a role in your professional teacher identity? Why or why not?
10. What other roles (in school or social life) do you have that contribute to your idea of your professional teacher identity?

Appendix 9: Sample of Interview Transcript

Type of audio:	Interview	
Subject matter:		
Audio quality:	Clear	
Special requirements:		
Speakers:	Sercan Acar	Interviewer
	Helena	Respondent
Date transcribed:	21st February 2020	
Length:	20 mins 30 seconds	

Sercan:

Can you tell me about your teaching experience, how long have you been teaching and how long have you been in this school?

Helena:

I have been teaching since 16 years. I've been in this school since 2010. So nine years.

Sercan:

Can you tell me about issues or challenges you faced teaching students in the mainstream class?

Helena:

Generally or that on in particular?

Sercan:

Generally?

Helena:

They need it very organised with the timetables and all those sorts of things. Sometimes they need extra resources, time, preparation for lessons. We need to a bit more sometimes for student, (?? 0:55). It's quite straightforward in his little way because he can get on quite well. Because he's older now as well he adapts quite well to what is going on, sometimes it's a bit more effort because they need a bit more support and those sorts of things.

Sercan:

How does it affect your teaching?

Helena:

You just have to, we don't differentiate anyway, so you just have to adapt don't you, and you just have to adapt to be mindful of them but in theory a good lesson should, what's good practice for ASD children is good practice for the whole class, so if you are putting individual timetable and do all your organisation things that's good for all children so in theory we should support all if you're looking after that one.

Sercan:

Do you think you need different qualities for students with autism?

Helena:

Sometimes it depends what you're doing. You mean in the lesson you need different things for them?

Sercan:

Could you please clarify for me what kind of qualities you need?

Helena:

For me to prepare for them?

Sercan:

Yes.

Helena:

So they might need writing guides, they might need differentiating down in maths, they might need a bit more challenge, they might just need you to take them through the steps. They might need it breaking down into what you want them to do first and then next you can do is a list on the whiteboard sometimes. Individual timetables.

Sercan:

Please could you tell me about the support system or resources that are in place for a student with autism?

Helena:

We've had training, we've been on autism training, we've had that very recently actually, we've got, our head of school is quite experienced with children with autism so she's always there to support if we ask her for ideas and need some support with that. Or using things you've used in the [past](#), you know visual timetables and things that I've got copies of at home that I can just use because you've used in the past that sort of thing.

Sercan:

Are there any resources you feel would further support your teaching role that are available or currently being offered to you?

Helena:

At present no. I've had to find things we have a new autistic boy in Year 4 and I've got to find things for that and I've just begun this year started with the Year 3 class, there's an autistic boy in there that needs quite a bit more support than I'm used to having to prepare in the past, so I've had to go and find things for that there, next charts and those kind of things, but they are around. I just needed to get things for myself so that I was ready for the day that I'm in.

Sercan:

Could you please verify how being a teacher in a mainstream class affect your perception of teaching?

Helena:

It's all I've know is teaching [mainstream](#) so I've never taught special needs so it's just always as it has been.

Sercan:

I'm interested to know your views on assessment in general and formative [assessment](#)?

Helena:

We do formative and that's day to day what you're picking up in your last lessons. I think you just do it naturally as part of being a teacher your just spotting children that haven't got it and need a bit more support. We've got TAs that we can then turn them to, they have time in the afternoon to do these things so we can pull kids out and say this child needs a bit more support and they can go in and fill in the gaps in the afternoon. I think it works quite well, in this school we do a lot of written feedback marking and

children respond to that with their purple pens, which shows that they've responded to what we're doing and to our questions in the next step and we really try and challenge them with deeper questions and make them think outside the box. I think it works because I think it's...

Sercan:

Could you just, how do you define formative assessment, just the definition?

Helena:

Day to day assessment of the things they're doing in their learning, just things that you pick up that they got right, things that they need to work on and then what you do with that to raise them on, so stretch them with further challenge or support in place to support them.

Sercan:

Could you give me some examples of formative assessment using your class?

Helena:

The written marking? Questioning, so you're asking questions to challenge the student who clearly understood it or digging a bit deeper if you're not sure if they understood it. Testing those children who you're not sure if they're listening or not and they understood what's going on. What else do we do?

Sercan:

Do you have any methods of your own?

