

Music Teachers' Perspectives and Practices in Teaching
Autistic Children: The Impact of the Autism Friendly
Accreditation Programme.

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Abstract

This study explored the experiences of instrumental music teachers who participated in the Autism Friendly Accreditation Programme (AFAP) in a privately owned music school. The research aimed to understand the impact of the programme on the educators' perspectives and practices in teaching autistic children. The broader literature shows that continuous learning is crucial for educators to enhance their teaching and adapt to the evolving educational landscape. This is particularly relevant for students who require additional support in their learning. Additionally, the literature shows that there are many strategies which can improve the teaching of musical instruments to autistic children. Adopting interpretive phenomenological analysis as a methodology, the study explored the impact of the AFAP on the experiences of the eight instrumental teachers through focus groups and reflective journals. Four themes emerged through the analysis: (i) Challenges from Limited Autism Awareness; (ii) AFAP: A Practical, Reflective and Collaborative Experience; (iii) Implementation of Strategies; and (iv) Evolution of Practice and Perspectives. The findings showed that the AFAP enhanced participating educators' teaching strategies, improved the self-efficacy and changed their mindset and attitude towards life-long learning. Additionally, the programme contributed to the development of the collaborative culture in the school as teachers recognised the advantages of learning and working with their colleagues. Furthermore, as the awareness of autism increased among the teachers, their views of autistic individuals became more positive and understanding. Finally, as a result of the AFAP, the school became more inclusive and the learning outcomes of the autistic students improved.

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List of Abbreviations

ADHD Attention Deficit Hyperactivity Disorder

AFAP Autism Friendly Accreditation Programme

CoPs Communities of Practice

CPD Continuing Professional Development

DBD Disruptive Behavioural Disorder

DES Department of Education and Skills

EPSEN Education for Persons with Special Educational Needs Act

FG Focus Groups

IME Instrumental Music Education

IPA Interpretative Phenomenological Analysis

ITE Initial Teacher Education

JA Joint Attention

NCSE National Council for Special Education

PLC Professional Learning Community

RJ Reflective Journals

ToM Theory of Mind

WCC Weak Central Coherence

Terminology around autism

In my study, I was guided by the broader findings on the use of language in autism research. I ensured to use terminology that is respectful to autistic people and that will “empower and support autistic people, while also changing attitudes of the broader community” (Monk et al., 2022). The current literature shows that terms such as “person with autism”, “high/low functioning”, “co-morbidity” and “autism spectrum disorder (ASD)” may be offensive to some autistic people (Monk et al., 2022). Consequently, I used terms such as “autistic person”, “levels of support”, “co-occurring” and “autism” which are preferred by the majority of autistic people (Keating et al., 2023).

Chapter 1: Introduction

1.1 Introduction

This chapter provides background information on the Autism Friendly Accreditation Program (AFAP) as well as instrumental music education (IME) in Ireland. It also outlines reasons behind choosing and conducting this research. Additionally, the chapter explains the purpose and significance of this study in the field of music education. In the final sections, the chapter presents the structure of the dissertation, as well as the research question and sub-questions.

1.2 Background to the study

This study explores the AFAP, developed to raise awareness and provide instrumental teachers with knowledge and skills for teaching autistic children. Autism is a complex neurodevelopmental condition which can hinder the process of learning an instrument, as well as disrupt communication with teachers and peers in music classes (Nell et al., 2022). Additionally, as the range of autism is very wide, the solutions and resources designed to support autistic learners are not one-size-fits-all. Consequently, music teachers must have good knowledge of the condition and strategies to adequately support autistic learners (Hammel & Hourigan, 2013).

The AFAP took place at an Irish private music school specialising in instrumental tuition. In Ireland, the vast majority of IME is provided by a private market, and it is not regulated by organisations such as the Teaching Council (Conaghan, 2022). The history of private Irish music schools can be traced back to the early 20th century, when music classes were offered on a fee-paying, extracurricular basis to daughters of wealthy families. The

tuition was provided by independent music teachers, who were often members of religious orders (Conaghan, 2022). The second half of the 20th century witnessed a significant increase in the establishment of private music schools in Ireland, driven by socio-economic changes such as the lifting of the marriage bar and a decrease in religious vocations. Despite these changes, no support for music schools was provided by the State, which remains unchanged to this day (Conaghan, 2022).

The lack of educational policies and guidelines in music schools has resulted in unequal access to IME (Moore, 2014). An evident example of this is the lack of provision for autistic students, who often require additional support in learning musical instruments (Hammel & Hourigan, 2013). In comparison, the autism provision in State schools in Ireland has been developing rapidly following the introduction of specific policies and frameworks from the Department of Education and Skills (DES), and the Education for Persons with Special Educational Needs Act (EPSEN) in 2004 (Daly et al., 2016). The EPSEN Act mandates that, wherever possible, all children with special needs should be educated in mainstream schools. Additionally, as a part of this Act, the Irish Government established the National Council for Special Education (NCSE), providing support and training for school faculty and parents of children with special educational needs (Daly et al., 2016). The implementation of the EPSEN Act is ongoing, and it has encountered some challenges, including access to the curriculum and teacher training (Anglim et al., 2018). Nonetheless, the inclusive education aimed at meeting the needs of all children has been developing, and many benefits and successes of the EPSEN Act have been reported in State schools (Daly et al., 2016). Unfortunately, as the autism provision has been established only for schools under the governmental oversight (Daly et al., 2016), autistic students in private music schools do not receive equal learning opportunities, a right every child deserves (Kivijärvi & Rautiainen, 2020).

In contrast, in many countries in mainland Europe such as Austria, Poland, and Germany, the vast majority of music schools follow the national curriculum and are regulated by the governmental guidelines (Conaghan, 2022). This means these institutions must adhere to the state policies to support children with special educational needs (Hennenberg et al., 2019; Westerlund et al., 2019). In addition, educators in publicly funded music schools typically receive the same professional development opportunities as educators in state schools. This includes collaboration and training in inclusive music education provided by experts in teaching children with additional needs (Aicher, 2019). On the other hand, the low numbers of special needs students in state music schools appear to contradict these findings (Hennenberg et al., 2019). However, this may be due to the fact that the admission to these schools is based on entrance exams which might be challenging to some children with additional education needs (Theologos & Katsadoros, 2019). Nonetheless, the autism provision in many countries in mainland Europe encompasses publicly funded music schools, which consequently, provides autistic students with opportunities for equal educational access and support (Hennenberg et al., 2019).

1.3 Rationale

The decision to undertake my research stems from my role as the owner of a music school as well as being an instrumental teacher. In the last five years there has been a significant increase of autistic children enrolled into music classes in my school. However, the vast majority of the teachers have never received any training in teaching autistic children, and the feedback I have received from them was that they often struggle in supporting these learners. Anecdotal evidence suggests that most music colleges in Ireland do not include modules on the topic of teaching musical instruments to children with additional

needs in their curriculum. Following extensive research, I also concluded that, there are no workshops available for the music teachers to enhance their skills in this area of teaching.

I studied music in a conservatory in Poland for 12 years. The tuition in Polish conservatories is free, which benefits children from low-income families. However, the admission is strictly based on musical talent, and classes prioritise the development of a high level of technical playing (Chmurzynska, 2009), which could potentially exclude children with special needs. While working in music schools in Ireland, I noticed that the music tuition is open to all learners and predominantly focuses on enjoyment of music playing and the passion for music. This inclusive approach sparked my interest in exploring how teachers foster development and passion for music in children with additional needs.

Throughout the fifteen years of my career as an instrumental teacher, I have taught musical instruments to many autistic children. While in general, I found that my own teaching strategies were successful for these learners, I wanted to further expand my knowledge and skills to support them to the best of my ability. Additionally, I wanted for my school to become an inclusive educational institution where all students can learn to their highest potential, and teachers are supported in their professional development. Recognising that this can be achieved by continuous professional development, I decided to implement the AFAP in my school.

I was driven to investigate the impact of the AFAP, because I recognize that it potentially could contribute to the enhancement of teaching strategies for autistic children (Hammel & Hourigan, 2013), which could significantly benefit the students in my school. Additionally, at this point in my career, one of my main priorities is to focus on developing a culture of professional learning and collaboration in my school. Therefore, I wanted to explore which aspects of CPD will contribute to the most effective learning experience for

teachers, and consequently improved learning outcomes for autistic learners. Additionally, because of the limited literature on CPD for music teachers, I believe that my research will provide valuable insights for music school owners looking to enhance their faculty's skills and offer strategies for teaching musical instruments to autistic children.

Another reason for conducting this study was to investigate the perceptions of instrumental teachers regarding autistic learners, recognizing that they can significantly influence their teaching methods (Gómez-Marí et al., 2021). Understanding these perceptions is important to determine if more awareness and CPD can positively affect teaching practice. The awareness of autism in Ireland is growing (Dillenburger et al., 2013), and while the majority of teachers in public schools support inclusion, evidently some of them still have negative perceptions on autistic students (Barry et al., 2022; Rodden et al., 2019). Moreover, given the limited literature on the topic of instrumental teachers' perceptions of autistic learners, my aim was to further explore this topic.

1.4 Purpose of this study

This study aims to explore the influence of the AFAP on instrumental music teachers' perceptions and approaches towards teaching autistic children. It seeks to understand the potential changes in pedagogical strategies and views on autism, that occur by participating in the professional development programme. The study is underpinned by a commonly discussed topic of the relevance and effectiveness of CPD (Duncombe & Armour, 2004). Therefore, it aims to explore what constitutes effective CPD for instrumental teachers, which is particularly valuable given the limited literature on professional development for educators in private music schools.

Another crucial topic in education is inclusive teaching, which aims to provide equal access to learning to all children. This is particularly relevant in IME, which has traditionally

been intended for “musically talented” children only (Hahn et al., 2024). This research endeavoured to explore the challenges associated with teaching musical instruments to autistic children and provide evidence of the effectiveness of strategies that are currently offered. Consequently, this study will offer insights into developing inclusive education for students with additional needs in private music school environment.

Finally, this study will contribute to the wider discussion on special education practices in instrumental tuition, which can potentially influence the development of inclusive educational practices as well as professional development for teachers in the music schools sector. The research question as well as sub-questions outlined in the next section were formulated to directly reflect the purpose of the study.

1.5 Research question

A clearly defined research question is crucial to explore the impact of the AFAP on music educators’ teaching and perspectives on teaching autistic learners. According to Maxwell (2013), “A good research question is specific, manageable, and poses a clear relationship to the theoretical framework” (p. 75). Following this guidance, the research question as well as sub-questions focus on how the strategies and perceptions of music educators are influenced by their participation in the AFAP. Moreover, this inquiry not only aims to explore and describe these changes and developments, but also to understand how the AFAP enhances teachers’ capabilities to effectively communicate and engage with autistic students.

The research question in this study is:

What is the impact of an Autism-Friendly Accreditation Programme (AFAP) on music teachers’ perspectives and practices in teaching autistic children?

The sub-questions are:

- a) What challenges do music educators commonly face when instructing autistic children, and how do these challenges impact their confidence in their teaching abilities?
- b) What CPD experiences do music teachers perceive to be essential for enhancing their practice in teaching autistic students?
- c) What modifications or adaptations do music teachers implement in their curriculum and teaching methods after completing the AFAP, and how do these changes align with best practices in autism-informed education?
- d) For music teachers, how does their experience of the AFAP impact overall confidence and competence in providing effective music education to autistic children?

1.5 The AFAP process

The AFAP took place between the months of January and April in the music school that is the subject of this research. The school provides individual instrumental classes for primary and secondary school students as well as pre-instrumental group classes for pre-school children. The school is privately owned by me, and operates independently; however, the teachers in the school adhere to the syllabuses set by the Royal Irish Academy of Music, the Associated Board of Royal Schools of Music and the Rock School of Music. At present, 20% of the students in the school have additional needs, with the majority diagnosed with autism.

Initially, the AFAP was planned to be delivered by an external organisation specialising in autism. However, this programme was limited to providing only awareness workshop and sensory check of the school. Therefore, after carefully reviewing literature on

the topic of the professional development, I made a decision to expand the content of the AFAP. Firstly, I decided that the programme will benefit with individual meetings with the teachers as well as in-class collaboration between educators. Secondly, I wanted the AFAP to offer practical and relevant teaching strategies to the participants, therefore, I included an observation and feedback session with a qualified music therapist in the programme. Additionally, I asked the external organisation specialising in autism to provide a workshop about practical solutions to teaching autistic children. The AFAP process is summarised in Figure 1 and explained in detail in the next section.

The AFAP consisted of two workshops provided by an external organisation specialising in autism, an observation and feedback session from a qualified music therapist as well as collaborative meetings, discussions and teaching sessions among music teachers. Prior to the commencement of the AFAP, I had informed the parents of students in the school that the teachers will be going through the process of this program. Throughout the AFAP, I kept the parents informed about updates to our teaching approaches as well as new materials used in class.

The first step of the AFAP was an autism awareness workshop titled “Understanding Autism”, which consisted of a presentation as well as an interactive discussion. The presentation provided an overview of the autism spectrum as well as myths and misconceptions associated with this condition. Additionally, the topics of autistic strengths and challenges were presented as well as reasonable accommodations for autistic people. In the last part of the workshop, teachers had the opportunity to clarify the information presented and ask additional questions.

After the initial training, I organised a meeting with participating teachers to discuss the next steps and goals of the AFAP. The initial approach involved the less experienced

teachers joining the more knowledgeable ones to assist in music classes specifically for autistic children. This provided an opportunity for collaboration and learning for the educators. I have also encouraged teachers to seek guidance on any challenges they face while teaching autistic children by consulting with me as well as the school manager, who has two years of experience working exclusively with autistic children. Following the information from the “Understanding Autism” training, we decided to purchase sensory materials such as wobble cushions, sensory toys, as well as musical instruments that feature colour-changing and glowing capabilities for the school.

In the next part of the AFAP I met with the training officer from the organization that provided the workshops in our school, who conducted a sensory check to advise on changes to be made to ensure a safe and autism-friendly environment for autistic students in the school. Consequently, I met with participating teachers to discuss the findings of the sensory check report as well as to share resources, such as articles and books, on the topic of teaching music to autistic children. Additionally, during the meetings, I collected inquiries from educators regarding teaching their autistic students, which I then sent to the practical workshop coordinator before the next training session.

In the subsequent phase of the AFAP, I invited a music therapist to observe and advise on music group classes we teach exclusively for autistic children in the school. Following the observation, the music therapist spoke to the teachers and offered her advice. The feedback provided strategies designed to foster a collaborative learning environment among the children, as well as the development of their concentration and coordination skills. The music therapist provided teachers with strategies and examples of music games designed to enhance these capabilities and facilitate their development. As some autistic children in the classes are non-verbal, she also recommended using a picture exchange communication system (PECS) to enhance communication and help with the class structure. Additionally, during the

feedback session the music therapist spoke to the educators about parental involvement and participation in the class.

The final part of the AFAP featured a workshop and a collaborative discussion, but this time focusing on practical approaches to teaching autistic children. The workshop facilitator covered the topic of inclusive teaching, augmentative and alternative communication systems as well as practical solutions to supporting communication and collaboration for autistic children. Additionally, targeted strategies for challenges in class as well as technological approaches were explored. In the final section of the workshop the participating teachers engaged in a discussion on the presentation which also included the topic of engaging parents in the educational journey of autistic children.

Throughout the process of the AFAP teachers actively participated in the workshops by asking many questions, which demonstrated a strong desire to understand the concepts discussed as well as the process of applying them in practice. Additionally, the educators displayed a keen interest during collaborative meetings and classes, where they shared insights and strategies with their colleagues, highlighting their commitment to enhancing their teaching strategies for autistic students.

Figure 1 The AFAP process



1.6 The Overall Methodology

Given the nature of the programme, this study adopted an interpretative phenomenological analysis (IPA) and gathered data via focus groups and reflective journals. IPA enables the researcher to delve into and analyse participants' experiences and subjective perceptions (Smith et al., 2022). Therefore, it allowed me to explore the ways in which music teachers make sense of their experiences with CPD and teaching autistic students. The data collection employed in this study was conducted over eight weeks to allow for capturing transformations of attitudes and teaching methodologies, as well as to reveal the personal meaning these changes held for educators (Smith et al., 2022).

The qualitative framework in this study allowed for an exploration of varied experiences and perceptions of music educators (Smith et al., 2022). The findings of this

research will be crucial in further discussions on teaching strategies and practises in diverse learning environments which I will elaborate on in the subsequent chapters of this study.

1.7 Structure of the dissertation

This dissertation consists of five chapters. Subsequent to this chapter, is the literature review which presents an overview of the literature on the topic of CPD, music pedagogy and autism. Given the fact that the literature on the topic of CPD in private music schools is limited, the chapter presents insights from a broad range of educational sectors. Chapter Three outlines the methodology used to conduct this research as well as the rationale for choosing it. Additionally, it explains participants' selection, data collection, and analysis processes, as well as ethical considerations, trustworthiness and the quality of the study, and its limitations. Chapter Four provides information on the four themes which have emerged after the data analysis process. The final chapter concludes the study and provides answers to the research question as well as the sub questions, additionally, it provides final insights on the findings and their implications.

1.8 Conclusion

This chapter presented background information on the AFAP as well as autism and IME in Ireland. It also provided a summary of the research question, which aims to explore the subject of CPD and special education in private music school settings. Additionally, this chapter offered the rationale behind choosing this research topic and highlighted its significance in the field of music education. The following chapter presents the literature review that informs the research question and this study.

Chapter 2: Literature Review

2.1 Introduction

This chapter explores insights into the autism spectrum condition and explains the reasons why some autistic children have difficulties with learning musical instruments. It also provides an understanding of teaching methods and resources available to improve learning experiences and outcomes of autistic children. Subsequently, the chapter explores the topic of continuous professional development (CPD) for teachers, including a range of definitions, frameworks, barriers, and concepts for effective professional development. The following sections provide information on CPD in autism in Ireland in light of autism provision. They show various perceptions and impacts of CPD on teachers' learning and reveal what constitutes effective CPD for Irish teachers. Additionally, this chapter discusses the lack of specialised CPD for music teachers in the area of special needs in Ireland. The chapter concludes with a discussion on the theoretical underpinnings of this study.

2.2 Autism - Characteristics and education provision

Autism is a neurological condition characterised by limited and repetitive patterns of behaviour and interests, as well as ongoing issues with social communication and interaction (American Psychiatric Association, 2013). These deficiencies typically start in early childhood and may lead to potential challenges and difficulties in various aspects of daily activities in adulthood. The exact causes of autism are unknown, however, genetics and environmental factors are believed to play significant roles (Yates & Le Couteur, 2016). The diagnosis of autism can be challenging as autistic children display various levels of behaviour disturbance, language, and intellectual abilities (Yates & Le Couteur, 2016). The Diagnostic and Statistical Manual of Mental Disorders (DSM-5) (American Psychiatric Association,

2013) classifies autism into three levels of support. Level One: requires some support; Level Two: requires substantial support; and Level Three: requires very substantial support (American Psychiatric Association, 2013). It is also essential to comprehend the demographics and prevalence of autism in order to create support services and interventions that work. According to recent epidemiological research, the global incidence of autism is estimated to be around 1 in 54 children, with major variances noted among areas and communities (Salari et al., 2022). In Ireland, the prevalence of autism is 1 in 65 children, which is similar to the incidence of autism in the UK and US (Daly et al., 2016).

Autism provision refers to the implementation of educational strategies designed to support learning for autistic children and allow them to learn in an inclusive environment with their peers (Lindsay et al., 2014). The goal of autism provision is to facilitate personal, social, and academic development for autistic learners so they can achieve their full potential and improve their sense of inclusion (Lindsay et al., 2014). Autistic children encounter numerous challenges in mainstream school settings such as difficulties in communication, social interaction, and following instructions. Educators' knowledge and teaching skills are a crucial element of inclusion, therefore, relevant and tailored CPD is an important factor in achieving autism provision (Dawson & Osterling, 1997; Finke et al., 2009). Additionally, communication with parents of autistic students, support and awareness of autism from neurotypical children can also significantly contribute to the improvement of autism provision (Boutot, 2007; Lindsay et al., 2014).

2.3 Music education and autism

Music education is a process of acquiring theoretical, aural, as well as technical skills in singing or playing an instrument (Jablonska, 2014). It is an individual and collective journey for students, as it involves working on their own abilities as well as integrating them

into group settings such as ensembles, choirs, and orchestras (Colwell et al., 2018). In order to educate a well-rounded musician, educators have to provide students with a comprehensive understanding of music theory, history and sight reading. They also must teach them correct posture, hand and breathing techniques to develop good sound production. Moreover, music teachers play an important role in developing aural skills in students, facilitating their ability to collaborate with other musicians and enhancing their capacity of understanding and interpreting musical pieces (Colwell et al., 2018). Music pedagogy, therefore, encompasses a range of teaching methodologies, strategies, and practices to effectively teach these skills to learners. Several methodologies such as Kodaly, Orff and Suzuki emerged in the 20th century promoting holistic learning for music students by using various approaches and teaching techniques (Stringer, 2005). However, it is important to note that one of the foundational principles of music pedagogy is individualized instruction, therefore, it is important music educators understand the unique learning needs of students and adjust their pedagogies accordingly for effective teaching (Colwell et al., 2018).

Within the literature, social-constructivist principles are evidently fundamental to effective practice (Colwell et al., 2018). The concept of the zone of proximal development (ZPD), as developed by Lev Vygotsky, is often advocated for being suited for music teaching, as it aims to tailor instruction to the student's current abilities while encouraging them towards higher levels of learning (Karpov, 2014). By giving students challenges that are just beyond their current level of playing but are achievable with guidance from their teacher, students can reach their goals most effectively. This means music teachers must identify the exact point at which students need assistance and introduce new material at the optimal moment for learning (Karpov, 2014). This type of scaffolding instruction leads to fostering a student's independence and confidence in playing a music instrument, therefore, ZPD can be

a powerful tool for music educators to help them in guiding music classes and encouraging students to progress and achieve musical mastery (Colwell et al., 2018).

The spectrum of autism ranges from individuals needing no additional support to those who require substantial assistance (Grandin & Panek, 2014). The variety of the spectrum is also observed in music learning. According to research, there are many autistic children who are musical savants, and exhibit extraordinary musical abilities (Heaton, 2009). Beyond savant skills, a lot of autistic children demonstrate excellent musical capabilities such as enhanced auditory and perceptual skills, as well as superior focus and memory. Moreover, as the structure of musical pieces is characterized by patterns and rhythms, it often resonates with the organized thinking patterns that are seen in many autistic individuals, allowing them deep understanding and connection with the structure of complex musical pieces (Heaton, 2009). Nonetheless, on the other side of spectrum, there are children who have difficulties with learning musical instruments, which may be a result of impairment of theory of mind, executive function, joint attention, weak central coherence, or other co-occurring conditions (Hammel & Hourigan, 2013). The following sections outline these elements in greater detail.

One of the cognitive processes which is impaired in some autistic children, and negatively affects their learning is executive function (EF) (Demetriou et al., 2018; Lesiuk, 2015). EF refers to attention, working memory, cognitive flexibility, organizing memory, and planning (Hammel & Hourigan, 2013; Lesiuk, 2015). Research comparing autistic children to neurotypical children shows that limited EF can affect the ability to perform timing tasks in music perception due to issues with working memory and other executive functions (Lesiuk, 2015). Additionally, weak EF can hinder completing tasks, planning, and organising practise at home, as well as focusing and switching between activities in class (Hammel & Hourigan 2013; Ozonoff et al., 2005). Another cognitive ability which can be impaired in autistic individuals is central coherence. Weak central coherence (WCC) leads to a bias towards local

rather than global processing. As a result, when processing information, autistic people focus on details rather than understanding its overall context (Foxton et al., 2003; Happé & Frith, 2006; Heaton et al., 2001). When it comes to music, according to Hammel and Hourigan (2013), WCC can affect how autistic students interpret the overall essence of a musical piece. Additionally, they state that WCC can contribute to autistic children having issues in performing as a part of an ensemble, as they might only be able to focus on their own playing rather than integrating with other musicians (Hammel & Hourigan, 2013).

Another factor which can impact learning for autistic students is theory of mind (ToM). Impaired ToM can hinder the ability to understand that other people have beliefs, thoughts, ideas, and desires (Baron-Cohen et al., 1985; Frith & Happé, 1994). In music learning, the ability to understand emotions, and meanings of musical pieces is very important, therefore, autistic students might struggle with grasping those abstract concepts (Bhatara et al., 2010; Hammel & Hourigan, 2013; Silarat, 2022). Furthermore, the impairment of ToM can extend to modelling and imitation, as these skills involve copying the actions and behaviours of others (Nell et al., 2022; Silarat, 2022). When it comes to music instruction, this can impact the process of learning correct physical posture or specific instrumental techniques (Nell et al., 2022; Scott, 2014). Additionally, the social aspects of music playing can be impacted by the lack of joint attention in autistic children (Hammel & Hourigan, 2013). Joint attention is a skill of sharing focus with another person, crucial for learning how to communicate and collaborate with others. Impaired joint attention is considered to be one of the early signs of autism and a significant reason for social dysfunction (Hammel & Hourigan, 2013). Autistic children often show difficulties in establishing and responding to joint attention, which leads them to be unwilling to participate in group projects (Hammel & Hourigan, 2013; Mundy & Crowson, 1998). In music, apart from learning from teachers, students acquire skills and knowledge from other music

students, for example, when playing in an orchestra. Consequently, autistic students who have a deficit in joint attention may lose out on beneficial opportunities of learning and enhancing their playing techniques from their peers (Hammel & Hourigan, 2013).

It is important to note that autistic children often experience co-occurring conditions such as attention deficit hyperactivity disorder (ADHD), high levels of anxiety, sensory issues, as well as disruptive behavioural disorder (DBD) and a deficit in motor skills, all of which can pose further challenges to their learning (Garside et al., 2000; Mannion & Leader, 2013). ADHD can have a significant effect on concentration levels and focus during classes. Additionally, children with ADHD often struggle to remain calm and complete tasks due to high levels of energy (Lee et al., 2023; Melago, 2014). The second most common co-occurring condition for autistic children is anxiety (Gillott et al., 2001; Hourigan & Hourigan, 2009). High levels of anxiety can impair communication between a student and teacher in class. Moreover, anxiety can lead to students not being able to concentrate or complete a task or refuse to participate in class (Hourigan & Hourigan, 2009; Nell et al., 2022). Sensory issues, prevalent in the autism condition, also pose a challenge in music classes as autistic children are often triggered by a hectic environment and loud sounds (Darrow, 2009; Hammel & Hourigan, 2013). This can contribute to autistic students being very overwhelmed. Additionally, it can cause stress resulting in aggressive behaviour (Darrow, 2009; Nell et al., 2022). Furthermore, autistic children often display behaviours which align with DBD (Hayashida et al., 2010; Kaat & Lecavalier, 2013). As a result, students might not follow instructions or refuse to participate in class (Hammel & Hourigan, 2013; Nell et al., 2022). Finally, motor and coordination deficiencies can impair the skills of imitation and modelling and make it challenging to achieve high levels of instrumental technique (Jansiewicz et al., 2006; Lang et al., 2010).

2.4 Strategies for effective instrumental teaching of autistic children

“Students with autism can learn from and enjoy music classes if they are given the right support structures and adaptations to help them make connections to their teachers, their peers, and the curriculum” (Hourigan & Hourigan, 2009, p. 40).

This statement is consistent with the current research which shows the benefits of inclusive and individual approaches to teaching instruments to autistic children (Nell et al., 2022; Scott, 2014). They include class environment and materials, strategies for improvement of imitation and modelling skills, physical exercises, as well as augmentative and alternative communication systems.

The appropriate classroom environment is important in teaching autistic children, as some of them get overwhelmed with loud noises and bright lights. There are many resources such as light dimmers, noise-reduction headphones as well as dedicated sensory-friendly spaces which can reduce the feelings of anxiety and stress in autistic students and improve their concentration (Darrow, 2009; Deris & Di Carlo, 2013; Hourigan & Hourigan, 2009). Adapted learning materials such as music books and sheets with colour-coded and enlarged music notes can significantly help autistic students in sight-reading music notation (Deris & Di Carlo, 2013). Additionally, there are many technological apps which can be an alternative way of teaching music notation, particularly for autistic children who prefer visual learning (Garside et al., 2000).

Current literature offers many strategies to improve the skills of modelling and imitation in autistic children, which mainly include constant repetition of the correct posture and technical playing. This means music educators must dedicate a lot of time during classes to demonstrating instrumental playing (Hourigan & Hourigan, 2009). Additionally, participating in music ensembles, practising and playing with peers can further enhance the

skills of imitation and modelling and at the same time help in developing students' social skills (Scott, 2014). Finally, modelling and imitation can be further supported by strategies such as physical finger exercises and video recordings demonstrating correct instrumental playing (Corbett, 2003; Imankhah et al., 2018).

Augmentative and alternative communication (AAC) are visual forms of communication such as signs, pictures or written text. For some autistic children they are a preferred way of expressing their thoughts and feelings (National Council for Special Education, 2020). For example, picture exchange communication (PECS) can be used to improve communication with autistic children, explain abstract concepts as well as illustrate tasks and parts of the classes (Hammel, 2004; Hourigan & Hourigan, 2009; Nell et al., 2022).

While a variety of strategies exist, the evidence suggests that key to successful implementation of such strategies is effective CPD. The following section explores this in greater detail.

2.5 Continuing professional development for teachers – Definitions and clarifications

Continuing professional development (CPD) is pivotal in enhancing the professional practice of teachers and ultimately impacts student learning outcomes (Abakah, 2023; Njenga, 2023; Teslo et al., 2023). However, exactly what constitutes CPD for teachers is contested within the literature. At this early stage, however, it is worth noting that there is a significant absence of literature pertaining to CPD for music teachers in private music schools. Hence, the discussion here draws on insights from the wider literature. This becomes particularly relevant when addressing the specific needs associated with teaching music to autistic students.

Desimone (2009) defines CPD as a process of acquiring new knowledge and skills beyond those provided in initial teacher training. In a similar vein, the Organisation for

Economic Co-operation and Development (OECD) (2013) notes that CPD serves to enhance and broaden professional competencies that teachers have already developed during their pre-service education. On the other hand, as per Guskey (2002b), CPD seeks to address the evolving challenges of the educational environment by adapting educational practices, integrating new technologies and meeting the diverse needs of students. This perspective shows that CPD is not just an acquisition of knowledge and skills but a continuous process of learning, reflection, and experimentation for teachers.

In tandem with a range of definitions, a number of authors offer specific models and frameworks that attempt to offer a clearer articulation of CPD and its essential elements. Kennedy (2005) identified several models of CPD, including training, award-bearing, deficit, cascade, standards-based, coaching and mentoring, community of practice, action research, and transformative. Subsequently, she classified them into a framework consisting of three categories: transmissive, transitional, and transformative. The transmissive approach focuses on updating skills through expert-led training, typically conducted outside the school environment. The second model is about encouraging autonomy and innovation, and the final aims for integration of theory and practice which can potentially result in changes in teaching methodologies. On the other hand, Bell and Gilbert's (1995) framework for CPD classifies the professional development into three dimensions. The first dimension which is the personal growth, aims to enhance confidence. The second, professional enhancement, seeks to develop knowledge and skills in educators. The aim of the final dimension of social development, is to develop and improve collaborative learning among teachers (Fraser et al., 2007).

Currently, the CPD initiatives which focus specifically on collaborative learning are communities of practice (CoPs) and professional learning communities (PLCs). CoPs are "groups of people who share a concern or a passion for something they do and learn how to

do it better as they interact regularly” (Wenger-Trayner & Wenger-Trayner, 2023). Wenger-Trayner and Wenger-Trayner (2023) outlined three main characteristics of CoPs: shared domain of interests, community of people who engage in activities to develop their skills, and shared information and expertise. On the other hand, the main elements of PLCs are focus on learning, collaborative culture with collective responsibility and a results-oriented approach (DuFour et al., 2006). The first principle stresses that the true measure of educational success are learning outcomes achieved by students. The second principle outlines the importance of collaboration between teachers who take responsibility for all students’ learning. The final principle seeks for educators to continue to set goals and implement new knowledge and skills into their teaching practices (DuFour et al., 2006). The main distinction between PLCs and CoPs is that PLCs have a more formal structure and aim to directly target a specific issue in a school in order to foster improvement within the whole institution (Blankenship & Ruona, 2007).

2.6 Effective CPD for teachers

The literature on the topic of CPD shows that to be effective, it needs to include collaboration between participants. Additionally, it must be relevant and delivered by a skilful practitioner, as well as sustained over an extended period time to allow for gradual integration of knowledge into practice. According to Duncombe and Armour (2004), collaborative learning that includes an exchange of ideas and teaching strategies among educators, can significantly improve their pedagogies. Moreover, Opfer and Pedder (2010) argue that for the learning to be truly effective, it must occur within the school setting and be integrated into daily teaching practices. The literature also shows that the content of CPD must be relevant (Opfer & Pedder, 2010). In the context of teaching, it has to be practice-specific and tailored for the participants, as generic courses often fail to meet their needs effectively (Makopoulou

et al., 2021). This also highlights the important role of the course instructors who must adapt their teaching methods and recognize the specific needs of a group (Abakah, 2023; Opfer & Pedder, 2010). Another important aspect of CPD is reflective practice, as it increases educators' confidence in teaching and fosters critical thinking (Teslo et al., 2023).

Furthermore, successful reflective practice that gives educators time to analyse their teaching strategies can enhance their educational growth and professional engagement (Teslo et al., 2023).

Emphasizing the continuity of this process, research stresses the importance of on-going and sustained CPD as opposed to short-term training programs, to allow educators to implement and refine their teaching strategies (Opfer & Pedder, 2010). The argument for long-term CPD aligns with broader educational research which often finds that sustained professional development is necessary to achieve deep, meaningful changes in teaching practice. This contrasts with shorter courses which may not provide the depth or continuity needed for significant professional growth. However, according to some research, one-off workshops that are relevant, well-structured and presented by a skilful expert can indeed have a long-lasting and positive influence on educators' teaching practise (Lydon & King, 2009; Makopoulou et al., 2021). Finally, factors such as age, experience, confidence levels and geographical location are also crucial in determining the effectiveness of CPD (Makopoulou et al., 2021; Njenga, 2023).

2.7 Criteria for effective CPD and exploring its impact

The effectiveness of CPD can be explored in frameworks offered by a number of authors (Kennedy, 2005). Guskey's (2000) seminal framework has been utilised by a wide range of professions in various educational settings (King, 2014; Spowart et al., 2017). This framework identifies four key criteria for effective CPD courses, they must: provide relevant

knowledge and practical strategies for direct application in teaching, promote systemic improvements within educational institutions, lead to tangible improvements in educator-student engagement, and ultimately aim to enhance student learning and development outcomes (Guskey, 2002b).

Guskey (2002a) also developed a framework for evaluating professional development consisting of five levels: participants' reactions, participants' learning, organization support and change, as well as participants' use of new knowledge and skills and students' learning outcomes. The first level assesses if the participants are satisfied and engaged in the CPD program. It also seeks to understand if they found the experience valuable, engaging, and relevant to their professional needs. The second level evaluates the extent to which participants have gained the intended knowledge, skills, and attitudes from the CPD course and measures the effectiveness of the program in conveying new information or skills. The third level examines the organizational support provided for implementing new skills or strategies learned during the CPD. It seeks to find out if the organization encourages or limits the application of new knowledge in practice. The fourth level focuses on the application of the learned skills and knowledge in the participants' professional practice. It assesses whether and how participants are using their new competencies to make a difference in their work environment. The final level examines the impact of the CPD on students' learning outcomes. It explores if the methodological changes in teachers' practices improved student performance and attitude towards learning.

2.8 Barriers to CPD

Literature identifies several factors which can negatively impact the participation and the outcome of CPD with institutional barriers being among the most prevalent. Institutional barriers include limited availability of learning opportunities which is often a result of the

geographical isolation of schools, funding issues and inadequate leadership (Abakah, 2023; Njenga, 2023). The lack of recognition, incentives, as well as support from school faculty, especially from principals, can significantly limit teachers' participation in CPD (Duncombe & Armour, 2004; Njenga, 2023). This can manifest in various ways. For example, restricted financial resources allocated for professional development indicate a failure to recognize the importance of ongoing learning for teachers (Duncombe & Armour, 2004).

CPD opportunities can also be hindered by personal factors as well as conflicts among teachers. For example, the lack of time and family commitments may be one of the reasons educators are not able to participate in CPD (Njenga, 2023). Additionally, some teachers may not want to collaborate, share their experiences and look for advice from their colleagues (Duncombe & Armour, 2004). Furthermore, the educators might be afraid of learning new strategies as they might turn out to be ineffective (Guskey, 2002a). In addition, negative past experiences with CPD may lead to educators perceiving professional development as irrelevant or unable to offer practical benefits which can lead to a general scepticism towards the value of training programs (Duncombe & Armour, 2004).

Addressing the barriers to CPD requires educational institutions to support and foster professional development while also considering teachers' personal challenges and circumstances. By promoting a more inclusive and understanding school environment, educational institutions can enhance quality education which will benefit both teachers and students.

2.9 CPD for autism provision

As with the broader literature on CPD for teachers, referencing CPD for music educators is limited. Therefore, when discussing CPD for teachers in this chapter, educators are referred to across a broad range of sectors.

While wider evidence suggests that autism provision does feature in initial teacher education programmes both in Ireland and abroad, it is evident that this is somewhat limited (Hamrick et al., 2021). Despite international efforts to enhance CPD for teachers in mainstream schools, many educators evidently still lack the necessary knowledge and skills in supporting autistic students (Gómez-Marí et al., 2021). Recent reports suggest that CPD in Europe puts a strong emphasis on maintaining standards and assessment, taking a functionalist approach that prioritizes acquiring certifications and meeting certain levels of assessment. However, there is a growing appreciation of the importance of integrating this approach with strategies that foster collaboration, personal development, and lifelong learning to create a more holistic CPD, so that educators can not only meet professional requirements but also engage in meaningful personal and professional growth (McMillan et al., 2016).

In Ireland, CPD for supporting autistic learners has grown exponentially over the last two decades. This is primarily due to a similarly expansive growth in autism provision with the introduction of the Education for Persons with Special Education Needs Act (2004). This Act was established to integrate children with special educational needs into mainstream education, alongside their peers whenever feasible. Additionally, the understanding of what constitutes CPD for teachers is also evolving in Ireland. Current frameworks provided by the Teaching Council emphasize CPD is a lifelong journey of learning which aims to enhance teachers' knowledge and skills throughout their careers. Moreover, the Teaching Council advocates for a coherent national framework for ongoing professional development and encourages teachers to actively maintain and update their professional knowledge, critically reflect on their practice, and continue to seek CPD opportunities (Teaching Council, 2016).