Helena:

Gosh what are my assessment methods. Probably but I don't, can't think what I do, I've been teaching a long time you just do things without knowing what you're really doing. It's just observing, questioning, looking at what they're doing in their books, walking, we walk round and just sort of glance at what the kids have done if you're not working with that group, just check that they know what they're doing and how they're getting on.

Sercan:

What is it that make the method of assessment including what you describe as formative?

Helena:

Because you use it to then inform what you do next,..... whether you set them on a higher challenge or whether you adapt tomorrow's lesson planning..... which doesn't work so well with me because I'm only in one day a week but I would feedback to the teacher and say, I didn't get something or they needed some more support with it generally I'd feed back with which kids have got it, which ones haven't. I'd leave them books for children that haven't got it so that they can then be picked up in some way. So it's adaptive and changing using what they've learnt to inform the next step so you can't go blindly ahead with the next bit if they're not ready.

Sercan:

Thank you. Could you give me some specific methods, what do you say is the most common form of assessment that you use in your classroom for non-typical students and autism?

Helena:

I think for both, I would say the marking is what we do. Yeah, marking of the books.

Sercan:

Do you think it's effective or easier?

Helena:

It's not easy. Is it effective? Yes. Are there better methods out there maybe, I don't know but it's what we use and what we have to do so there's no (?? 7:58) it's what we do. So yeah but it's the way, at the end of the lesson I know he's got, who's understood and who hasn't. You know it does show you who's got it, quite how much we write after that is useful I'm not sure.

Sercan:

Do you have any experience with self-assessment and peer assessment?

Helena:

We do, do that quite a bit as well. I've mentioned those.

Sercan:

What about your opinion for using it to support learning of student with autism?

Helena:

They can find it more difficult sometimes, peer assessment they can find particularly difficult because that's working in teams or groups is something that they don't do particularly well with. Joseph would be different, I haven't done any with them but we're only in October, he would probably not be too bad. Because he can work with certain children and if it was a supportive person that would support him through that process I think he might be okay. Self-assessment he'd find difficult I don't think he'd be able to identify what was wrong with his work. So maybe it's more challenging for all children to do those two skills anyway, yeah I think particularly with peer assessment if you struggle to work with peers it's going to be particularly tricky. Some children might be better at self-assessment they might prefer to just look back at things themselves, but I think with autistic children they quite often can't identify the mistakes they think it's right. So they're going to find it particularly challenging I think.

Sercan:

Do you think they need support more?

Helena:

Yeah, you'd have to support them through that process, in some way.

Sercan:

How do you communicate with students what they need to do next in order to improve?

Helena:

It depends. A lot of it would be on back of what we do and I would write the same in Joseph's book as I would anybody else's but I would think about the fact that it's Joseph and make sure it was something he could understand in small steps but that's because particularly his learning is slightly weaker than the rest of the class and English is slightly weaker in maths, he's quite a bit weaker so he would need it at his level. What was the question, how would I support them?

Sercan:

Yes and how would you communicate the system that they need the support next?

Helena:

In order to do peer assessment or...?

Sercan:

In order to improve their learning.

Helena:

So conversation, talking to them, one to one. Joseph can't process a huge amount that is said to the whole class, partly because of where his learning ability is, he is slightly weaker than the average so therefore is going to struggle to access sometimes what I'm doing with the average but he will often have a TA in there who would then explain it at a lower level or do the input while I'm doing it, if I was on my own (?? 11:01).

Sercan:

Now you compare all the students and students with ASD do you think in these situations it is different for students with ASD?

Helena:

Yes, I would use the same strategies really. I certainly do in Year 5 because Joseph, those strategies will work for Joseph I think. He isn't an extreme case and yeah we still do, do written feedback for most of our autistic children, what I possibly wouldn't write in his book because he wouldn't be able to read it but that's an ability thing rather (?? 11:45) he wouldn't be able to access it to read it so it would be verbal feedback but we would still use those strategies.

Sercan:

How do you decide on which of those strategies to use when supporting students with ASD?

Helena:

Be whatever one worked. Whichever strategy works really. So we have to mark all the books and we have to feedback. So I would always write, always write something in Joseph's book but I tell it to his ability rather than his autism I'm worry about it's his ability. Can he access what it is I've written. Can he understand it to be able to respond. So I don't know that I really, I would adapt it if it didn't work for that particular child, it's very individual with autism, it's so individual you learn the strategies that work for them and adapt it where you need to. So actually we have to provide written feedback but if they needed it orally I would probably write in their books and then read it through with them. Joseph would need that sometimes but so would some of the other children in his group, it's not just an autism thing.