CPD in Ireland is generally funded by the Department for Education and Skills (DES) (Duggan, 2016; McMillan et al., 2016). CPD courses in special education, including autism,

are recommended, primarily due to the limited coverage of this subject in Initial Teacher Education (ITE), however, they are not obligatory (National Council for Special Education, 2015). The CPD training is delivered by various organisations, including the Special Education Support Service (SESS) and the Middletown Centre for Autism (MCA), which offer one day as well as extended duration courses delivered throughout the school term (Duggan, 2016). CPD in special education is in high demand, however, because of the limited funding, not all teachers have the opportunity to participate in specialized programs (National Council for Special Education, 2015).

Due to the lack of literature on CPD for autism provision for music teachers in private schools in Ireland, the findings discussed in the next chapter will take a broader approach to the subject.

2.10 Research on teachers' CPD for autism provision in Ireland

The literature on the topic of the impact of CPD courses on teachers' practise in Ireland presents a diverse range of findings. While some research shows a very high percentage of satisfactory levels from training courses conducted by SESS and MCA (Department of Education and Skills and PricewaterhouseCoopers LLB (PwC), 2012; Department of Education and Skills Inspectorate – Republic of Ireland & Education and Training Inspectorate – Northern Ireland, 2012), several studies show teachers' dissatisfaction with the quality and availability of CPD (Anglim et al., 2018; Barry et al., 2023; McGillicuddy & O'Donnell, 2014; Rodden et al., 2019).

Current research shows that according to Irish teachers the main issues with CPD initiatives are the short length of the programmes and their lack of relevance and quality (Young et al., 2017; Barry et al., 2023). Additionally, educators want the CPD programmes to offer practical solutions to teaching, rather than theoretical knowledge (McGillicuddy &

O'Donnell, 2014; Nic Aindriú et al., 2022). This is also affirmed in the research conducted by Ring et al. (2019) which shows that through workshops that combine theoretical and practical knowledge on the subject and include elements of reflection and collaboration, educators can significantly improve their understanding, confidence, and skills in teaching autistic children.

The varied findings on the effectiveness and quality of CPD for autism provision raise questions about the quality and applicability of the programs across different educational contexts. Moving forward, it becomes equally important to explore CPD for music pedagogy in Ireland and abroad. The findings into this exploration are presented in the next chapter.

2.11 CPD for music pedagogy

In countries where the vast majority of music schools are private and not regulated, such as Ireland, Canada, and the United States, the responsibility to provide CPD for music teachers rests with the music schools' owners (Conaghan, 2022; Upitis et al., 2017). In Ireland, there are a few non-governmental organisations such as AsIAM and Autism Ireland that deliver training to private music schools, however, because of the lack of financial support to cover the costs of these courses, this type of CPD is infrequently pursued by the music schools themselves. Additionally, as these organisations do not specialise in music education, the training they deliver is not always relevant. On the other hand, in the United States, the opportunities for specialised CPD for music teachers are developing, for example, through the Berklee College of Music which delivers the Accessible Music Education Group programme specifically tailored for instrumental educators who teach children with special needs (Berklee Institute for Accessible Arts Education, 2024). This unique programme includes practical and collaborative sessions which are delivered at no cost to music teachers.

Many countries in Europe, such as Poland, Austria and Finland, are a part of the public education system. This means instrumental teachers have better, and usually free

access to the CPD initiatives (Björk, 2016). However, the CPD in these countries is usually delivered through conferences and has been criticised in the past for not focusing on students with additional needs (Björk, 2016; Kruse-Weber et al., 2023). Nonetheless, in recent years, initiatives such MEOK and Inclusive Pedagogy in Arts – Europe (IPA-E) were developed to promote inclusive teaching in music schools and enhance educators’ knowledge and skills through collaboration with their colleagues (Hennenberg et al. 2019).

The findings of this section of the literature review show that CPD for teaching instruments to autistic students is developing, as the public and private music schools are becoming more inclusive. However, in some countries the lack of regulation and funding hinders the opportunities for professional development. Furthermore, the fact that there are currently no external CPD opportunities for teaching instruments to children with additional needs in Ireland, indicates the need for tailored and collaborative programmes that are designed and carried out by the music teachers themselves

2.12 Theoretical framework

This study is underpinned by Dewey’s (1916) concept of education as growth. In his works, Dewey stressed that education should continue throughout the entire life in order to achieve personal, professional and social growth. Dewey offered a useful perspective on the notion of growth by saying that: “Growth is the characteristic of life and education is all one with growing; it has no end beyond itself. The criterion of the value of school education is the extent in which it creates a desire for continued growth and supplies means for making the desire effective in fact” (Dewey, 1916, p.62). Additionally, he highlighted the importance of life-long learning due to the evolving educational landscape and needs of learners (Cross-Durrant, 1984). Dewey also believed that to achieve growth educators must learn from their

experiences and that the learning process must be active, collaborative and reflective (Aubrey & Riley, 2019).

John Dewey's concept of education as growth guided many aspects of this study. First of all, the importance of experiential, reflective and collaborative learning highlighted by Dewey, influenced the design of the AFAP. As a result, I included collaborative, practical and reflective elements in the programme. Secondly, guided by the concept of growth being a continuous process, I used qualitative methods and gathered data at different stages of the AFAP which helped me to illustrate the evolving changes of teachers' practices and perspectives. Additionally, in the process of data collection I ensured to ask educators questions about future plans for teaching and skill development, consistent with the concept of lifelong learning. Similarly, when developing the themes in this study, I aimed to show the growth and evolution of teachers' practices and perspectives throughout the whole duration of the programme. Finally, when interpreting the data I focused on understanding the AFAP as a process of learning and adaptation which also aligns with life-long learning concept in Dewey's teachings.

This study was also guided by Guskey's (2002a) five criteria of effective CPD which are participants' reactions, participants' learning, organisational support, participants' use of knowledge and students' learning outcomes. These criteria informed the questions for the reflective journals as well as the focus groups. I believe that by capturing participants' reactions and learning as well as exploring organisational support and learning outcomes of the students helped me in understanding the impact of the AFAP. Similarly, when analysing and interpreting the data I paid close attention to Guskey's criteria which helped me to compare and consequently understand the subjective experiences of the participating teachers.

2.13 Conclusion

The findings of this chapter show that there are various strategies and resources that can help to support instrumental learning for autistic children. However, given the complexity and broad range of autism, educators must understand and adjust their teaching methods to each autistic student. This can be achieved through CPD which to be effective must be tailored to teachers' needs and include elements such as collaboration and reflection. Additionally, it is important the educators continue to learn and develop throughout their careers to meet the demands of all learners. Furthermore, the literature shows that even though the support for autistic learners is developing both in Ireland and globally, the CPD opportunities for autism are not equal for all educators. Finally, the evident lack of literature on CPD for instrumental music teachers shows the need for research on this topic. Therefore, I believe this study will contribute to the exploration of this important subject and provide valuable insights into the professional development for instrumental teachers.

Chapter 3: Methodology

3.1 Introduction

The aim of this chapter is to give an understanding of how the interpretative phenomenological analysis (IPA) research methodology was employed in this study. The chapter starts with a description of a paradigm used for this research. The following section presents the ground IPA principles and justification for employing this methodological approach. The subsequent sections, describe the participants' selection, data collection and analysis process, as well as ethical considerations in the study. The final two sections of this chapter explore the principles of trustworthiness and quality in this research as well as its limitations.

3.2 Philosophical underpinnings

A paradigm in research is a set of epistemological, ontological, and methodological beliefs that guides the study and illustrates how researchers understand the nature of reality and knowledge of the world. A paradigm, therefore, informs the researcher's conceptualisation, research design, choice of methods, data analysis and consequently influences how they analyse and perceive the phenomena in the study (Baker, 2021).

This research is grounded in the interpretivist paradigm and aligns with the ontological and epistemological views of this approach. In interpretivism, ontology, which is the philosophical study of being, is based on relativism, meaning that the reality is subjective and differs for each person (Scotland, 2012). In this research, the "reality" of educating autistic children varies among educators, as their perceptions and teaching methodologies are shaped by personal and professional experiences, as well as their backgrounds. Epistemology,

which is a philosophical study of knowledge, in the interpretivist paradigm asserts that knowledge is subjective and constructed through interactions and experiences (Scotland, 2012). This also aligns with the goal of this research which is to understand how participating teachers make sense of their unique experiences.

3.3 Methodological approach

IPA is a “qualitative research approach committed to the examination of how people make sense of their major life experiences” (Smith et al. 2022, p.1), and how these experiences affect their behaviours and feelings (Smith et al., 2022). The theoretical foundations of IPA are phenomenology, hermeneutics and idiography. Phenomenology is a “philosophical approach to the study of experience” (Smith et al., 2022, p.7), and its philosophers are concerned with exploring the nature of subjective experiences of individuals (Smith et al., 2022). The second theoretical underpinning is the theory of interpretation known as hermeneutics. IPA utilises the principle of double hermeneutics because “the researcher is trying to make sense of the participant trying to make sense of what is happening to them” (Smith et al., 2022, p.3). The final theoretical underpinning is idiography which seeks to examine the experiences of each individual in detail, hence, small sample sizes are used in IPA (Dennison, 2019)

In my opinion, IPA was the most suitable approach for this study. First of all, I aimed to fully understand how the participating teachers make sense of their subjective experiences and how they affect their practices and perceptions, which corresponds with the main aim of IPA (Smith et al., 2022). Secondly, I believe that to reveal the true impact of the AFAP it was crucial to explore the participating teachers’ experiences in detail, consistent with the theoretical foundation of idiography in IPA (Smith et al., 2022). Additionally, I believe that the iterative nature of data analysis, which aligns with the hermeneutic approach in IPA

(Smith et al., 2022), was the most effective way for an in-depth understanding of the experiences with the AFAP. Finally, the small sample of participants used in IPA was also suited for my study, as I acknowledge that modifications in teaching strategies and perspectives are very personal among educators, and it is crucial to capture their unique insights and responses.

3.4 Participants

I used purposive sampling to choose participants for this study, selecting from 18 teachers at a private Irish music school. The selection criteria required that the teachers worked in the music school for longer than one year and had experience in teaching autistic children for a minimum of six months, ensuring they possess enough experience to assess the impact of the AFAP. Eight teachers met those criteria. The size of the sample aligns with the perspectives of Smith et al. (2022) who emphasize the importance of detailed and rich narratives while still allowing for exploration of differences between participants. The size of the sample is small and has limited transferability, however, Creswell (2007) argues that authenticity comes from gathering meaningful data rather than high numbers of participants.

Among the eight participating teachers, seven were female and one was male. Each teacher held NFQ qualifications in music or education. Five participants had level eight qualifications, and the remaining three had qualifications at levels six, nine, and ten, each level represented by a different educator. The teaching experience varied: two teachers had over ten years, four had four years and one had over two years of experience. Finally, seven of the teachers were Irish, while one was from outside Ireland.

3.6 Data collection

IPA typically uses semi-structured interviews as the data collection tool. However, other approaches such as focus groups, observations and reflective journals are also utilised in this methodological approach (Tomkins & Eatough, 2010). The process of data collection in IPA seeks to explore the deep understandings of participants' experiences with a phenomenon, therefore, it is important they can openly share their experiences and stories with the interviewer and other participants (Smith et al., 2022).

When choosing a data collection method, I have originally considered observation of practice to explore the impact of the AFAP on teachers' perceptions and teaching strategies. However, as this process would involve recordings of music classes with vulnerable children, I decided that the ethical concerns associated with this form of data collection outweighed the potential benefits.

In the initial phase of data collection, which took place after the last AFAP session, the participating teachers began to document their reflections in the reflective journals. Reflective journals are not a commonly used form of data collection in IPA research, however, they strongly align with the theoretical foundations of IPA (Cudjoe, 2022). The rationale for choosing this form of data collection was to gather first-hand, individual experiences of the music teachers which aligns with the theory of phenomenology, aiming to explore the in-depth and subjective experiences of individuals (Smith et al., 2022). Additionally, I strongly believed that by giving the participating teachers the time to note their feelings and thoughts in reflective journals would provide me with the most in-depth data, aligning with the theory of idiography in IPA. Furthermore, my aim was to ensure that the music teachers have time to reflect on the AFAP, as this was a crucial element of the programme that allowed them to process and analyse their experiences.

In this study the participants noted their thoughts in the reflective journals over the space of eight weeks to allow them to express their feelings and reflect on their teaching strategies. The questions in the reflective journals were informed by the Gibbs' model of reflective cycle, which consists of six stages: description, feelings, evaluation, analysis, conclusion, and action plan (Gibbs, 1988). The cyclical nature of the reflective model enhances personal growth and professional practice by encouraging continuous reflection and learning from experiences (Gibbs, 1988). In the questions developed for the reflective journals, I encouraged teachers to describe and reflect on their feelings and experiences in the programme and how they changed over time. Subsequently, they were asked more insightful questions about their learning journeys which was followed by drawing conclusions of what might have been done differently and reflections on what steps are needed to be taken next. My intention initially was using broad questions, however, as the teachers encountered difficulties with understanding and answering some of these questions, it was necessary for me to add prompts. For a full list of questions and prompts please see Appendix iii.

A second form of data collection was gathered through focus groups. Focus groups are conducted to allow for an exchange of opinions, insights and perceptions, within a group of participants, and are facilitated by a moderator who uses a structured guide (Lauri, 2019). Typically, focus groups are of 60-90 minutes duration and consist of six to twelve participants (Freeman, 2006). One of the main aims of the focus groups is to motivate participants to challenge each other's views and explore differences in the perceptions (Freeman, 2006). This leads to gaining deep insights into a subject which is achieved through open ended questions, establishment of ground rules as well as creating an open and non-judgmental environment (Breen, 2006; Lauri, 2019). The focus group moderator's responsibility is to guide conversations while concentrating on the topic as well as to ensure that all participants fully engage in discussion. Therefore, while it is important for the focus

group facilitators to create a no pressure environment where participants enjoy sharing and discussing ideas, they must ensure that the sessions are structured and the main objectives are met (Krueger & Casey, 2015).

Focus groups are also not commonly utilised in IPA, however, in my opinion, they were suitable for this study, and they enriched the depth of the data gathered. I am aware that the use of focus groups in IPA has been criticised for issues with capturing individual participants' experiences (Love et al., 2020). However, as these experiences were gathered through reflective journals in this study, the focus groups were an opportunity to provide me with additional insights into the impact of the AFAP. According to the literature, the interactions between the participants in focus groups can provide more insightful data in IPA study, as unexpected topics might develop through discussions (Love et al., 2020). Additionally, focus groups can help the researcher to notice the differences in the views and perceptions of the participants as they engage in discussions with others (Palmer et al., 2010). Furthermore, given my positionality in the research, I anticipated that participating teachers, who are also my employees, might have found it easier to express themselves in a group environment rather than in a semi-structured interview (Wire, 2022). Finally, as I conducted multiple focus group sessions, my approach aligned with the iterative nature of IPA by providing multiple opportunities for participants to openly talk about their experiences and opinions which ultimately provided me with more insightful data (Smith et al., 2022). To conclude, I believe that the focus groups significantly enriched the study findings and gave me in-depth information on the impact of the phenomena in this research, which is the main goal of the IPA (Smith et al., 2022).

When formulating the focus group questions, I adhered to the framework set by Smith et al. (2022). My aim was to ask broad but relevant questions that would help me explore the

subjective experiences of teachers. Firstly, I selected and arranged the topics that need to be discussed in the sessions to answer the main research question. Subsequently, I ensured the questions were open ended and that I had a list of prompts to further engage with participating teachers and encourage them to talk (Smith et al., 2022). Additionally, I used Krueger's (2002) guidelines for designing and conducting focus group interviews which are opening, introductory, transitional, key, expansion and exit questions. Finally, I discussed the questions with my supervisor and conducted a pilot focus group to further enhance the quality of the data collection process.

The participants of the pilot focus group were three teachers who went through the process of the AFAP but could not be a part of the official study because of their unavailability to participate in the final focus group held in May. The pilot focus group lasted for 90 minutes. In the first 60 minutes, I conducted a discussion using the questions I had prepared for the official session. This was followed by 30 minutes conversation about the interview process as well as participants' feedback and insights about the questions.

I believe that I gained a lot of insights from conducting the pilot focus group. Firstly, I learned that it can be difficult for the participants to fully describe and express their experiences, and that a lot of prompts are needed to help in gathering rich data. However, the prompts have to be structured carefully, so that they do not give lead answers (Smith et al., 2022). Therefore, in my focus groups I used a lot of open prompts, as suggested by Smith et al. (2022), such as "how do you feel about it?" or "tell me more about this experience". Additionally, when conducting the pilot focus group, I noticed that the participants had difficulties in answering the questions about perceptions of autistic people. Therefore, I replaced the word "perception" with "understandings and views". Furthermore, the participants of the pilot focus group pointed out that some of the questions were either too

broad or too long and suggested that specific questions would be easier to answer.

Consequently, I refined the questions to ensure more clarity for the official focus group sessions.

The time limits of my research allowed me to conduct two separate focus groups consisting of four members each, which were held over a period of eight weeks. The sessions were spread four weeks apart to allow for a period of reflection and more time to embed new teaching practises. Focus groups, which lasted approximately 60 minutes each, were carried out in person in the music school, in the months of April and May. They were recorded on an audio recording application on my phone.

In the initial focus group session, educators were encouraged to talk about their previous experiences with teaching autistic children as well as CPD. Subsequently, I asked about the expectations and experiences they have had with the AFAP to date. In the next part of the focus group, I inquired about the strategies they implemented in their teaching following their participation in the AFAP. Finally, I asked them to provide insights on how participating in the AFAP has shaped their perception on autistic children as well as their professional development.

The second focus group started with teachers sharing their recent experiences with teaching autistic children, as well as their perspectives on the AFAP. Subsequently, I asked the educators to provide me with information about current strategies they use in teaching autistic children, as well as their experiences with the process of developing inclusive education in the school. In the final part of the focus group, I inquired about teachers' goals regarding CPD and asked how their needs could be further supported by the school. For the full list of questions and prompts please see Appendix iv.

3.7 Data analysis

The data analysis process was guided by the framework by Smith et al. (2022). The first step in this process was transcribing the data from the focus groups and reflective journals onto a Microsoft Word document. Subsequently, I began to familiarise myself with the data through slow reading and re-reading of the text (Smith et al., 2022). My next step was writing my initial observations in the comments section in the Microsoft Word document (Pietkiewicz & Smith, 2014). Following this process, I began the process of making the initial comments (Pietkiewicz & Smith, 2014). This was achieved by identifying meaningful phrases and sentences that capture the subjective experiences of the participants.

After noting initial comments on the entire transcripts and reflective journals, I began the process of developing the themes. This process started with re-reading the initial notes and looking for emergent patterns and themes. Subsequently, I organised them into clusters (Pietkiewicz & Smith, 2014). I decided to do it chronologically, based on the stages of the AFAP: before, during, immediately after, and 4 weeks after the programme (appendix vi). I believe this approach helped me to track and fully understand the teachers' experiences with the programme. Consequently, I began to develop the main themes from the clusters.