Sercan:

How do you think children with autism respond to these strategies, formative assessment?

Helena:

Whether or not we're being critical usually they're going to find any kind of marking that says you need to, can you improve this they're going to find that a challenge, and even hearing it said to them is going to be a challenge. He will respond to it and do it. If you say to him can we make this better, he will come up with a suggestion and do it but again he's not a very typical autistic child.

Sercan:

What is the most common feedback or response that Joseph feels in the classroom?

Helena:

What do you mean by that in terms of...?

Sercan:

For example he can use the verbal feedback or just use that language, do you use some strategies and...?

Helena:

He's better at talking. His body language you can tell what's wrong with him in terms of body language you know if there's a problem. But he understands enough language for me to feedback to him orally no problem that's probably the most effective in terms of written feedback he would probably need someone to go through it and read it with him to make sure he's read it. He would probably avoid doing it straight away if it's written, it needs that sort of extra bit of discussion. So the most effective way with him would be discussion.....

Sercan:

How do you know which methods work for students?

Helena:

You learn, you pass it on from teacher to teacher, this way worked and we pass it at the end of every year we give feedback and pass things on. So yeah or I used...

Sercan:

Do you think you have importance to understand their development during the process?

Helena:

Oh yes because things will change and as their ability changes they're able to access things as they're learning changes, as they peer assessment, self-assessment become quite a lot of it, so eventually you hope they'll start to be able to access it although it will be a slower process than everybody else and they need that guidance, and that support through that process. So yeah and then we just learn off each other, we share ideas, we talk, we talk to the TAs and the teachers talk and go this worked today, I did this with Joseph, try this. Debbie had an example the other week when she asked him to write so many sentences and she put a dot in his book I think see if you can get to there and then he'd written loads which he hadn't really done before, so that helped him to know where to get to, it gave him a challenge and in reading today he had to get three questions done which means he did better for me than he did last week which is where he got in a flap last week and didn't get anything done because he got upset with Lily, so this week he's done three questions, yeah setting him those targets has helped. So you just kind of pick up those things as you go along. That didn't work try something else next time.

Sercan:

What are the advantages or disadvantages of formative assessment could you give me some examples from your experiences?

Helena:

Instant feedback if it's oral and if it's in the book it's the next day. We always mark the books, they always get it back straight away so it's instant feedback on their work, so they know what they need to do next to improve and to learn so that's an advantage because you're getting the feedback as quick as you could, and they get to then practice or redo or if it's maths have another go in order to learn rather than not being left and forgotten and not knowing where they are. Disadvantages, I suppose you have to make sure that the children can access it, it's got to be relevant and able to access which I guess some of our children might find more difficult it's also a lot of effort and more effort from the teachers sometimes to mark all the books that's hard going, but we have to do it.

Sercan:

Would you assess differently in different subjects?

Helena:

Yes. Perhaps. Still we wouldn't always do written feedback for lessons like PE those kind of lessons, we wouldn't do written feedback we'd do a lot more discussion a lot more sharing and talking about what they've done. An investigation, they would be more investigative, or certainly (?? 17:32) I'm doing, they investigate more that they're learning. So see what they can get out of it and then I would direct children as they were going along. We wouldn't mark it. It's more detailed with English and maths because

they're priorities. There's more of it. We ask open ended questions perhaps in the topic to get them thinking deeper whereas the maths we need to work on getting it right first and then we can look at it deeper. That's probably content.

Sercan:

Is there anything else you would like to add maybe from the assessment or using support for students?