Once I developed the main themes, I began writing their findings. To ensure the transparency and consistency, I allocated unique number to each participating educator. I also believe that by doing this I allowed for the reader to see the evolution of practices and perspectives of each music teacher and to explore their subjective experiences.

3.8 Ethical considerations

Considering that the participants of this study are my employees, it was particularly important for me to adhere to ethical considerations, as well as maintain integrity and respect

towards the participating teachers throughout the research. The first step to this process was informed consent that explained the purpose and process of the research. I also informed the participants that the participation in this study was voluntary and that they could withdraw at any stage without any consequences (O’Leary 2017).

In my study, I complied with confidentiality and anonymity in all personal information, and identities to prevent breach of privacy. Moreover, by obtaining ethical approval from the National College of Ireland (NCI) Ethics Committee, the research complied with established practices and standards. Data protection was ensured by employing secure storage and safeguarding of the information. Immediately after the focus group discussions, audio recordings were transferred to a password-protected Google Drive for additional security and accessibility. The reflective journals were stored in a locked file cabinet in my house, which I only have access to. All data from the focus groups and reflective journals will be destroyed upon the completion of my dissertation.

The well-being of the participants was also very important in this study; therefore, they were informed of the date and the length of the focus groups sessions four weeks in advance. Before the sessions, I also reassured the participants that the discussions could be paused at any stage for a break, and that they could drop out of the research at any point without repercussions (O’Leary, 2017). Following the focus group sessions, I checked if the participants were satisfied with the process and the use of data gathered in my research. I also assured them that a summary of the main themes and findings would be shared with them after the completion of my dissertation. Additionally, I made sure to express my gratitude once again, and thank the teachers for their participation and contribution to the research (Smith et al., 2022).

3.9 Researcher positionality

The study was conducted in the music school which I own and where I also teach. Therefore, throughout the process of the research I had to continually consider and reflect on my positionality as an insider researcher as well as potential power dynamic challenges.

Insider research has a lot of advantages that can contribute to obtaining in-depth data and findings of a study (Mercer, 2007). First of all, insider researchers have a deep understanding of the subject, that might be challenging to grasp for outside researchers. Additionally, they can more easily blend into the group of the study participants without disturbing the inquiry process which contributes to gathering more genuine insights (Mercer, 2007). Finally, the familiarity with the participants can help in establishing trust in the study which results in improved openness and strengthens the findings (Greene, 2014).

On the other hand, insider research can potentially have disadvantages, therefore it requires significant amount of consideration. According to the literature insider researchers who are deeply involved in the study environment can put too much focus on their own experiences or assume that the participants share the same perceptions and knowledge which can potentially contribute to biased findings (Greene, 2014; Merriam et al., 2001). Additionally, high levels of the familiarity with the subject of the study can limit the questions asked in the interviews which results in weaker findings (Mercer, 2007).

The power dynamic challenges in the research can also have an impact on the study findings (Madikizela-Madiya, 2017). For example, research participants might be reluctant to openly share their experiences with a person in power due to fear of negative impacts on their work (Madikizela-Madiya, 2017). Additionally, for researcher who is in a position of power, it might be difficult to separate managerial duties from the research. For example, if concerns about participants work approaches emerge during the study (Madikizela-Madiya, 2017).

I believe that my positionality had a significant influence on this study. First of all, my knowledge and expertise allowed me to select and design relevant and effective elements of the AFAP. Secondly, as an experienced teacher, who has an in-depth understanding of the subject allowed me to ask meaningful questions as well as competently analyse data and interpret the findings. Additionally, as I reassured the participating teachers that the research will be confidential and will not affect their employment, I believe that they were comfortable in sharing their experiences with me. Moreover, the relationship I have developed with the teachers over the years, as well as the fact that I also actively participated and collaborated in the AFAP contributed to their openness and honesty during the focus groups and in their reflective journals. Finally, while I shared some of the experiences and perspectives with the participating teachers, I ensure to carefully examine their points of view and focus on understanding their own opinions to avoid bias in the study.

I aimed to enhance the trustworthiness and the quality of the study, by using guidelines and strategies presented in the next section.

3.10 Trustworthiness and quality

This study was informed by the guidelines of quality research by Lincoln and Guba (1985) and aimed to follow the principles of credibility, transferability, dependability, and confirmability, to ensure quality and rigor.

Credibility is the extent to which the findings are reliable and credible (Lincoln & Guba, 1985). The strategies I used to ensure credibility were data triangulation and member checking. In the data collection and analysis process I analysed data from focus groups and reflective journals. In order to validate the findings of the research I discussed them with the participating educators individually upon the completion of the research (Lincoln & Guba, 1985).

Transferability is the degree to which the findings can be implemented in other settings or with other participants (Lincoln & Guba, 1985). In order to ensure the transferability of the study, I described the process of the AFAP in detail as well as provided information about the participating educators. I also included the process of the data collection and analysis as well as the limitations of the study, to ensure that future readers can decide if they can be applied in their own practice.

Dependability is the extent to which the study could be replicated (Lincoln & Guba, 1985). To ensure the dependability of my study, I continued to write my reflections in the reflective journal as well as kept an audit trail of each step of my work and meetings with participating teachers (Lincoln & Guba, 1985).

Confirmability is the degree to which the findings are genuine and not biased (Lincoln & Guba, 1985). In the study I continued to reflect on the research to minimise the risk of bias. Additionally, I cross checked the researcher's findings with the participating educators as well as provided a reliable audit trail (Korstjens & Moser, 2018).

While conducting the research, I took a rigorous approach to ensure the trustworthiness and quality of the findings. I believe that by adhering to Lincoln and Guba's (1985) framework, my study contributes valuable and quality findings and insights into the private music schools' sector.

3.11 Limitations

In my research, I encountered a few limitations including the short scope of the study. I acknowledge that the exploration of the impact of CPD is a complex and intricate process, and that the real outcomes of CPD develop gradually (Guskey, 2002a). Consequently, the time frame of 12-weeks might have been too brief to gain a full understanding of the overall

impact of the AFAP (Hager & Hodkinson, 2009). To address this limitation, I focused on the visible changes in teaching methods and teachers' perceptions to explore the effects of the AFAP. Moreover, I believe that obtaining data from reflective journals, in addition to focus groups, enriched the insights of the study and gave me more comprehensive information. Nonetheless, returning to the research at a later point and gathering further data would undoubtedly yield rich insights around the longer-term impact of the AFAP.

Another limitation of my study is the use of IPA. While this research method provides in depth data about experiences and perceptions of the participants, it limits the spectrum of the research findings and the generalizability to a wider population as it uses a small size of the participants (Smith et al., 2022). However, it is important to note that the topic of CPD for instrumental music teachers in private music schools in Ireland has never been researched. Therefore, this gap in the literature adds significant value to the study, as it provides initial insights into an unexplored area, contributing to the foundation for future research.

My position as a novice researcher also added challenges to the study. While I believe that my experience in the music education field has significantly contributed to the overall understanding of the topic, I believe that the lack of experience in conducting research might have been a limitation. In response to this challenge, I have read and analysed a lot of literature on the topic of educational research, as well as sought advice from my supervisor to enhance the rigor and depth of my analysis. Additionally, I conducted a pilot focus group in order to refine my research questions and practice my interviewing skills. I believe that this strategy helped me to compensate for my lack of experience and enriched the contribution of my study to the understanding of how CPD can impact music education (Ellis & Levy, 2009).

3.12 Conclusion

In conclusion, this chapter outlined a comprehensive explanation of the application of the IPA methodological approach in the research by providing paradigmatic foundations, the main principles of IPA, data collection and analysis procedures as well as ethical considerations and limitations. Additionally, the sections on trustworthiness and quality as well as limitations highlighted the transparency and reflective process of this research. Consequently, this chapter lays the groundwork for the exploration and analysis of the research findings presented in the next chapter.

Chapter 4: Findings and Discussions

4.1 Introduction

This chapter presents the four emerging themes from the IPA data analysis from the reflective journals and the focus groups, which aim to answer the research question and the sub-questions presented in Chapter 1. The summaries of the themes are followed by a further granular exposition accompanied by a discussion within the wider literature. In this chapter, verbatim quotes are used and appropriately indicated with the abbreviations FG (focus groups) and RJ (reflective journals). The overall themes are:

Figure 2 The four final themes

Challenges from Limited
Autism Awareness

AFAP: A Practical,
Reflective and
Collaborative Learning
Experience

Implementaion of
Strategies

Evolution of Practice
and Perspectives

Theme One: Challenges from Limited Autism Awareness reveals that the majority of music teachers faced challenges when teaching autistic children because of the lack of knowledge, skills and experience which ultimately led to stress and low levels of self-efficacy. Therefore, they were eager to participate in the programme to support their autistic students more effectively and to enhance the schools' inclusivity. Additionally, the findings of this theme highlight two key issues for instrumental teachers which are the lack opportunities and negative experiences with CPD, and the inadequate institutional support.

Theme Two: AFAP: A Practical, Reflective and Collaborative Learning Experience, identifies that the participating teachers considered AFAP to be effective as it has provided them with practical skills and solutions to teaching autistic children. Additionally, the reflective aspects of AFAP have further contributed to the success of the program and helped them in evaluating their learning journey. Furthermore, the participating teachers appreciated the institutional support they received through the AFAP as well as its collaborative nature. Although the opinions on some aspects of the AFAP differed, the general view was that the program was effective.

Theme Three: Implementation of Strategies. This theme presents the strategies participating teachers used as a result of their involvement in the AFAP. The findings show that the music teachers were able to successfully implement many strategies learned in the AFAP and that they led to improved learning outcomes for students. However, some of the strategies that were initially effective, lost their efficacy with time which led teachers to recognise the uniqueness of the autism spectrum and their own learning journey.

Theme Four: Evolution of Practice and Perspectives. The findings of this theme show that the vast majority of teachers experienced an evolution of practice and perspectives as a result of the AFAP. The music educators became more positive and empathetic towards

autistic individuals and more confident in their teaching skills. In addition, they valued the enhancement of the inclusivity for autistic students and expressed keen interest in participating in professional development programs in the future.

4.2 Theme One: Challenges from Limited Autism Awareness

Theme one illustrates that music educators experienced several challenges when instructing autistic students, stemming from their limited knowledge and skills. This caused emotional fatigue and feelings of anxiety and incompetence, which led educators to feeling overwhelmed and stressed. In the reflective journal entry Participant 5 disclosed: *“I didn’t know much about them. I didn’t know what to do when they were getting upset or stimming.”* Similarly, Participant 2 stated: *“I was frustrated when I hadn’t managed to do much in class, because I struggled to get them to focus”* (RF). The limited knowledge and experience of the participants resulted in music teachers feeling not good enough to support their students. This was stated by Participants 3 and 7: *“I felt like I am not good enough at times,”* and *“I wasn’t able to control one of my autistic students; it was very distracting for other children in class”* (RF). Furthermore, the teachers felt responsible when their autistic students did not improve in their playing or discontinued the classes. This was strongly stated during the first focus group, for example, by Participant 2: *“I felt really bad, like it was my fault.”*

Most of the educators possessed limited knowledge and specific teaching strategies for teaching autistic children. For example, in the reflective journals, Participants 3 and 6 revealed: *“I didn’t use any particular strategies,”* and *“I didn’t know there were any strategies. I never heard about any workshops on this topic.”* Despite being unfamiliar with the commonly used strategies in teaching autistic children, most of the educators tried different methods to support their autistic students. However, they felt like they were not fully successful. For example, Participant 5 noted: *“I tried to demonstrate a lot in class and*

record myself playing. I was frustrated because the progress was slow” (RJ). Similarly, Participant 4 stated: *“I also used video recordings. They worked to some extent, but the progress was still slow”* (RJ).

The participants were also disappointed from the lack of modules on teaching children with special needs in their ITE programmes. For example, in the first focus group Participant 5 stated: *“...you would wonder why they didn’t teach you that in college”*. Additionally, they expressed their frustration with no support in the previous music schools they worked in. Participants 3 and 6 stated: *“There was no one there to advise me or help me with teaching autistic children”* and *“I asked for some sensory toys but never got any”* (FG). Furthermore, the participants regretted that they did not explore the topic of teaching autistic children. For example, Participant 6 stated in the first focus group: *“I actually don’t know why I didn’t do any workshops or even read some articles on the topic.”* Similarly, Participant 7 said: *“I should have researched this topic, I didn’t know there was so much information available”* (FG).

The theme also revealed that the experienced and knowledgeable music teachers were very confident in teaching autistic students. For example, Participant 1 highlighted the significance of the experience on her confidence in teaching autistic children. She stated: *“I worked in a centre for autistic students for 2 years. I have always felt like my students were happy and were progressing. I learned a lot there”* (FG). She also confirmed that she had been using many strategies before the AFAP: *“I have been using PECS, physical experiences, and technological apps for years, they have been quite helpful.”* Similarly, Participant 8 stated: *“I am also confident in teaching autistic children. I have worked with them for many years in a pre-school, and I have used many strategies such as PECS and sensory toys”* (FG).

Out of eight participants, six had no previous experience with professional development programs, with the AFAP being their first-time experiencing CPD. The participants who had attended CPD sessions previously viewed them as unsatisfactory as they did not learn anything substantial from their experience. They believed that the previous CPD sessions attended were irrelevant to their needs as music teachers or even embarrassing. Participant 2 expressed dissatisfaction with previous CPD experience describing it as irrelevant. During the first focus group she disclosed: *“I did 2 workshops in the music academy. One was about stage fright for musicians, but turned out to be about third level students, and I only teach primary school children. The other workshop was just like a boring lecture”*. Similarly, Participant 5 described an uncomfortable experience during a workshop she attended. She stated: *“I did a workshop on learning music through singing. They made us sing and dance in front of everyone. It was an awful experience for me. I didn’t do any workshops since then”* (FG).

The educators were enthusiastic about the AFAP, and hoped that it will contribute to the school’s being inclusive . During the first focus group Participant 6 revealed: *“it was a good opportunity for our school to become more inclusive”*. In addition, Participant 4 added: *“I felt like it was needed in the school”*. The music teachers said that they were hoping the AFAP would enhance their skills and understanding of autism. They also hoped the program would improve the classroom environment as well as the communication with the students. Participant 7 stated: *“I wanted to learn how to better manage group classes and communicate with the young autistic students”* (FG). Similarly, Participant 4 added: *“...hoping to learn more about autism in general, and ways to teach autistic students and communicate with them more effectively”* (FG). On the other hand, the more experienced teachers hoped for *“...new ideas for classes...”*, as stated by Participant 1, and *“...reassurance that my current teaching methods are effective...”* (FG).

This theme confirms the findings of the literature which indicates that the lack of knowledge and skills in educating autistic children contributes to low levels of confidence as well as feelings of anxiety and stress (Barry et al., 2023; Rodden et al., 2019; Young et al., 2017). The participants of the study did not cover the topic of teaching autistic children in their ITE and felt unsupported in the music schools they previously worked in. Furthermore, prior to the AFAP they either did not participate in any CPD programmes or their experiences with them were negative. This highlights significant barriers with CPD in private music schools in Ireland, caused by the absence of educational policies and institutional support (Conaghan, 2022; Njenga, 2023).

While the teachers expressed regret over not having educated themselves about autism in the past, their acknowledgement indicated a genuine concern for effectively teaching these students as well as the need for professional development. This aligns with the wider literature on the topic of teaching autistic children, for example, in the study by Barry et al. (2023). Unfortunately, the lack of knowledge and skills led the educators to feeling insecure about their teaching and communication with autistic students, which affected their confidence and made them question their ability to effectively teach these students. This resulted in low self-efficacy, defined in Bandura's (1982) Social Learning Theory as one's belief in their ability to facilitate successful learning and achieve desired outcomes. According to Candeias et al. (2021), over time, low self-efficacy and the feelings of stress can lead to professional burnout, especially for teachers who do not specialise in inclusive education.

It is also important to note, that the participants in this study who reported low levels of self-efficacy had only four or less years of teaching experience in general, compared to the more confident teachers who had at least 10 years of experience in education. It is, therefore,

possible that as they were still quite new in teaching and might have felt particularly overwhelmed when faced with the demands of educating children with special needs (Dias-Lacy & Guirguis, 2017). Nonetheless, this finding further shows the necessity of a CPD program for the participating teachers in the music school.

4.3 Theme Two: AFAP: A Practical, Reflective and Collaborative Learning Experience

This theme revealed that the participating teachers were satisfied with the AFAP, as they appreciated the practical, collaborative and reflective aspects of the programme. The vast majority of the music teachers found the practical workshop and the session with a music therapist to be the most beneficial to their learning. Participant 3 stated: *“The practical workshop provided me with many solutions to challenges I would have never thought of before”*. Similarly, Participant 7 noted: *“... practical workshop and session with the music therapist gave us the best ideas...”* Additionally, Participant 4 revealed: *“I found the meeting with the music therapist a lot better, because she gave us great examples of music games we can actually use in class”*.

The participating teachers also appreciated the opportunity to reflect about the programme in the reflective journals, as it has helped them with evaluating their teaching practice and motivated them to continue to work on this skill in the future. For example, Participant 5 stated: *“...the turning point was when I started filling out the reflective journals. When you start reflecting on your teaching, you notice so many good things, and so many improvements”* (FG). Supporting this view Participant 2 added: *“In my lessons I now make a greater effort to explain things in several ways and then reflect on this again at the end of the lesson”* (FG). Furthermore, the AFAP motivated educators to continue to reflect in the future. Participant 4 stated: *“I will continue to use reflection in my teaching in general. It helped me with being more aware about my own strengths and weaknesses”* (FG).

During the focus groups many participants revealed that collaboration between the teachers was a significant aspect of the AFAP. They stated that it helped them in gaining knowledge on new teaching methods and applying them in practice. Participant 3 revealed: *“Working with Participant 5 was great. We learned a lot from each other.”* Similarly, Participant 5 added: *“Every week Participant 3 and I set up a plan to implement new strategies. It was a lot easier than doing it by yourself.”* The collaborative aspect of the AFAP also helped in addressing challenges in classes and managing the classroom environment. During the focus group, Participant 7 revealed: *“If one of the children became overstimulated, Participant 6 would bring them to the quiet room, so I could continue with the class.”* In addition, Participant 6 stated: *“Together, we were quicker in resolving issues in class.”* Furthermore, the participating teachers appreciated the support they received from the school which they revealed in the reflective journals. Participant 7 stated: *“I was glad the school supplied me with new approaches, techniques and learning resources to try to ensure that every child’s learning can be supported.”* Similarly, Participant 6 noted that: *“I was glad that we were able to choose the sensory toys we wanted to be purchased for our students.”* In addition, Participant 5 revealed: *“I also found it helpful to discuss with the other teachers and the school management to hear that they were dealing with similar difficulties.”*

The participating teachers appreciated the sustained length of the AFAP, which allowed them to implement and reflect on the new strategies learned in the programme. Participant 3 stated: *“I feel like there was a lot of information at times, but because the program was spread over few months it was easier to apply them in practice”* (FG). Participant 8 agreed with this by stating: *“Yes, we had a long time to process everything, which was good”* (FG). Additionally, Participant 6 revealed: *“It was good to have breaks between workshops to process the information”* (FG).

On the other hand, the participants had mixed views on the theoretical workshop. While some did not consider it to be useful, others thought it was beneficial to their practice and perceptions of autistic students. Participant 6 revealed: *“I felt like I needed practical strategies, not theory”* (FG). In addition, during the first focus group, some also agreed with Participant 4 who said: *“I didn’t get much out of it.”* In contrast, in the reflective journal, Participant 5 stated: *“It provided information about autism spectrum condition which gave me a more empathetic view on autistic children”*. Additionally, Participant 2 revealed: *“I learned more accurate terminology for autism and how to engage better with students”* (RJ). The participants also had mixed views on articles which were provided to them as a part of the AFAP. For example, Participant 1 stated: *“...they were excellent, because they were written by music teachers and offered many practical solutions”* (FG). Similarly, Participant 5 stated that: *“The articles were very good”* (FG). On the other hand, Participant 6 revealed: *“I much preferred the interactive parts of AFAP.”* This opinion was shared by the majority of the participating teachers in the focus groups.

Speaking about their experiences with the AFAP from a professional point of view, the teachers stated that if there had been an opportunity for a longer program, they would have wanted more sessions with the music therapist and meetings with autistic students’ parents. Participant 7 stated: *“I think meeting with the music therapist for the second time to discuss our progress would have been beneficial”* (RF). Additionally, several teachers agreed that they would have liked to organise meetings with parents to learn more about their autistic students. For example, Participant 8 said: *“Parents can give you many helpful information about their children. It would have been helpful to organise meetings with them”* (FG).

The theme highlights that relevant and practice specific content is the key element for effective CPD (Makopoulou et al., 2021; Opfer & Pedder, 2010). Participating teachers

strongly agreed that the specific knowledge from the music therapist as well as practical skills learned in the program were the most beneficial aspects of the AFAP. Additionally, they appreciated that support they received from their colleagues and the school contributed to the success of the program and consequently students' learning outcomes (Duncombe & Armour, 2004). This finding aligns with Guskey's criteria for evaluating effective CPD, which stresses the importance of institutional support and the use of practical, and relevant content to improve both teacher competence and students' learning outcomes (Guskey, 2002a).

Furthermore, the music teachers frequently mentioned that during the program they learned a lot from their colleagues, and that the collaboration helped them in the successful application of the strategies, which aligns with the wider literature on the topic of CPD (Barry et al., 2023; Duncombe & Armour, 2004). Additionally, as they initially found the amount of information in the AFAP overwhelming, they particularly appreciated the extended duration of the program as it allowed for a comprehensive exploration and application of the topic, which stresses the importance of the extended duration of CPD (Nic Aindriú et al., 2022). Finally, consistent with Dewey's concept of "education as growth" (Dewey, 1916), the educators appreciated the opportunity to reflect on the programme, as it allowed them to see improvements in their practice and encouraged them to continue to learn and think critically in the future.

In contrast, the less motivating components for the participating teachers were the articles on the topic of teaching autistic students as well as the theoretical workshop which indicates the preference for aural learning and an experiential CPD experience (Sikandar, 2016; Tanwinit & Sittiprapaporn, 2010). These findings further highlight the need for experiential and practice-based CPD (Sikandar, 2016).

4.4 Theme Three: Implementation of Strategies

Theme three illustrates that the participating teachers were able to successfully implement strategies learned in the program, which led to improved learning outcomes such as better communication with autistic students, more organised classes, as well as improved sight reading and technical playing. Strategies that were implemented immediately after the AFAP included sensory materials, music book adaptations, physical finger exercises, PECS and visual boards. The participating teachers experienced considerable success with these strategies, particularly in the initial stages of their application.

Some of the participating teachers used sensory toys to help their autistic students relax and regain focus in class. Participant 1 stated: *“I was glad to have them in my classroom. They are helpful when students become overwhelmed”* (FG). Similarly, noise-reduction headphones were used, particularly in music group classes. Participant 7 stated: *“Some of the autistic students like loud noises and play on the instruments very loudly. Others don’t, so the headphones are very helpful”* (FG). Additionally, the majority of the participants implemented book adaptations in their classes which proved to be very successful for the students’ reading abilities. For example, Participant 4 stated: *“I started enlarging and colour-coding music notes for autistic students. For most of the students it helped a lot with their reading and focus”* (FG). Similarly, Participant 2 revealed: *“It made a big difference for two of my students”* (FG).

Following the advice from the music therapist, the teachers also made changes to the class environment which was a major breakthrough in one of the music group classes. Participant 5 explained in the reflective journal: *“There were too many distractions... We moved the tables and chairs out of the room.”* Additionally, the teachers were advised to sit on the floor instead of at desks, to provide more space for movement for autistic students.

Participant 6 stated: *“This has made such an improvement. It increased class engagement. Eye contact, communication, and participation in lessons (also) increased”* (RJ). Similarly, Participant 5 noted: *“In the previous classes we couldn’t get them to sit down and concentrate for 1 minute, and this has worked so well. We were able to fully complete 2 music games”* (RJ).

Movement games were also one of the strategies adopted by the music teachers, which they discussed in focus groups. According to Participant 5, this strategy was particularly helpful, she stated: *“We introduced a lot of movement games to increase coordination. They were fun for students and also helped with their sense of beat and rhythm.”* Additionally, physical finger exercises to enhance motor skills were also implemented by the participating teachers. For example, Participant 2 stated: *“I see the benefits of finger exercises already.”* On the other hand, Participant 4 stated that the progress with the finger exercise has been slow but he was hopeful they will start working overtime: *“I think for weak motor skills, physical finger exercises are good, but I think it takes a while for them to work.”*

In the initial stages of implementing new strategies, the participating teachers found PECS to be very helpful in classes. Participant 2 stated that the use of PECS improved the communication and focus of one her students: *“He chose what to do in class based on the pictures. He really enjoyed it and stayed on track for the whole class”* (RJ). Similarly, collaborating Participants 3 and 5 noted significant progress in their music group classes as a result of PECS. Participant 5 stated: *“We put up the PECS on the whiteboard to show students what will be done in class. It was the first time they actually followed the class plan”* (FG). Participant 3 added: *“The PECS also helped with communication, especially when children didn’t like loud sounds, they communicated it through pictures”* (FG). The music teachers also adopted visual boards in the classes. Participant 7 found them particularly

helpful in getting her student to focus: *“The visual board keeps the students on one collective instrument together. The visual guide is something a lot of autistic people would use daily, so it became a good anchor to keep the class on track”* (RJ).

The participating teachers reported that the majority of the learning outcomes continued to improve, which was confirmed by the participants in the final focus group and concluding entries of the reflective journals. For example, Participant 4 revealed the progress in the class: *“I feel like the physical exercises are starting to work now”* (FG). Similarly, Participant 5 stated: *“Participant 7 and I continued to have great progress in class.”* She also added that she was hopeful for the future: *“I think we will see the learning outcomes of our students more and more in the coming months”* (FG). In addition, Participant 3 stated that their autistic student joined violin ensembles, which started to help with instrumental technique. She revealed: *“I finally got my autistic student to join the violin ensemble in the school. I think her technique and posture are already improving because she watches other students”* (FG). Similarly, Participant 7 said that the autistic students' success has been improving as they have been more engaged and responsive to new teaching strategies. She revealed: *“The successes have been deeply gratifying. Seeing students more engaged and responsive to the new teaching strategies has confirmed the value of the AFAP initiatives”* (RJ). Participant 4 revealed that it was obvious that autistic students are more interested, focused, and relaxed in their classes. *“I see that now, they are more interested and focused in class and more relaxed probably because I am more relaxed too”* (RJ). Furthermore, increased emotional regulation was one of the successes mentioned by Participant 6. She said that strategies suggested by the music therapist continued to improve children's emotional regulation among others. *“The children's emotional regulation in class improved, as they started understanding the class structure, were listening and felt a sense of belonging in the classroom through the use of PECS and welcome song”* (RJ).

After a period of few weeks, however, the participating teachers noticed that some of the strategies they used were no longer appealing to students. This has prompted them to be more creative and continue to adapt their teaching. This issue was discussed in the second focus group as well as later stages of reflective journals. Participant 4 provided an example of how using music apps with autistic students was an engaging activity but in the end the students lost interest in them. Participant 4 provided an example of how using a music app with autistic students was a fascinating activity but ended up not appealing to them. *"I used music apps with my autistic students for reading music. They all loved it at first, but then they got bored with it. Still, there was some progress in their reading in the end"* (FG). Participant 7 agreed with Participant's 4 view stating that autistic children become uninterested in working with apps after a while. *"They do get bored with the apps. But even if they work for a while, it's still a success"* (FG). Participant 2 encountered a similar problem: *"I used pictures to explain abstract musical concepts to my student. It worked for few weeks and then he lost interest in them"* (FG).

Similarly, in the stages of the AFAP the music group classes teachers expressed their disappointment with using PECS. Participant 3 stated: *"They worked really well for around four weeks. After that, the kids didn't want to know about them"* (FG). Participant 5 added: *"Yes, we were hoping PECS would continue to help us in maintaining the structure of the class, but after a few weeks, the kids started being indifferent to them, and the class became disorganised again"* (FG). In response to this, Participant 1 suggested to give the strategies more time whose advice was welcomed by the other teachers. She said: *"I think you should try PECS again in a few weeks, maybe use them in a different way or with different pictures. You will learn more about your students and what works for them overtime"* (FG).

Consequently, music educators realised that they would have to continue refining their teaching strategies and be more creative and adaptable in their approaches. For instance, Participant 1 stated: *“They work for some students, but not for others. It’s just trial and error”* (RJ). Similarly, Participant 4 stated that: *“not all the strategies were successful in the long run, but I will keep trying”* (FG). Participant 6 gave the wide spectrum of autism as the reasons why strategies were not cast in iron: *“I feel like I used all strategies. Some worked, some didn’t. Because autistic children are all different not all strategies will work for everyone”* (FG).

The findings of this theme confirm that autistic children can gain a lot of knowledge and enjoyment from learning music, if they are given the right tools and support from their teachers (Hourigan & Hourigan, 2009). The music teachers in this study experienced a lot of success when implementing strategies learned in the AFAP, particularly with cognitive skills such as focus and organization. Additionally, some of the teachers were able to successfully explain abstract concepts to enhance autistic students’ understanding of music as well as improve their modelling and imitation skills by participating in classes with their peers. Moreover, music games and physical exercises also proved to be beneficial for coordination and technical playing for autistic students. It is noteworthy, that these achievements are very significant as they can go beyond music education and positively impact students in various aspects of their lives (McGregor & Campbell, 2001; Rose et al., 2018).

However, as the range of autism is very broad, the path to success in teaching autistic students is often paved with many challenges (Hammel & Hourigan, 2013). Over time, the participating teachers in this study came to recognize the trial-and-error nature of the approaches and realised that not all strategies work effectively across all contexts or for every student (Nell et al., 2022). This understanding led them to embrace a more flexible approach,

acknowledging that their instructional strategies should adapt to challenges and the changing range of students' needs (Dewey, 1916). These insights align with the words of autism ambassador Dr Stephen Shore, who said, "If you've met one person with autism, you've met one person with autism" (Flannery & Wisner-Carlson, 2020), emphasizing the unique spectrum of autism that challenges educators to tailor their approaches to meet the varied needs of each student. Furthermore, the ongoing nature of these challenges shows that the AFAP initiative should continue in the future, in order to support autistic students as well as music teachers in the school, highlighting the importance of ongoing institutional support (Abakah, 2023).

4.5 Theme Four: Evolution of Practice and Perspectives

Theme four reveals that as a result of the AFAP, the participating teachers evolved in their professional career and become more confident, skilful, and knowledgeable as educators. In addition, they appreciated the opportunity for professional development and recognised the importance of CPD. Furthermore, the music teachers' perspectives on autistic individuals grew more positive and their teaching approaches became more inclusive and aligned with best practices in autism-informed education.

The participating educators felt that the AFAP improved their confidence in their abilities in teaching autistic children and provided them with new mindsets on teaching and learning. Participant 1 stated: *"Throughout the AFAP, I noticed a lot of teachers becoming more open to new ideas and talking more about their challenges."* Additionally, during the focus groups as well as in the reflective journal entries, the participants reported an increase in confidence in teaching autistic students. They believed that the AFAP improved their teaching skills and gave them assurance about the strategies they have been using. For example, during the second focus group, Participant 5 revealed: *"I find it a lot easier to teach*

autistic students now, the program put me at ease.” Similarly, Participants 6 and 7 stated: *“Through conversation with teachers, children and music therapist, my practice evolved,”* and *“I am a lot happier with my approaches to managing the group classes for autistic students”* (RJ). Furthermore, they appreciated they were able to successfully apply knowledge into practice. Participant 2 revealed: *“I was glad I managed to implement strategies learned in AFAP into my daily teaching”* (RJ).

The music educators felt that their ability to enhance students' learning experiences and outcomes has also improved. Participant 4 stated: *“After seeing a lot of progress, I became more confident that I can support their learning”* (FG). Similarly, Participant 5 stated: *“My teaching definitely evolved, and the moment that illustrates this change was when I started noticing students' improvements”* (RJ). Additionally, many of the participating teachers recognised the need to develop a more patient and relaxed approach to teaching autistic students, centred around enjoying music, rather than rushing and struggling to finish the curriculum. Participant 7 stated that students should be allowed to enjoy the music. She said: *“I have come to learn that teaching isn't always getting the student to learn as much as possible, but also just getting them involved and engaged with the instruments”* (RJ). Similarly, Participant 5 recognised the need for a more relaxed teaching approach while focusing on collaboration and focus in group classes rather than solely adhering to the syllabus. *“I realised that I should have a more relaxed approach to teaching. I feel like especially in group classes for autistic children I should focus more on improving their collaboration and focus rather than just following the syllabus”* (RJ). Additionally, Participant 2 revealed that music teachers are always in a haste to finish their lessons and materials and not involved in enjoying the music: *“We can get caught up in getting through the material, and we should go back to focusing on enjoying music with students”* (FG).

Furthermore, most of the participants stated that they wish to continue to learn and improve as educators. For example, Participant 3 noted: *"AFAP made me realise that as teachers we still have so much to learn, and we need to continue to learn and reflect on teaching throughout our careers"* (RJ). In addition to this, Participant 6 stated: *"I learned a lot from other teachers as well as the workshops, I actually have a lot of interest in this topic, and I am considering pursuing master's degree in music therapy"* (RJ). Furthermore, Participant 4 expressed his willingness in other CPD programs: *"I am currently teaching tin whistle to an adult with Down syndrome. I would like to learn more about this condition to improve my teaching"* (FG).

The participants' understanding and perceptions of autism also evolved due to the AFAP, as they learned to recognise that it is a diverse condition, and each autistic individual has unique strengths and challenges. Consequently, this helped them in using adequate support and encouraged them to promote inclusion in the school. For example, in the final focus group, Participant 2 revealed how the AFAP changed her perceptions: *"I realised that I wasn't looking at learning from the autistic students' point of view."* Similarly, Participant 4 stated: *"I can see now that autism spectrum is very wide and that we need to continue to support autistic students."* Participant 7 also reported a change in perceptions: *"My perceptions changed. From discussions with other teachers and the workshops, it was very clear that every autistic child is different, and they learn differently."* In addition to this, Participant 6 stated: *"I think we should appreciate and support and create supportive environments for all learners in the school"* (RJ). Moreover, the teachers' view on the AFAP became more positive as a result of the AFAP. Participant 2 revealed: *"We should appreciate the strengths of autistic students rather than focusing on their difficulties"* (FG). Participant 4 agreed with this statement by stating: *"When I was reflecting on the classes I realised that there are many unique strengths autistic students have"* (FG).

Furthermore, the participants felt that the AFAP helped them in supporting autistic individuals in their professional as well as personal life, as they felt like they became more knowledgeable and skilled. Participant 2 stated in the reflective journal: *“These strategies contributed to my professional development by broadening my pedagogical knowledge and skills and also by making my teaching more inclusive and effective, which enhanced learning outcomes for my students.”* Similarly, Participant 4 noted: *“My teaching changed a lot, as I have more knowledge and skills to work with autistic children now”* (RJ). Furthermore, Participant 7 revealed that she aims to be calmer and more patient while engaging with autistic students and individuals. She stated: *“In the practical workshop they also said to wait long enough for a response from a student to give them a chance to answer. This advice really stood out to me. It made me realise, that when it comes to autistic people, I need to be patient in my professional and personal life”* (RJ).

Furthermore, the AFAP contributed to increased levels of empathy towards autistic individuals in participating teachers. For example, Participant 4 stated during the focus groups: *“We shouldn’t be getting frustrated with autistic students and individuals”*. Participant 8 added: *“As educators, we should aim to understand our students, particularly autistic students, and appreciate their weaknesses and strengths”*. This was also confirmed by other participants who agreed that they feel more empathetic as a result of the programme.

The findings of this theme reveal that the AFAP significantly impacted the participants’ teaching methods as well as their views on autistic people. The educators felt like they became more skilful, knowledgeable and confident in their teaching and that their practice evolved. This finding is consistent with research confirming that tailored, practice-based and collaborative CPD can transform and significantly enhance teachers’ educational approaches (Anglim et al., 2018). Additionally, as teachers’ levels of understanding and

empathy increased during the programme, they started to appreciate the unique strengths and weaknesses of autistic students. This change in perceptions is an important part of providing support and effective teaching for autistic students (Au & Lau, 2021; Kuzminski et al., 2019).

An important finding of this study is that the participating teachers developed new mindsets and endeavoured to continue to learn and participate in CPD initiatives in the future. Additionally, they acknowledged that professional development programmes not only enhance their skills and knowledge but also refresh their teaching methods and strengthen their dedication to their profession. Echoing Dewey's concept of life-long learning, they realised that education should be an on-going journey that is equally important to teachers as it is to students (Dewey, 1916).

It is also important to note, that the two participating educators who not only had substantial experience in teaching autistic children but also had significantly longer teaching careers than the other participants, did not report any changes in their teaching strategies and perceptions about autistic students as a result of their involvement in the AFAP. They attributed their confidence and positive attitude towards autistic children to their extensive experience, as neither had received formal training in this area of education prior to the AFAP. This finding demonstrates the value of the practical experience in teaching autistic children which is widely supported in educational literature (McGregor & Campbell, 2001; Young et al., 2017). Nonetheless, the experienced educators appreciated the content of the program, and stated that it has reaffirmed the effectiveness of their existing approaches which led to increased confidence. This finding shows that for some teachers CPD can serve as a valuable tool to reassure them about the effectiveness of their teaching strategies (Hudson, 2013).

4.6 Conclusion

This chapter presented the findings and discussion on the four emergent themes in this study. The findings showed that the AFAP had a significant impact on the educators' teaching strategies and the learning outcomes of autistic students. Additionally, the AFAP has contributed to the change of perspectives and attitude towards autistic individuals. The findings of the study successfully answer the research question as well as the sub-questions by exploring teachers' experiences with the program. The final chapter offers conclusions based on the study's findings.

Chapter 5: Conclusion

5.1 Introduction

This chapter provides the overall conclusion to the study which aimed to answer the research question. It also offers insights into the implications of the study for practice, as well as recommendations for future research and my own practice.

The findings of the study were presented through four themes that emerged from the IPA data analysis which are as follows: Challenges from Limited Autism Awareness; AFAP: A Practical, Reflective and Collaborative Experience; Implementation of Strategies; and Evolution of Practice and Perspectives. Based on these findings, this chapter provides final conclusions, limitations, recommendations for future research as well as implications and recommendations for CPD for private music schools.