Helena:

No I don't think so. I think Joseph's support we treat very much, like can function very well in an ordinary class environment, he's not extreme in any way so a lot of the things we do work for him, he just might need a little more extra support. There are some students at school who practice written feedback as useful and actually it needs to be done there and then. We have students that keep getting things wrong and so he's only joined us next week so working out how I'm going to mark his maths if he gets things wrong I need to be careful about how that's done and we're going to think about, and I will talk to the TAs and the teacher who's had him for a week and a half and look at how we're going to do that because he's going to have to know it's wrong, it's about talking him through that process rather than just putting crosses on his work because he won't respond to that, and he'll get angry. So it's about how we deal with that. But we'll work through what works we'll try different things. We'll perhaps just mark one wrong and leave the rest that are wrong so that he can just work on one at a time so he doesn't see that he's got others wrong. We'll have to find strategies so we'll between us work through strategies that will work for him. Questioning, making sure you're questioning them all the time trying to include them where possible. So I wouldn't have asked too many question to Joseph this morning because he wouldn't have been able to access to the means to be able to process, you want get the chance to with the whole class waiting for it, so I would normally the TA would sit there and question him separately so that he's got his own time to think and she would question that group as well, in particular in maths where he's working, his aim to access English a bit more so I would perhaps ask him some questions in English. Yeah you just adapt to the children, adapt to the children's needs because they're all so different...No autistic child fits in a box they all have their own quirks and their own things. Joseph is very, very adaptable and very, he doesn't have huge things that set him off, so he gets on very well in that class.

Sercan:

Thank you very much, that's the end thank you.

Appendix 10: Sample of Initial Coding

SERCAN: And thank you very much to accept me. And please can you tell me about your teaching experiences? For example, how long have you been teaching and how long have you been at the school?

MARIA: Okay, so I've been teaching about 12 years now. However, I have had to maturities was teaching in the post and miss school. So I've had all about 10 years now. In this school, I've been here nine years. So I started doing supply first, I have not originally from Nottingham, I'm from Wales. So when I before I came to Nottingham, I was teaching in London for two years in a similar school, and it was city school and the makeup there was a lot of ill children. We actually had a special needs unit in that school, where children with autism and special needs were actually taken out. of the class. And during the morning sessions would go into this unit and have a very prescribed education similar to the nurture group that we're doing here. But there was a unit in that school, which was a class just for those children with those particular needs. So I did have some experience with didn't send children as well. When I was teaching in Wales, I taught in a special needs class, it was eight children. They were a lot younger Key Stage one with very specific needs. And especially autism was one of the big things then as well. So I've had some experience working with children on the spectrum. And then yes, in this in this school, I've taught to children so last year, I had a child who has autism. And this year, I also have another child who's on the spectrum as well. I was very different. And in terms of the way, I think the social side of things is different between the two boys. So the student that I've got now does do the work. So if he's got objectives with some persistence, he will try and he will try to complete and reach his objective. Whereas last year student was a bit more challenging. If he refused, he refused, and he would sit there, and we could we could never get him to do what we wanted when we wanted. Whereas students that I have now he is a little bit more flexible. He likes that praise and response that we give him. And you know, us being quite strict and firm means that he's able to meet us objectives.

Sercan Aslantas
Teaching experience
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Autism experience

Sercan Aslantas
Student responses

SERCAN: Okay, thank you very much. And please can you tell me about issues or challenges you face teaching student beads autism in the mainstream classes and how is it affect your teaching?

MARIA: Okay, I think that the main issue is not having enough sorts of helpers, because, you know, funding sorts of various funding in places, but you know, schools funding is quite tight. And so it's difficult to manage sort of what they should be doing. I think we do pretty well. We spend a lot of time thinking about the children, their objectives, what they need to do, and we do a lot of planning but it is difficult to manage, I think, but we have to do it because you know, we're an inclusive school. And you know, we accept children regardless of their needs, and it's our job to make sure that they are making that good progression through the year. I think we do it really well as a school in in specific challenges. I think last year was we found that funding was reduced. Our we had a teacher that would work with these children, and most stays. And so we lost her to because of low levels of funding. And so then we had to, we had to make sure that those needs were then being met in the classroom. So it meant as a challenge, we had to sit down and think about what we are going to be doing for these children who have got particular needs, and how are we going to encompass that into our classrooms. And then we, we've we've actually come up with a really prescriptive education curriculum for them, which they have any afternoons with a senior teaching assistant. So a lot of the life skills and social skills that the children will need, they are being covered in those sessions. And it is a very small group, which means it's almost one to one, one out of this three children. So they're getting a lot out of that and that's happening Monday, Tuesdays and Wednesdays as well.