5.2 Summary of the main findings and the research question

This chapter provides a broader view of the findings of the main research question as well as the sub-questions. The questions and the summary of how they were addressed by the findings are outlined below.

Sub-question 1: What challenges do music educators commonly face when instructing autistic children, and how do these challenges impact their confidence in their teaching abilities?

The research found that the most frequently encountered issues by the participating teachers in classes for autistic children were focus and communication, indicating difficulties with EF and JA which can often be observed in autistic children (Hammel & Hourigan, 2013). Additionally, understanding of the abstract concepts which may be contributed to by

the impaired ToM (Silarat, 2022), as well as weak motor skills and difficulties in reading music notation were also noted by some of the educators. Furthermore, neurological responses and sensory issues such as overstimulation, and emotional regulation, were also often experienced, particularly in the group classes for young autistic children. These challenges have significantly impacted music teachers who had limited knowledge, skills and experience in teaching autistic children as they reported low levels of self-efficacy, as well as the feelings of anxiety and frustration. These findings strongly indicated the need and the importance of professional development training in autism for teachers, which is often highlighted in the wider literature, for example, in the research by Lessner Listiakova and Preece (2020).

Sub-question 2: What CPD experiences do music teachers perceive to be essential for enhancing their practice in teaching autistic students?

The participating teachers perceived practical and relevant experiences with the AFAP to be the most essential for their teaching practice. The vast majority of the educators found the learning experiences during in-class collaborations and sessions with the music therapist to be the most significant for them. They believed that experiential learning where they can engage with their colleagues and expert in teaching autistic children significantly enhanced their teaching skills and helped them develop more positive and empathetic attitude towards autistic individuals. Additionally, the participating teachers appreciated the sustained length of the programme as well as the support they received from the school. They noted that those elements of the AFAP enhanced their experience with the programme and consequently improved their instruction and understanding of autistic students.

Sub-question 3: What modifications or adaptations learned in the AFAP effectively enhance students' learning outcomes, and how do these changes align with best practices in autism-informed education?

Consistent with the wider literature (Hourigan & Hourigan, 2009; Nell et al., 2022; Scott, 2014), the research found that strategies targeted specifically to support autistic students, had a positive effect on their learning outcomes. The most commonly implemented strategies included: sensory materials, music book adaptations, physical exercises as well as AAC. The sensory materials, such as noise-reducing headphones and sensory toys, proved to be effective in reducing the feelings of anxiety in class and created a more comfortable classroom environment for autistic children. Music book adaptations also worked very well for some of the autistic students, who given their preference for visual learning benefited from more accessible learning materials which included enlarged and coloured music notes. Similarly, AAC helped in communication, particularly for non-verbal autistic students in music group classes who were able to express their needs as well as better understand the structure of the class. Moreover, the educators encouraged autistic students to participate in the school's ensembles which was helpful in developing the skills of imitation and modelling and also has the potential to improve social skills for autistic children. Finally, some of the teachers used physical and movement exercises in the instrumental classes, and while they noted slow progress, they were hopeful of their success in the future and their overall contribution to the development of coordination and motor skills in autistic children.

Sub-question 4: For music teachers, how does their experience of the AFAP impact overall confidence and competence in providing effective music education to autistic children?

The AFAP had a significant impact on teachers' confidence and competence in teaching autistic children. As students' learning outcomes improved, the educators became more confident in their teaching approaches. Additionally, they believed that they became more knowledgeable and skilful in their work. Furthermore, collaborating with their colleagues also increased the music teachers' self-efficacy as sharing insights and working through the challenges together validated their experiences and encouraged them to continue to adapt their teaching methods. These findings align with the wider research on the positive impact of tailored and relevant CPD on teachers' confidence and self-efficacy (Ambrose et al., 2023; Anglim et al., 2018).

The main research question: What is the impact of an Autism-Friendly Accreditation Programme (AFAP) on music teachers' perspectives and practices in teaching autistic children?

The AFAP changed the participating teachers' perceptions of autistic people, as they became more understanding and empathetic to their needs. The increased awareness of the condition made teachers realise that they should appreciate the strengths and weaknesses of autistic students to fully support their needs. Additionally, they recognised the diversity of the condition and the importance of looking at the autistic students' points of view. Finally, as a result of the programme, the educators endeavoured to be more supportive and understanding to autistic individuals in their personal life.

The AFAP had also a significant impact on the educators' practices in teaching autistic children. First of all, the music educators implemented many new strategies and resources

learned in the programme which made their teaching more inclusive. Secondly, their awareness of autism and its wide spectrum changed their teaching approaches to being more flexible and creative as well as prompting them to be open to new ideas. Additionally, the teachers' practices became more collaborative, as they appreciated the benefits of working and exchanging advice with their colleagues. Furthermore, the approach to teaching autistic children became more relaxed and aimed at developing the love of music. Finally, the teachers realised the importance of lifelong learning and they endeavoured to continue to learn and develop their teaching practices.

The insights from the data gathered in this research confirm that relevant CPD can have a significant impact on the perspectives and perceptions of music teachers (Ambrose et al., 2023; Lindsay et al., 2014; Nestorowich et al., 2022).

5.3 Recommendations for the future research

This study has presented valuable insights into the topic of teaching instrumental music to autistic children in private music school settings, therefore, enhancing the research's validity (Lincoln & Guba, 1985). However, given the small scope of the study which included eight participants from one music school, it is recommended future research should expand the sample size. Additionally, as only one participant in the study was from outside of Ireland, incorporating more international participants would be beneficial, as it would better reflect the diversity of backgrounds in the music industry and improve transferability (Lincoln & Guba, 1985).

Another recommendation for future research is to extend its duration to allow for full understanding of the overall impact of the programme (Hager & Hodkinson, 2009). This is particularly crucial to explore the evolving teaching approaches and to assess the usefulness of strategies such as the physical finger exercises and book adaptations. Furthermore, to

improve the understanding and motivation of teachers, future research should include pre- and post-training surveys or interviews, to gain insights into the specific needs and motivation of teachers with varied experiences which consequently would lead to more tailored and effective CPD (Ryan & Deci, 2000).

5.4 Implications and Recommendations for CPD in Music Schools

Recommendations stemming from the study's findings advocate for the need of CPD for instrumental music teachers tasked with educating autistic children. This is particularly important for novice educators with less experience in teaching and in professional development programs. Given the lack of regulations in the private music schools industry (Conaghan, 2022), the responsibility to support and provide music teachers with effective CPD lies with the music school owners who must ensure to provide adequate programmes and resources for educators.

Another recommendation stemming from this study is for the private music school owners to develop unique policies to support teachers and promote CPD in their educational practices. This can be achieved by including experts as well as music teachers in the policies' design and creating learning programs that facilitate effective application of theory into practice (Kennedy, 2014).

One of the most important elements of learning programs is the delivery of relevant and practical knowledge, which can be achieved by workshops provided by specialists (Makopoulou et al., 2021), such as music therapists or experts in autism education. However, the findings of this study revealed that teacher collaboration is a powerful tool which can foster autonomous educators who support and learn from each other. Therefore, the development of the learning programme can benefit from the expertise and experience of the teachers, potentially even more than the specialist.

The sustained duration of the program, as well as the integration of reflective journaling as a prerequisite for the CPD, is also proposed to allow educators to analyse their teaching practices and refine their teaching strategies (Teslo et al., 2023). Finally, given the complex nature of CPD and the evolving educational demands of students, the CPD policies and learning programs must be continually analysed to address the changing educational needs of teachers to promote their ongoing development (Kennedy, 2014).

5.5 My personal reflection on the AFAP

The experience of the AFAP had a significant impact on my role as both a music school owner and a teacher and I believe that including my own reflection in this research will provide further understanding of the AFAP and serve as a valuable resource for music school owners looking to establish similar initiatives.

As a music school owner, the process of designing and implementing the AFAP was a challenging endeavour especially given the limited opportunities for CPD specializing in teaching instrumental music to autistic children. Additionally, given my own mixed experience with professional development and the importance of providing my employees with the tools to effectively support autistic students in the school, I felt a strong responsibility to create a comprehensive learning program that would ensure success for both teachers and learners.

Reflecting on the program made me realise that up to this point in my career as a music school owner I had prioritised the organisational aspects of running the school while overlooking CPD for teachers. Therefore, I particularly appreciate the experience of the AFAP, as I believe it has equipped me with the tools to establish frameworks and policies for CPD initiatives for my music school in the future. Additionally, while reflecting on the AFAP,

I realised the importance and benefits of collaboration among teachers, and I plan to further develop the culture of collaboration in the school in the future.

Participating in the AFAP has also contributed to the changes in my teaching strategies as well as my perceptions of autistic individuals. The breakthrough moment of the AFAP for me was the session with the music therapist which made me realise that the teachers in my school, including myself, were too focused on achieving goals and preparing students for exams to satisfy parental expectations. However, our goal should have been primarily to develop and foster the love of music. Additionally, despite my experience in teaching autistic children and interacting with autistic people in my personal life prior to the AFAP, the programme has deepened my empathy and understanding by allowing me to see the world from their perspective.

Overall, I believe that the AFAP was a significant experience in my career that enabled me to reevaluate my work priorities and refine my future goals. Moving forward, I plan to continue working on delivering the highest quality education for autistic students as well as pursue new CPD initiatives in my school.

5.6 Conclusion

This study aimed to answer the research question: What is the impact of an Autism-Friendly Accreditation Programme (AFAP) on music teachers' perspectives and practices in teaching autistic children? IPA was chosen as the most appropriate methodology because of the in-depth and comprehensive nature of this approach. The participating teachers in the study were asked to share their experiences with the process of the AFAP collaboratively in focus groups as well as individually in the reflective journals. After the data analysis process, which followed guidelines of the IPA by John Smith, four themes emerged. Subsequently, the

themes were described and contextualised in the broader literature. The findings showed that the AFAP significantly influenced the research participants' instructional methodologies as well as perceptions on autistic students. Additionally, it has motivated the music teachers to continue to collaborate with their colleagues and pursue CPD in the future. Finally, as the school and the participating educators' teaching strategies evolved, the learning outcomes of the autistic students have improved.

As this study concludes, I endeavour to continue to explore the impact of the AFAP as well as develop more CPD initiatives in my music school. Additionally, as this study contributes to the limited research on teaching musical instruments to autistic children as well as the CPD for instrumental teachers, I hope it will result in increased research into the IME and the enhancement of the autism provision in the music schools in Ireland.

Reference List

- Abakah, E. (2023). Teacher learning from continuing professional development (CPD) participation: A sociocultural perspective. *International Journal of Educational Research Open*, 4, 100242. <https://doi.org/10.1016/j.ijedro.2023.100242>
- Aicher, L. (2019). Exploring music. In M. Hahn, & F.-O. Hofecker (Eds.). *The future of music schools: European perspectives* (pp. 271-282). University of Music and Performing Arts.
- Ambrose, L., Fitzgerald, J., Murchu, F. O., & O'Keefe, E. (2023). Exploring the impact of an Autism Friendly Schools Initiative on staff understanding and practice. *Good Autism Practice*, 24(1), 44–53.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). American Psychiatric Association.
<https://doi.org/10.1176/appi.books.9780890425596>
- Anglim, J., Prendeville, P., & Kinsella, W. (2018). The self-efficacy of primary teachers in supporting the inclusion of children with autism spectrum disorder. *Educational Psychology in Practice*, 34(1), 73–88.
<https://doi.org/10.1080/02667363.2017.1391750>
- Au, T.-C., & Lau, N.-S. (2021). Private music teachers' knowledge of and attitudes toward students with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 51(12), 4551–4559. <https://doi.org/10.1007/s10803-020-04809-5>

- Aubrey, K., & Riley, A. (2019). *Understanding & using educational theories* (2nd ed.). SAGE Publications.
- Baker, E. B. A. (2021). *Crafting qualitative research questions: A prequel to design* (Vol. 62). Sage.
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 37(2), 122-147. <https://doi.org/10.1037/0003-066X.37.2.122>
- Baron-Cohen, S., Leslie, A. M., & Frith, U. (1985). Does the autistic child have a “theory of mind”? *Cognition*, 21(1), 37-46. [https://doi.org/10.1016/0010-0277\(85\)90022-8](https://doi.org/10.1016/0010-0277(85)90022-8)
- Barry, L., Holloway, J., Gallagher, S., & McMahon, J. (2022). Teacher characteristics, knowledge and use of evidence-based practices in autism education in Ireland. *Journal of Autism and Developmental Disorders*, 52(8), 3536–3546. <https://doi.org/10.1007/s10803-021-05223-1>
- Barry, L., Holloway, J., & McMahon, J. (2023). ‘It’s up to the teacher’: A qualitative study of teachers’ use of autism EBPs. *Irish Educational Studies*, 1-17. <https://doi.org/10.1080/03323315.2023.2200021>
- Bell, B., & Gilbert, J. (1995). *Teacher development: A model from science education*. Routledge.
- Berklee Institute for Accessible Arts Education. (2024). *Accessible Music Education Study Group: January 2024 to March 2024*. Berklee College of Music. <https://college.berklee.edu/BIAAE/accessible-music-education-study-group>

- Bhatara, A., Quintin, E.-M., Levy, B., Bellugi, U., Fombonne, E., & Levitin, D. J. (2010). Perception of emotion in musical performance in adolescents with autism spectrum disorders. *Autism Research*, 3(5), 214–225. <https://doi.org/10.1002/aur.147>
- Björk, C. (2016). *In search of good relationships to music: Understanding aspiration and challenge in developing music schoolteacher practices*. Åbo Akademi University Press.
- Björk C., & Heimonen M. (2019). Music schools and human flourishing. In M. Hahn, & F.-O. Hofecker (Eds.). *The future of music schools: European perspectives* (pp. 35-50). University of Music and Performing Arts.
- Blankenship, S. S., & Ruona, W. E. A. (2007). Professional learning communities and communities of practice: A comparison of models, literature review. *Academy of Human Resource Development International Research Conference in The Americas*, 1-8.
- Boutot, E. A. (2007). Fitting in: Tips for promoting acceptance and friendships for students with autism spectrum disorders in inclusive classrooms. *Intervention in School and Clinic*, 42(3), 156–61. <https://doi.org/10.1177/10534512070420030401>
- Breen, R. L. (2006). A practical guide to focus-group research. *Journal of Geography in Higher Education*. 30(3), 463-475. <https://doi.org/10.1080/03098260600927575>.
- Candeias, A. A., Galindo, E., Calisto, I., Borrvalho, L., & Reschke, K. (2021). Stress and burnout in teaching. Study in an inclusive school workplace. *Health Psychology Report*, 9(1), 63–75. <https://doi.org/10.5114/hpr.2020.100786>

- Chmurzynska, M. (2009). Self-efficacy of piano teachers of specialized music school. In J. Louhivuori, T. Eerola, S. Saarikallio, T. Himberg, & P.-S. Eerola (Eds.), *Proceedings of the 7th Triennial Conference of European Society for the Cognitive Sciences of Music (ESCOM 2009)*, 44–51. <https://jyx.jyu.fi/handle/123456789/20853?locale-attribute=en>
- Conaghan, D. (2022) Instrumental music education in Ireland: How subsidiarity and choice can perpetuate structural inequalities. *Irish Educational Studies*, 1-17.
<https://doi.org/10.1080/03323315.2022.2093255>
- Corbett, B. A. (2003). Video modeling: A window into the world of autism. *The Behavior Analyst Today*, 4(3), 367-377. <https://doi.org/10.1037/h0100025>
- Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches* (2nd ed.). Sage Publications Inc.
- Cross-Durrant, A. (1984). Lifelong education in the writings of John Dewey. *International Journal of Lifelong Education*, 3(2), 115–125.
<https://doi.org/10.1080/0260137840030205>
- Cudjoe, E. (2022). Using diaries with interpretative phenomenological analysis: Guidelines from a study of children whose parents have mental illness. *International Journal of Qualitative Methods*, 21. <https://doi.org/10.1177/16094069221084435>

- Daly, P., Ring, E., Egan, M., Fitzgerald, J., Griffin, C., Long, S., McCarthy, E., Moloney, M., O'Brien, T., O'Byrne, A., O'Sullivan, S., Ryan, M., Wall, E., Madden, R., & Gibbons, S. (2016). *An evaluation of education provision for students with autism spectrum disorder in Ireland. Research report no. 21*. https://ncse.ie/wp-content/uploads/2016/07/5_NCSE-Education-Provision-ASD-Students-No21.pdf
- Darrow, A.-A. (2009). Adapting for students with autism. *General Music Today* 22(2), 24-26. <https://doi.org/10.1177/1048371308328384>
- Dawson, G., & Osterling, J. (1997). Early intervention in autism: Effectiveness and common elements of current approaches. In M. J. Guralnick (Ed.), *The effectiveness of early intervention: Second generation research*, (pp. 307–326). Brookes.
- Demetriou, E. A., Lampit, A., Quintana, D. S., Naismith, S. L., Song, Y. J. C., Pye, J. E., Hickie, I., & Guastella, A. J. (2018). Autism spectrum disorders: A meta-analysis of executive function. *Molecular Psychiatry*, 23, 1198–1204. <https://doi.org/10.1038/mp.2017.75>
- Dennison, M. (2019). IPA: The black swan of qualitative research. *Qualitative Methods in Psychology Bulletin*, 1(27), 34–39. <https://doi.org/10.53841/bpsqmip.2019.1.27.34>
- Department of Education and Skills and PricewaterhouseCoopers LLB (PwC). (2012). *Evaluation of the special education support service*. <https://assets.gov.ie/31342/c8d3135492514ff7a76e4827ca31856a.pdf>
- Department of Education and Skills Inspectorate – Republic of Ireland, & Education and Training Inspectorate –Northern Ireland. (2012). *Report of an inspection of Middletown Centre for Autism*. Department of Education and Skills and Education and Training Inspectorate.

- Deris, A. R., and Di Carlo, C. F. (2013). Back to basics: Working with young children with autism in inclusive classrooms. *Support for Learning, 28*(2), 52- 56.
<https://doi.org/10.1111/1467-9604.12018>
- Desimone, L. M. (2009). Improving impact studies of teachers' professional development: Toward better conceptualizations and measures. *Educational Researcher, 38*(3), 181–199. <https://doi.org/10.3102/0013189X08331140>
- Dewey, J. (1916). *Democracy and education: An introduction to the philosophy of education*. Macmillan.
- Dias-Lacy, S. L., & Guirguis, R. V. (2017). Challenges for new teachers and ways of coping with them. *Journal of Education and Learning, 6*(3), 265–272.
<https://doi.org/10.5539/jel.v6n3p265>
- Dillenburger, K., Jordan, J.-A., & McKerr, L. (2013). Autism spectrum disorder: Public awareness and attitudes. *Research Update, 84*.
<https://ark.ac.uk/ARK/sites/default/files/2018-08/update84.pdf>
- DuFour, R., DuFour, R., Eaker, R., & Many, T. (2006). *Learning by doing: A handbook for professional learning communities at work*. Solution Tree.
- Duggan, C. (2016). *An overview of CPD provision for teachers in the area of inclusion and special educational needs*. National Council for Special Education. <https://ncse.ie/wp-content/uploads/2016/12/FINAL-SUMMARY-REPORT-CPD-DATABASE.pdf>
- Duncombe, R., & Armour, K. M. (2004). Collaborative professional learning: From theory to practice. *Journal of In-Service Education, 30*(1), 141–166.
<https://doi.org/10.1080/13674580400200287>

Education for Persons with Special Educational Needs Act, Government of Ireland, (2004).