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SERCAN: how it is affect your teaching experiences. teaching your students in the classroom

MARIA: It's about managing it really, I think you've got to be quite patient. I find that I have to be quite patient because my student likes to leave his workspace and come and see me quite often, and share, which is fine. So I've got to be quite strict and say, okay in a moment, because obviously, if I'm working with somebody, I can't just walk away whenever. So I tried to put some timings in place, I'm going to be back to you in a moment. So you know, and the more we do that you learn, so we've got to be we've got to make sure the routine is the same as well for that person. Yeah. So you know, this is your learning. We've taught them we've come away we go and teach somebody else. And then we go

Sercan Aslantas
challenges
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back and check, you know, to move them on. So it's a lot of thinking ahead about managing your time. So what about time management and being organized? We've got to be organized. Yeah, it seems crazy from an outsider's point of view, possibly, but Because we do it day in, day out, it's quite natural for us. So yeah, we are still learning to manage that time and manage our time with the class children and then back with the person that needs us as well. Yes, I know. And routine, you need different qualities for students with autism. I think you need to be aware of the students and what their needs are because not every autistic child is not the same. They can be, but some might be aware of the fact that some might have special tendencies. So I think knowing the child having regular meetings with parents as well, which we do, you know, is this something changed at home? Are they doing something different at home? Are the parents really struggling at home, how we can support that? I think knowing the child and then planning what they need to do is really important. So at the beginning of the year, we had a meeting with the parents. The first time I met the students parents find out what sort of things they do at home, what sort of challenges the parents face. And then we looked at strategies to try to overcome them, things that we could both do in school and at home. So in school, we've got this chart with them the rainbow son, cloud and storm. I know my students mom is also using the same charts at home, to support his learning and to make sure he's on task as well.

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SERCAN: Are there any resources you feel will further support your Teaching clothes that are not available or currently being offered to you.

MARIA: I think with new initiatives, we do get lots of training. So in school, our SEND leader, they will get training which will then get passed down to us. So if something new comes out, we will have the training to support children. So there isn't that there's something out there we don't know about it. And we are well informed, I think, from the council, government etc. For any new things that came just close that suddenly.

Sercan Aslantas
school support
collaboration

SERCAN: Okay, could you please clarify how does being a teacher in mainstream class affect your perception of teaching?

MARIA: I think if you're in a mainstream class, and say you have no send children or anyone autistic, you might think that, you know, it's it's easy to teach, but it's not. It doesn't matter if you're mainstream or not, there are children with many different challenges and difficulties. They might not be sand, but they might be other things like their emotional state or something that's may be happening at home affects their learning. So, you know, everybody is individual. And just because we're in a mainstream school doesn't necessarily mean it's easy, plain sailing, you know, we have to take into account that actually, the children's home lives affect them. So that might have an effect on their learning. You know, so something might be going on at home, and the children bring that with them to school. So, you know,

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Appendix 11: Observation Form

OBSERVATION SCHEDULE

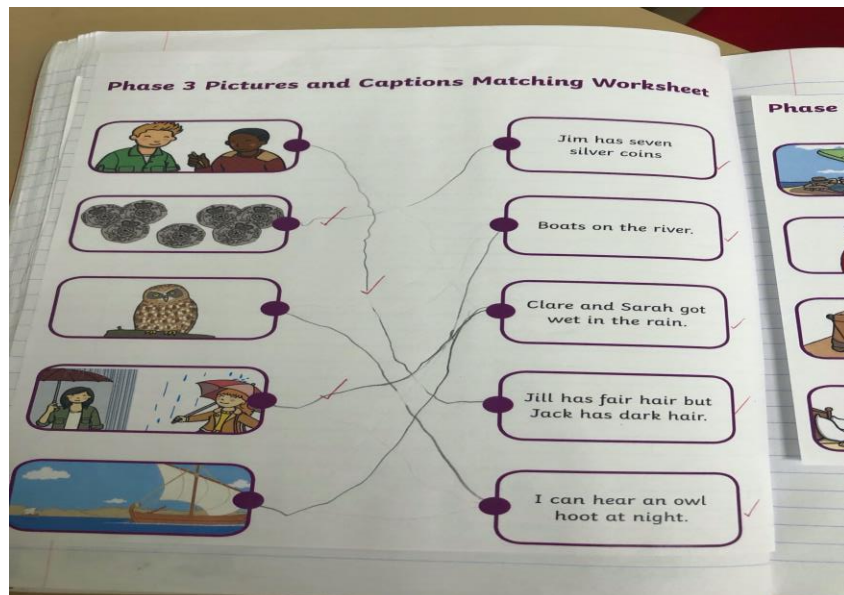
<i>Teacher's name:</i>
<i>Student's name:</i>
<i>Lesson:</i>
<i>Time:</i>
<i>Date:</i>

<i>Teacher</i>		<i>Student</i>	
1	<i>Body Language</i>	1	<i>Body language</i>
2	<i>Verbal praise</i>	1.1	<i>Rotating towards stimulus</i>
2.1	<i>Tone of voice</i>	1.2	<i>Head down/turning away</i>
3	<i>Smiley formative assessment charts</i>	1.3	<i>Glance at object briefly</i>
4	<i>Self-assessment</i>	2	<i>Verbal praise</i>
5	<i>Peer assessment</i>	2.1	<i>Tone of voice</i>
6	<i>Questioning</i>	3	<i>Smiling</i>
7	<i>Modelling and prompting</i>	4	<i>Giggling</i>
8	<i>Written feedback</i>	5	<i>Touching</i>
9	<i>Post-it-notes</i>	6	<i>Signalling intent</i>
10	<i>Team discussion</i>	7	<i>Eye contact</i>
11	<i>Tangible rewards</i>	8	<i>Response/feedback</i>
12	<i>Symbols</i>		
13	<i>Video/audio recording</i>		
<u>Other Comments-Notes for Participant Observation</u>			
<i>Did students respond positively to formative assessment?</i>			
<i>Yes</i>			
<i>No</i>			
<i>Not applicable</i>			
<i>Questions</i>			

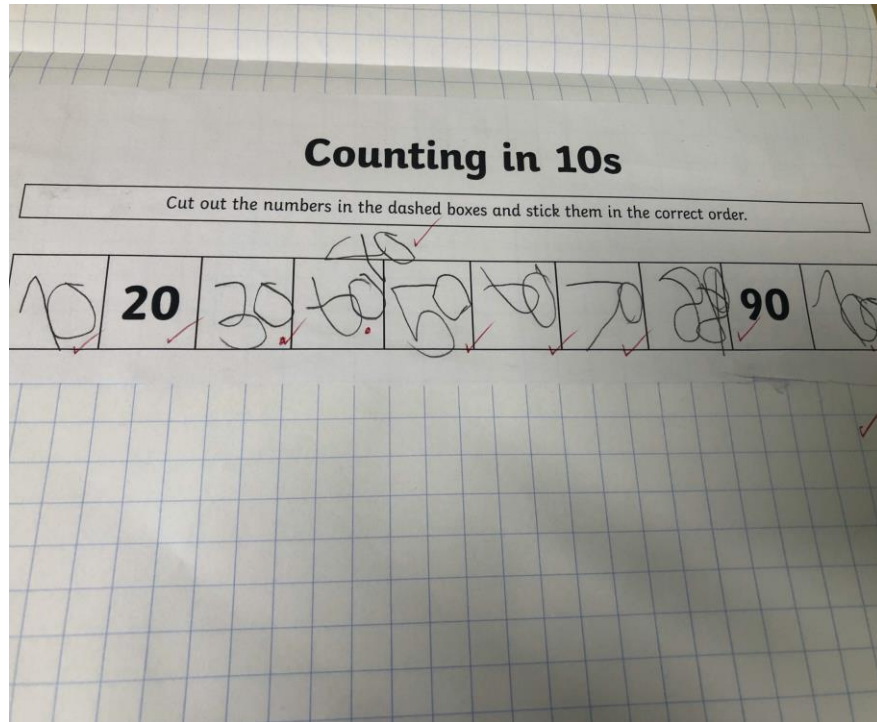
Appendix 12: Formative assessment examples



An Example of Modelling



An Example of Written Feedback



An Example of Written Feedback



An Example of Peer Assessment

Work linked to: Using the Internet

Year 2 Text and graphics 2017-2018

I know how to enter a web address using the address bar	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
I know how to move around the websites	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
I know that the photos on the Internet belong to the person who put them there	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Monet and Nottingham - I know how to copy and paste images from the Internet	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Nottingham - I know how to edit the photos	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Weather - I know how to find information from the Internet about the weather	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Weather - I can create a graph about the weather	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoyed this topic	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

An Example of Self-Assessment

END OF THE THESIS
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