<https://www.irishstatutebook.ie/eli/2004/act/30>

Ellis, T. J., & Levy, Y. (2009). Towards a guide for novice researchers on research methodology: Review and proposed methods. *Issues in Informing Science and Information Technology*, 6, 323-337. <http://dx.doi.org/10.28945/1062>

Finke, E. H., Finke, E. H., McNaughton, D. B., & Drager, K. D. R. (2009). All children can and should have the opportunity to learn. *Augmentative and Alternative Communication*, 25(2), 110–22. <https://doi.org/10.1080/07434610902886206>

Flannery, K. A., & Wisner-Carlson, R. (2020). Autism and education. *Child and Adolescent Psychiatric Clinics of North America*, 29(2), 319-343. <https://doi.org/10.1016/j.chc.2019.12.005>

Foxton, J. M., Stewart, M. E., Barnard, L., Rodgers, J., Young, A. H., O'Brien, G., & Griffiths, T. D. (2003). Absence of auditory “global interference” in autism. *Brain*, 126(12), 2703–2709. <https://doi.org/10.1093/brain/awg274>

Fraser, C., Kennedy, A., Reid, L., & Mckinney, S. (2007). Teachers’ continuing professional development: Contested concepts, understandings and models. *Journal of In-Service Education*, 33(2), 153–169. <https://doi.org/10.1080/13674580701292913>

Freeman, T. (2006). 'Best practice' in focus group research: Making sense of different views. *Journal of Advanced Nursing*, 56(5), 491-497. <https://doi.org/10.1111/j.1365-2648.2006.04043.x>

Frith, U., & Happé, F. (1994). Autism: beyond “theory of mind”. *Cognition*, 50(1–3), 115-132. [https://doi.org/10.1016/0010-0277\(94\)90024-8](https://doi.org/10.1016/0010-0277(94)90024-8).

- Garside R., Ghag, S., Haines, K., Hamilton, M., Hansen, L., Hockin, P., Hovestad, K., Ireson, C., MacKenzie, M., Malette, P., McDougall, M., Mirinda, P., Mjolsness, R., Perrin, J.-A., Porco, B., Seip, J.-A., West, B., & West, K. (2000). *Teaching learners with autism: A resource guide for schools*. British Columbia-Ministry of Education: Special Program Branch. <https://www.literacyleader.com/sites/default/files/autism.pdf>
- Gibbs, G. (1988). *Learning by doing: A guide to teaching and learning methods*. Further Education Unit, Oxford Polytechnic.
- Gillott, A., Furniss, F., & Walter, A. (2001). Anxiety in high-functioning children with autism. *Autism*, 5(3), 277-286. <https://doi.org/10.1177/1362361301005003005>
- Gómez-Marí, I., Sanz-Cervera, P., & Tárraga-Mínguez, R. (2021). Teachers' knowledge regarding autism spectrum disorder (ASD): A systematic review. *Sustainability*, 13(9), 5097. <https://doi.org/10.3390/su13095097>
- Grandin, T., & Panek, R. (2014). *The autistic brain: Exploring the strength of a different kind of mind*. Rider Books.
- Greene, M. J. (2014). On the inside looking in: Methodological insights and challenges in conducting qualitative insider research. *The Qualitative Report*, 19(29), 1-13. <https://doi.org/10.46743/2160-3715/2014.1106>
- Guskey, T. R. (2000). *Evaluating professional development*. Corwin Press.
- Guskey, T. R. (2002a) Does it make a difference? Evaluating professional development. *Educational Leadership*, 59(6), p. 45-51.
- Guskey, T. R. (2002b). Professional development and teacher change. *Teachers and Teaching*, 8(3), 381-391. <https://doi.org/10.1080/135406002100000512>

Hager, P., & Hodkinson, P. (2009). Moving beyond the metaphor of transfer of learning.

British Educational Research Journal, 35(4), 619-638.

<https://doi.org/10.1080/01411920802642371>

Hahn, M. (2019). *The future of music schools: European perspectives*. University of music and performing arts.

Hahn, M., Björk, C., & Westerlund, H. (2024). Introduction: a collaborative journey. In M.

Hahn, C., Björk & H. Westerlund (Eds.). *Music schools in changing societies: How collaborative professionalism can transform music education* (1-11). Routledge.

Hammel, A. M. (2004). Inclusion strategies that work. *Music Educators Journal*, 90(5), 33-

37. <https://doi.org/10.2307/3400021>

Hammel, A. M., & Hourigan, R. M. (2013). *Teaching music to students with autism*. Oxford University Press.

Hamrick, J., Cerda, M., O'Toole, C., & Hagen-Collins, K. (2021). Educator knowledge and preparedness for educating students with autism in public schools. *Focus on Autism and Other Developmental Disabilities*, 36(4), 213–224.

<https://doi.org/10.1177/1088357621989310>

Happé, F., & Frith, U. (2006). The weak coherence account: Detail-focused cognitive style in autism spectrum disorders. *Journal of Autism & Developmental Disorders*, 36(1), 5–

25. <https://doi.org/10.1007/s10803-005-0039-0>

Hayashida, K., Anderson, B., Paparella, T., Freeman, S. F. N., & Forness, S. R. (2010).

Comorbid psychiatric diagnoses in preschoolers with autism spectrum disorders.

Behavioral Disorders, 35(3), 243–254. <https://doi.org/10.1177/019874291003500305>

- Heaton, P. (2009). Assessing musical skills in autistic children who are not savants. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 364(1522), 1443–1447. <https://doi.org/10.1098/rstb.2008.0327>
- Heaton P., Pring L., & Hermelin, B. (2001). Musical processing in high functioning children with autism. *Annals of the New York Academy of Sciences*, 930(1), 443–444. <https://doi.org/10.1111/j.1749-6632.2001.tb05765.x>
- Hennenberg, B., Knuuttila A., & Vetoniemi E. (2019). Inclusive pedagogy in arts – Europe. In M. Hahn, & F.-O. Hofecker (Eds.). *The future of music schools: European perspectives* (pp. 293-311). University of Music and Performing Arts.
- Hourigan, R., & Hourigan, A. (2009). Teaching music to children with autism: understandings and perspectives. *Music Education Journal*, 96(1), 40-45. <https://doi.org/10.1177/0027432109341370>
- Hudson, P. (2013). Mentoring as professional development: ‘growth for both’ mentor and mentee. *Professional Development in Education*, 39(5), 771–783. <https://doi.org/10.1080/19415257.2012.749415>
- Imankhah, F., Khanzadeh, A. A. H., & Hasirchaman, A. (2018). The effectiveness of combined music therapy and physical activity on motor coordination in children with autism. *Iranian Rehabilitation Journal*, 16(4), 405–412. <http://dx.doi.org/10.32598/irj.16.4.405>
- Jablonska, B. (2014). *Socjologia muzyki/Sociology of music*. Wydawnictwo Naukowe Scholar.
- Jansiewicz, E. M., Goldberg, M. C., Newschaffer, C. J., Denckla, M. B., Landa, R., & Mostofsky, S. H. (2006). Motor signs distinguish children with high functioning

autism and Asperger's syndrome from controls. *Journal of Autism & Developmental Disorders*, 36(5), 613–621. <https://doi.org/10.1007/s10803-006-0109-y>

Kaat, A. J., & Lecavalier, L. (2013). Disruptive behavior disorders in children and adolescents with autism spectrum disorders: A review of the prevalence, presentation, and treatment. *Research in Autism Spectrum Disorders*, 7(12), 1579–1594. <https://doi.org/10.1016/j.rasd.2013.08.012>

Karpov, Y., (2014). *Vygotsky for educators*. Cambridge University Press.

Keating, C. T., Hickman, L., Leung, J., Monk, R., Montgomery, A., Heath, H., & Sowden, S. (2023). Autism-related language preferences of English-speaking individuals across the globe: A mixed methods investigation. *Autism Research*, 16(2), 406–428. <https://doi.org/10.1002/aur.2864>

Kennedy, A. (2005). Models of continuing professional development: A framework for analysis. *Journal of In-service Education*, 31(2), 235-250. <https://doi.org/10.1080/13674580500200277>

Kennedy, A. (2014). Understanding continuing professional development: the need for theory to impact on policy and practice. *Professional Development in Education*, 40(5), 688–697. <https://doi.org/10.1080/19415257.2014.955122>

King, F. (2014). Evaluating the impact of teacher professional development: An evidence-based framework. *Professional Development in Education*, 40(1), 89–111. <https://doi.org/10.1080/19415257.2013.823099>

Kivijärvi, S., & Rautiainen, P. (2020). Contesting music education policies through the concept of reasonable accommodation: Teacher autonomy and equity enactment in

Finnish music education. *Research Studies in Music Education*, 43(2), 91–109.

<https://doi.org/10.1177/1321103x20924142>

Korstjens, I., & Moser, A., (2018). Series: Practical guidance to qualitative research. Part 4: Trustworthiness and publishing. *European Journal of General Practice*, 24(1), 120-124. <https://doi.org/10.1080/13814788.2017.1375092>

Krueger, R. A. (2002). *Designing and conducting focus group interviews*. EIU Illinois Higher Education Center. <https://www.eiu.edu/ihec/Krueger-FocusGroupInterviews.pdf>

Krueger, R. A., & Casey, M. A. (2015). *Focus groups: A practical guide for applied research* (5th ed.). Sage Publications.

Kruse-Weber, S., Bucura, E., & Tumler, M. (2023). Facilitating collaborative professional development among instrumental and vocal teachers: A qualitative study with an Austrian music school. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.1096188>

Kuzminski, R., Netto, J., Wilson, J., Falkmer, T., Chamberlain, A., & Falkmer, M. (2019). Linking knowledge and attitudes: Determining neurotypical knowledge about and attitudes towards autism. *PLoS ONE*, 14(7), e0220197. <https://doi.org/10.1371/journal.pone.0220197>

Lang, R., Koegel, L. K., Ashbaugh, K., Regester, A., Ence, W., & Smith, W. (2010). Physical exercise and individuals with autism spectrum disorders: A systematic review. *Research in Autism Spectrum Disorders*, 4(4), 565–576. <https://doi.org/10.1016/j.rasd.2010.01.006>

- Lauri, M. A. (2019). WASP (Write a Scientific Paper): Collecting qualitative data using focus groups. *Early Human Development, 133*, 65-68.
<https://doi.org/10.1016/j.earlhumdev.2019.03.015>.
- Lee, R. R., Ward, A. R., Lane, D. M., Aman, M. G., Loveland, K. A., Mansour, R., & Pearson, D. A. (2023). Executive function in autism: Association with ADHD and ASD symptoms. *Journal of Autism and Developmental Disorders, 53*(2), 688-700.
<https://doi.org/10.1007/s10803-020-04852-2>
- Lesiuk, T. (2015). Music perception ability of children with executive function deficits. *Psychology of Music, 43*(4), 530-544. <https://doi.org/10.1177/0305735614522681>
- Lessner Listiakova, I., & Preece, D. (2020). In-service education and training for teachers regarding autism spectrum disorder: A review of the literature. *Annales Universitatis Paedagogicae Cracoviensis: Studia Psychologica, 12*, 177-199.
<https://doi.org/10.24917/20845596.12.9>
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage Publications.
- Lindsay, S., Proulx, M., Scott, H., & Thomson, N. (2014) Exploring teachers' strategies for including children with autism spectrum disorder in mainstream classrooms. *International Journal of Inclusive Education, 18*(2), 101-122.
<https://doi.org/10.1080/13603116.2012.758320>
- Love, B., Vetere, A., & Davis, P. (2020). Should interpretative phenomenological analysis (IPA) be used with focus groups? Navigating the bumpy road of “iterative loops,” idiographic journeys, and “phenomenological bridges”. *International Journal of Qualitative Methods, 19*. <https://doi.org/10.1177/1609406920921600>

- Lydon, S., & King, C. (2009). Can a single, short continuing professional development workshop cause change in the classroom? *Professional Development in Education* 35(1), 63–82. <https://doi.org/10.1080/13674580802264746>
- Madikizela-Madiya, N. (2017). Ethics' power dynamics in higher education's self-ethnographic research. *Qualitative Research Journal*, 17(1), 32–42. <https://doi.org/10.1108/qrij-06-2016-0038>
- Makopoulou, K., Neville, R. D., Ntoumanis, N., & Thomas, G. (2021). An investigation into the effects of short-course professional development on teachers' and teaching assistants' self-efficacy. *Professional Development in Education*, 47(5), 780-795. <https://doi.org/10.1080/19415257.2019.1665572>.
- Mannion, A., & Leader, G. (2013). Comorbidity in autism spectrum disorder: A literature review. *Research in Autism Spectrum Disorders*, 7(12), 1595–1616. <https://doi.org/10.1016/j.rasd.2013.09.006>
- Maxwell, J. A. (2013). *Qualitative research design: An interactive approach* (3rd ed.). SAGE.
- McGillicuddy, S., & O'Donnell, G. M. (2014). Teaching students with autism spectrum disorder in mainstream post-primary schools in the Republic of Ireland. *International Journal of Inclusive Education*, 18(4), 323–344. <https://doi.org/10.1080/13603116.2013.764934>
- McGregor, E., & Campbell, E. (2001). The attitudes of teachers in Scotland to the integration of children with autism into mainstream schools. *Autism*, 5(2), 189–207. <https://doi.org/10.1177/13623613010050020>
- McMillan, D. J., McConnell, B., & O'Sullivan, H. (2016). Continuing professional development – why bother? Perceptions and motivations of teachers in Ireland.

Professional Development in Education, 42(1), 150-167.

<https://doi.org/10.1080/19415257.2014.952044>.

Melago, K. A. (2014). Strategies for successfully teaching students with ADD or ADHD in instrumental lessons. *Music Educators Journal*, 101(2), 37–43.

<https://doi.org/10.1177/0027432114547764>

Mercer, J. (2007). The challenges of insider research in educational institutions: wielding a double-edged sword and resolving delicate dilemmas. *Oxford Review of Education*, 33(1), 1–17. <https://doi.org/10.1080/03054980601094651>

Merriam, S. B., Johnson-Bailey, J., Lee, M.-Y., Kee, Y., Ntseane, G., & Muhamad, M. (2001). Power and positionality: Negotiating insider/outsider status within and across cultures. *International Journal of Lifelong Education*, 20(5), 405-416.

<https://doi.org/10.1080/02601370120490>

Monk, R., Whitehouse, A. J. O., & Waddington, H. (2022). The use of language in autism research. *Trends in Neurosciences*, 45(11), 791–793.

<https://doi.org/10.1016/j.tins.2022.08.009>

Moore, G. (2014). Mind the gap: Privileging epistemic access to knowledge in the transition from Leaving Certificate music to higher education. *Irish Educational Studies*, 33(3), 249–268. <https://doi.org/10.1080/03323315.2014.926165>

Mundy, P., & Crowson, M. (1998). Joint attention and early social communication:

Implications for research on intervention with autism. *Journal of Autism and*

Developmental Disorders, 27, 653-76. <https://doi.org/10.1023/A:1025802832021>.

- National Council for Special Education. (2015). *Supporting students with autism spectrum disorder in schools - NCSE Policy Advice Paper No. 5*. https://ncse.ie/wp-content/uploads/2016/07/1_NCSE-Supporting-Students-ASD-Schools.pdf
- National Council for Special Education. (2020). *Autism and augmentative alternative communication. A resource for parents and teachers to support the post primary level and primary level summer programme*. <https://ncse.ie/wp-content/uploads/2021/06/Autism-and-Augmentative-Alternative-Communication.pdf>
- Nell, N., De Villiers, F., & Griessel, D. J. (2022). Reflections on teaching piano to young children diagnosed with autism spectrum disorders. *Muziki, 19*(2), 41–63. <https://doi.org/10.1080/18125980.2023.2199458>
- Nestorowich, D. L., Lupien, S. P., & Madaus Knapp, V. (2022). Perceptions of behaviors associated with ASD in others: Knowledge of the diagnosis increases empathy and improves perceptions of warmth and competence. *European Journal of Investigation in Health, Psychology and Education, 12*(11), 1594–1606. <https://doi.org/10.3390/ejihpe12110112>
- Nic Aindriú, S., Ó Duibhir, P., Connaughton-Crean, L., & Travers, J. (2022). The CPD needs of Irish-medium primary and post-primary teachers in special education. *Education Sciences, 12*(12), 909. <https://doi.org/10.3390/educsci12120909>
- Njenga, M. (2023). Teacher participation in continuing professional development: A theoretical framework. *Journal of Adult and Continuing Education, 29*(1), 69–85. <https://doi.org/10.1177/14779714221123603>
- O'Leary, Z. (2017). *The essential guide to doing your research project* (3rd ed.). Sage Publications.

- Organisation for Economic Co-operation and Development (OECD). (2013). *Teaching and Learning International Survey TALIS 2013: Conceptual framework*. <https://web-archive.oecd.org/2013-08-29/246643-TALIS%202013%20Conceptual%20Framework.pdf>.
- Opfer, V. D., & Pedder, D. (2010). Benefits, status and effectiveness of continuous professional development for teachers in England. *Curriculum Journal*, 21(4), 413–431. <https://doi.org/10.1080/09585176.2010.529651>
- Ozonoff, S., South, M., & Provençal, S. (2005). Executive functions. In F. R. Volkmar, R. Paul, A. Klin, & D. Cohen (Eds.), *Handbook of autism and pervasive developmental disorders: diagnosis, development, neurobiology, and behavior* (3rd ed., pp. 606–627). John Wiley & Sons, Inc.
- Palmer, M., Larkin, M., de Visser, R., & Fadden, G. (2010). Developing an interpretative phenomenological approach to focus group data. *Qualitative Research in Psychology*, 7(2), 99-121. <https://doi.org/10.1080/14780880802513194>.
- Pietkiewicz, I., & Smith, J. A. (2014). A practical guide to using interpretative phenomenological analysis in qualitative research psychology. *Czasopismo Psychologiczne/ Psychological Journal*, 20(1), 7-14. <https://doi.org/10.14691/cppj.20.1.7>
- Ring, E., O’Sullivan, L., O’Keefe, S., Ferris, F., & Wall, E. (2019). Transforming the lives of early childhood teachers, autistic children and their families: Findings and recommendations from an evaluation of a programme of continuing professional development. *Adult Learner*, 118–147.

- Rodden, B., Prendeville, P., Burke, S., & Kinsella, W. (2019). Framing secondary teachers' perspectives on the inclusion of students with autism spectrum disorder using critical discourse analysis. *Cambridge Journal of Education, 49*(2), 235–253.
<https://doi.org/10.1080/0305764X.2018.1506018>
- Rose, D., Jones Bartoli, A., & Heaton, P. (2018). Learning a musical instrument can benefit a child with special educational needs. *Psychomusicology: Music, Mind, and Brain, 28*(2), 71–81. <https://doi.org/10.1037/pmu0000209>
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55*(1), 68-78.
<https://doi.org/10.1037/0003-066X.55.1.68>
- Salari, N., Rasoulpoor, S., Rasoulpoor, S., Shohaimi, S., Jafarpour, S., Abdoli, N., Khaledi-Paveh, B., & Mohammadi, M. (2022). The global prevalence of autism spectrum disorder: A comprehensive systematic review and meta-analysis. *Italian Journal of Pediatrics, 48*(1), 1-16.
- Scotland, J. (2012). Exploring the philosophical underpinnings of research: Relating ontology and epistemology to the methodology and methods of the scientific, interpretive, and critical research paradigms. *English Language Teaching, 5*(9), 9-16.
<http://dx.doi.org/10.5539/elt.v5n9p9>
- Scott, S. (2014). The challenges of imitation for children with autism spectrum disorders with implications for general music education. *Update: Applications of Research in Music Education, 34*(2), 13-20. <https://doi.org/10.1177/8755123314548043>

- Scott, L. P., Jellison, J. A., Chappell, E. W., & Standridge, A. A. (2007). Talking with music teachers about inclusion: Perceptions, opinions and experiences. *Journal of Music Therapy, 44*(1), 38–56. <https://doi.org/10.1093/jmt/44.1.38>
- Sikandar, A. (2016). John Dewey and his philosophy of education. *Journal of Education and Educational Development, 2*(2), 191-201. <https://doi.org/10.22555/joed.v2i2.446>
- Silarat, C. (2022). Piano lessons: Fostering theory of mind in ASD through imitation. *International Journal of Disability, Development and Education, 69*(1), 154-169. <https://doi.org/10.1080/1034912X.2021.1947473>
- Smith, J. A., Flowers, P., & Larkin, M. (2022). *Interpretative phenomenological analysis: Theory, method and research*. (2nd ed.). SAGE Publications.
- Snyder, R. R. (2017). Resistance to Change among Veteran Teachers: Providing Voice for More Effective Engagement. *International Journal of Educational Leadership Preparation, 12*(1), 1-14.
- Spowart, L., Winter, J., Turner, R., Muneer, R., McKenna, C., & Kneale, P. (2017). Evidencing the impact of teaching-related CPD: Beyond the ‘happy sheets’. *International Journal for Academic Development, 22*(4), 360–372. <https://doi.org/10.1080/1360144x.2017.1340294>
- Stringer, M. (2005). *The music teacher's handbook: Real solutions for today's teachers*. Faber Music.
- Tanwinit, A., & Sittiprapaporn, W. (2010). Learning styles of undergraduate musical students attending music college in Thailand. *Revista Electrónica de LEEME – Lista*

Electrónica Europea de Música en la Educación, 25, 149-163.

<http://musica.rediris.es/leeme>

Teaching Council. (2016). *Cosán: Framework for teachers' learning*.

<https://www.teachingcouncil.ie/assets/uploads/2023/08/cosan-framework-for-teachers-learning.pdf>

Teslo, S., Jenssen, E. S., Thurston, M., Mandelid, M. B., Resaland, G. K., Chalkley, A. E., & Tjomsland, H. E. (2023). It's the journey, not the arrival that matters – Teachers' perceptions of their practice after participating in a continuing professional development program in physically active learning. *Teaching and Teacher Education*, 136, 104377. <https://doi.org/10.1016/j.tate.2023.104377>

Theologos, C., & Katsadoros G.C. (2019). How music schools justify themselves. In M. Hahn, & F.-O. Hofecker (Eds.). *The future of music schools: European perspectives* (pp. 51-66). University of Music and Performing Arts.

Tomkins, L., & Eatough, V. (2010). Reflecting on the use of IPA with focus groups: Pitfalls and potentials. *Qualitative Research in Psychology*, 7(3), 244–262.
<https://doi.org/10.1080/14780880903121491>

Upitis, R., Abrami, P. C., Brook, J., Boese, K., & King, M. (2017). Characteristics of independent music teachers. *Music Education Research*, 19(2), 169-194.
<https://doi.org/10.1080/14613808.2016.1204277>

Wenger-Trayner, E., & Wenger-Trayner, B. (2023, June 4). *Introduction to communities of Practice - Wenger-Trayner*. <https://www.wenger-trayner.com/introduction-to-communities-of-practice/>

- Westerlund, H., Väkevä, L., & Ilmola-Sheppard, L. (2019). How music schools justify themselves. In M. Hahn, & F.-O. Hofecker (Eds.). *The future of music schools: European perspectives* (pp. 15-33). University of Music and Performing Arts.
- Wire, T. (2022) “They don’t need to know that.” Focus groups as a model for teacher-led research and curriculum consultation, *Practice*, 4(1), 42-55.
<https://doi.org/10.1080/25783858.2021.1896344>
- Yates, K., & Le Couteur, A. (2016). “Diagnosing autism/autism spectrum disorders”. *Paediatrics and Childhood Health*, 26(12), 513-518.
<https://doi.org/10.1016/j.paed.2016.08.004>
- Young, K., Mannix McNamara, P., & Coughlan, B. (2017). Post-primary school teachers’ knowledge and understanding of autism spectrum disorders. *Irish Educational Studies*, 36(3), 399–422. <https://doi.org/10.1080/03323315.2017.1350594>

Appendices

Appendix i: Participant information and consent form

Dear teacher,

Thank you for considering participation in my research study titled: "What is the impact of an Autism-Friendly Accreditation Programme (AFAP) on music teachers' perspectives and practices in teaching autistic children?"

Please find the consent form and information sheet about the research in this document. I would kindly like to ask you to read these documents carefully to understand the research objectives, your role as a participant, and the procedures involved.

Should you have any questions or require additional information regarding any part of the study, please feel free to contact me by email at your convenience.

If you have no queries at this stage, I would be thankful if you could fill out section IV and sign the consent form on the next page. Please return the entire consent form by email to x23201266@student.ncirl.ie

Your contribution is invaluable in advancing the understanding of effective music education strategies for autistic children.

Kind regards,

Karolina Hogan

Director

I. **Research Study Title**

The research study you are being asked to consider participating in is: "What is the impact of an Autism-Friendly Accreditation Programme (AFAP) on music teachers' perspectives and practices in teaching autistic children?" This research is being conducted at the National College of Ireland (NCI) as a part of my studies for the MA in Educational Practice under the supervision of Dr Conor Mellon cmellon@staff.ncirl.ie

II. **Purpose of the Research**

This research is designed to understand the effects of the AFAP on the perspectives and methods of music teachers when instructing autistic children. It aims to understand the challenges teachers face and how the AFAP assists in addressing them.

III. **Participant Requirements as Outlined in the Information Sheet**

In accordance with the Information Sheet, as a participant, you will be engaged in various activities including attending a team meeting, documenting your experiences through journaling, and participating in focus group discussions.

IV. **Participant – Kindly Answer Questions Below (Yes/No)**

- Do you confirm reading and understanding the Information Sheet? Yes/No
- Did you have a chance to ask questions and discuss this study? Yes/No
- Are the responses to your inquiries satisfactory? Yes/No
- Do you consent to the audio recording of the focus groups? Yes/No
- Do you consent to the use of anonymized quotes from the focus group sessions in the research paper? Yes/No
- Do you consent to the use of anonymised quotes from your journal in the research paper? Yes/No

V. **Voluntary Participation**

Your involvement in this research is entirely optional, and you have the freedom to withdraw at any point without facing any repercussions.

VI. **Confidentiality of Data**

I assure you of the utmost confidentiality. Your personal information will be anonymized and securely stored, accessible only to the research team.

VII. **Signature**

By signing below, you confirm that you have understood the information provided and agree to participate in this research study.

Participant's Signature: _____

Name in Block Capitals: _____

Date: _____

Information Sheet

I. The Research Study

The Research Study is titled "What is the impact of an Autism-Friendly Accreditation Programme (AFAP) on music teachers' perspectives and practices in teaching autistic children?"

II. Information on What Participation in the Research Study Involves.

You will be invited to engage in two training courses focused on educating autistic children. Following the completion of these courses, you will be encouraged to incorporate the acquired insights and techniques into your teaching practices. Over an eight-week period, following the conclusion of the last training course, you will be asked to document the implementation of these new strategies and your personal experiences in reflexive journals during weeks 3, 6, and 8. Hard copy notebooks for these entries will be provided, along with structured questions to guide your reflections and ensure comprehensive documentation. This reflective exercise is designed to provide a deep understanding of the impact these changes have on your teaching perspectives and approach. Additionally, you will be asked to participate in two focus group sessions, which will take place in weeks 4 and 8 after the completion of the second training course. These sessions are intended as a platform for you to share your experiences and discuss any adaptations you've made to your pedagogical methods, and changes to your perceptions particularly influenced by the AFAP approach. The focus groups aim to foster a collaborative environment where you can exchange insights and ideas with peers, further enriching your professional development in teaching autistic children.

III. Potential Risks to Participants from Involvement in the Research Study

Participation in this study does not involve any risks beyond those encountered in normal daily activities. The study involves reflective activities like journaling and group discussions which are common in educational settings.

IV. Benefits to Participants from Involvement in the Research Study

This study might be a benefit for you as it can enhance your teaching strategies and practices. Furthermore, my goal is to uncover meaningful perspectives on music education for autistic children, potentially aiding the wider educational community. Please note, principal outcomes of this research will be sent to you via email.

V. Arrangements to Protect Confidentiality of Data

I will ensure to maintain participants' confidentiality. Data collected will be analysed only by me. I will anonymise participants in the recordings and assign them numerical identifiers instead of using names. This approach will be similarly applied to journals. In the written transcriptions, participants' identities will be protected through anonymisation. Immediately

after the interviews are recorded on an audio recorded on my phone, they will be uploaded to a password-protected folder on Google Drive and deleted from my phone. The transcriptions will be securely stored in a password-protected folder on Google Drive, specifically designated by the National College of Ireland. All data collection and storage will adhere to GDPR regulations, ensuring the confidentiality and security of participant information. Please note, the confidentiality can only be protected within the limits of the law.

VI. Data Management

Data collected, including journal entries and focus group recordings, will be safely stored for a duration of five years and subsequently discarded as per NCI guidelines.

VII. Voluntary Participation

Participation in this research study is entirely voluntary. Participants can withdraw at any time without any penalty.

VIII. Additional Information

Should you have any issues regarding this study and wish to speak with me, please do not hesitate to contact me on this email address x23201266@student.ncirl.ie

If you wish to speak with someone independent, please reach out to: NCI Research Ethics Committee: EthicsSubCommittee@ncirl.ie

Appendix ii: Sample of the pilot interview

To preserve anonymity of the teaching participants only a short sample of the transcribed pilot interview is presented below.

Let's now think about the strategies you have used in the program. Please share examples and your experiences.

- **Participant A:** I only have one autistic student. He is really bright and has a very good ear. He had some issues with reading music, so I tried colour coding the notes.
- Karolina: How has that been going?
- **Participant A:** For now, I colour coded 3 songs and we are still working on them. It seems to be easier for him.
- Karolina: Did you try any other strategies?
- **Participant A:** No, as I said the only challenge was his reading.
- **Participant C:** For individual classes, I just have one autistic student. She is very good as well and doesn't need any extra support. I did use PECS for communication in the group classes though, and they definitely helped.
- Karolina: How long did you use them for?
- **Participant C:** So, I only started. I'd say 3 weeks now.
- Karolina: In what way did they help?
- **Participant C:** So, what I do is I show the kids all the pictures and they choose what music games they want to do in class. It helps with organising the class.
- Karolina: Are you planning to use other strategies?
- **Participant C:** I heard, (participant 7) is using vision board. I was planning to ask her about them. The only mentioned it in the workshop, I think she searched it up after.
- **Participant B:** I don't teach groups, but I teach flute to two autistic students. Their reading is actually very good. But the concentration comes and goes. I was thinking after the last workshop that maybe I was spending too much time on the songs. So now, we only work on the songs for 10 minutes and then do scales, sight-reading etc.

Appendix iii: Reflective journals questions

Stage 1 (completed the week of the last AFAP session)

Question 1. Reflect on and then describe your experience to date of teaching autistic children. How have you felt about this aspect of your work? Are there particular strategies you've used?

Question 2. Describe your reactions to participating in AFAP's workshops, collaborations, and discussions with colleagues. What have been the most beneficial aspects of AFAP to date? How did they influence your teaching methods.? Were there any challenges and successes you've experienced in this process? Considering this, outline next steps you might take.

Stage 2: completed 3 weeks after the last AFAP session

Question 1. Reflect on AFAP workshop or collaboration in you practice that you consider to be the most significant to you up to this point. Describe this experience and how you felt about it. How did it personally and professionally resonate with you? Has this event had an impact on your teaching and students' learning? If yes, in what way?

Question 2. Reflect on teaching strategies you have adopted from AFAP. In what way did they contribute to your professional development and growth? Provide examples.

Stage 3: completed 12 weeks after the AFAP session

Question 1. Have your teaching approaches, methodologies, and perceptions on teaching autistic children evolved throughout AFAP? Describe an important moment that illustrates this change.

Question 2. Reflect on challenges and successes you have encountered throughout the process of AFAP. How did they shape your approach to teaching and learning?

Question 3. How do you generally feel about your experience with AFAP? How do you plan to adjust or continue your professional learning journey?

Appendix iv: Focus groups questions

1st FOCUS GROUP:

1. Opening questions

- a) Tell me about your experience of teaching autistic students before AFAP.

Further prompts:

- Where/when has this happened?
- How have you found teaching these learners, in general? What strategies and resources have you drawn on?
- What successes have you experienced?
- What about challenges and how have you addressed these?

- b) Tell me about your experience of CPD as a music educator.

Further prompts:

- Where/when has this happened?
- What form has it primarily taken e.g., workshops? Or have you been involved in other forms e.g., peer dialogue, independent reading/research, accessing external resources etc.?
- What areas of practice has it focused on? Any examples of something similar to the AFAP i.e., focusing on inclusive provision? Tell me about this.
- How have you found this involvement in CPD? Tell me what you gained from it.
- What challenges have you experienced in accessing CPD? Are there aspects of CPD that haven't necessarily proven useful in your practice? Why?

2. Introductory question

Let's talk about your initial expectations with AFAP. What were they like?

Further prompts:

- How did the initial expectations compare to your expectations with CPD in the past?
- What were you hoping to achieve through the AFAP?
- Were there any particular parts of the program you were looking forward to?

3. Transitional question

Thinking about each part of AFAP, what has that journey been like?

Further prompts:

- How did you feel about the program having various components?
- How did different components of AFAP compare to one another?
- Overall, how was your experience from a professional point of view?

4. Key question

Let's now think about the strategies you have used in the program. Please share examples and your experiences.

Further prompts:

- Did you use them with all students? Why?
- How long did you use them for?
- What successes did you experience?
- What challenges did you experience? How have you addressed them?
- Were there any breakthrough moments you've experienced with learners, since participating in the AFAP?
- What about strategies you didn't use? Are you planning to use any of them in the future?
- What about difficulties that persist in your practice that the AFAP hasn't necessarily addressed?

5. Expansion question.

Let's talk about your (perceptions) thoughts and opinions of autistic people.

Further prompts:

- Have they stayed the same or evolved throughout the program? Why?
- To what extent did AFAP influence your understanding of autism in relation to music education?
- Can you share a story from the program that has significantly impacted your views and understanding of autistic people?
- What about from a personal point of view, how do you feel about autistic people now?

6. Exit question.

Is there anything else you would like to share about your experience in this program?

2nd FOCUS GROUP:

1. Opening question

Let's talk about your recent experiences with teaching autistic children.

Further prompts:

- How do you feel in general about teaching autistic students now?

- Has your general approach towards teaching autistic students evolved? In what way?
- Describe your students' progress in the last few weeks? What has it been like?
- What about communication with autistic students?
- What about difficulties that persist in classes with autistic children. What are they like?

2. Introductory question.

Have your perspective of CPD evolved since the beginning of AFAP?

Further prompts:

- Reflecting on your initial expectations for AFAP, how well do you think they have been met?
- From a time perspective, what are your thoughts on AFAP now?
- What about your confidence levels as a teacher? To what extent has AFAP contributed to them?
- What components that were not included in AFAP would you choose to add to the program?

3. Transitional question.

How do you feel about the support you received from the school as well as your colleagues during the AFAP?

Further prompts:

- Please describe any relevant resources or advice you received from the school.
- Please provide examples and share experiences from any conversations with you colleagues about the programme.
- How do you feel about those conversations?
- What further support in relation to professional development do you think you need from the school in the future?

4. Key question

Let's talk about the strategies you have used in classes for autistic children. What have your experiences with them been like since the last focus group?

- Did you continue to use the same strategies? Did you use any new strategies?
- What do you think about long-term use of these strategies?
- Describe your challenges and successes with these strategies?
- Were there any strategies you never used? Why?

5. Expansion question.

In the last focus group session, we talked about the need for creating inclusive environment in the school. How do you feel about this aspect of your work now?

- What successes have you encountered in this aspect of your work?
- What about challenges? What have they been like?
- What changes or support are still needed in the school to enhance inclusive learning to all learners?
- What feedback did you receive from parents in general about the changes implemented to ensure inclusive learning?

6. Exit question.

Thinking about your professional development in the future, what would you like to achieve?

- How have the insights the AFAP shaped your goals or ambitions within your profession?
- What are your hopes for the future in terms of developing professionally?
- How do you think your professional needs moving forward can be further supported?

Appendix v: Examples of initial observations and exploratory comments

Initial observations

we had decided to purchase sensory tools to classroom to see if they would benefit any of the children. The children were interested with the majority of the new sensory toys and especially enjoyed the flashing lights on the speaker and maracas. **So** far, discussion with Karolina and setting the plan for AFAP has been the most beneficial. My next steps I want to focus more on children focusing in class by using PECS and more relaxed approach to

KH Karolina Hogan

Collaboration beneficial
Use PECS, sensory toys
Change in approach

Q3: I plan to continue to use all strategies I learned in AFAP in my teaching. Through conversations with Karolina, children, music therapist and parents as well as all workshops my knowledge evolved. Support was definitely needed to teach this class to my best ability. The support I received was effective.

KH Karolina Hogan

Plans to continue to use strategies

Reply

KH Karolina Hogan

Knowledge evolved

Reply

KH Karolina Hogan

Considers AFAP effective

Reply

Exploratory comments

Participant 1: I worked in a centre for autistic students for 2 years. I have always felt like my students were happy and were progressing.

KH Karolina Hogan

Experienced teacher
Confidence because of experience

Q2: I have come to learn that teaching isn't always getting the student to learn as much as possible but also just getting them involved and engaged with the instruments and music. It is important to create intrigue rather than demanding the child's attention, which is something I already used in my teaching, but I found it was important thing to be aware of. In the

KH Karolina Hogan

Change of mindset

Reply

Appendix vi: Clusters and provisional themes

Before the AFAP Challenges	During the AFAP Effective CPD	Immediately after the AFAP Implementaion of strategies	4 weeks after the AFAP Evolution of practices and perspectives
<ul style="list-style-type: none"> • Lack of knowledge & skills • None or negative experience with CPD • Challenges in classes • Feelings of anxiety • Experienced teachers confident in classes for autistic children 	<ul style="list-style-type: none"> • Relevant knowldege significant • Prefer practical workshops and collaborations • Appreciated reflection & sustained duration • Mixed views on theory and articles 	<ul style="list-style-type: none"> • Initial success with strategies • Pecs, book adaptations most commonly used • Improved learning outcomes of students • Teachers became more confident 	<ul style="list-style-type: none"> • Some strategies not as effective • Teachers continued to adapt strategies • Changes of perceptions and evolution of practises • Increase in confidence • New mindset on CPD • Reassurance for experienced teachers