

Inclusive Methods in Art Classroom for Students with Autism in China

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ABSTRACT

Cultivating professional knowledge and developing specific inclusive training has always been important for educators in China. Within the context of special art education in China, art educators are supposed to adjust the instruction effectively for students with a variety of disabilities. This qualitative study sought to gain insight of the strategies of modifying and adapting art instruction for children with autism. Data were collected and analyzed by comparative method through interviews with three art educators. During the interview, three participants addressed strategies they use when working with autistic students in art classroom and proved the ways to modify and adapt art instruction to enhance autistic children's pedagogical skills. Art teachers can also identify students' preferred art materials to engage autistic students in learning art. Beyond helping my educational practice, this study could further serve as an impetus to assist other educators in China thus expand teachers' professional knowledge in teaching children with special needs.

1. Introduction

Background to the Problem

As an art educator in elementary school in China, the author has worked with many children with special needs before, however, school is hard for some of them. The author had an autistic student in my art class, whose classmates had a lot of misunderstandings of him. His peers used offensive labels like "idiot" and "moron" due to his movement delay reaction and impaired social reaction. His mother worried about him and she asked me through tears to pay more attention to him as art class was his favorite class. Kraft (2006) indicated that teaching kids with special needs should combine efforts of the art educator, special educator, and parents^[19]. To improve the situation, The author tried many ways to rearrange the learning environment to help the student with autism to create and appreciate the art as well as develop other skills.

On the one side, art lessons enable students with special needs to strengthen their comprehensive ability and communication skills. Wexler (2016) pointed out the connections between special and visual arts education and advised on the necessity of critical disability studies to assure the inclusion of the disabled students' leaning and living experience^[35]. Furthermore, Kellman (1999) indicated that each part of autistic kids' drawing appears to have unique approach to detail in color, line quality, space, and similar type of form. On the other side, art teachers should focus on students with special needs and ask more specific questions to guide their thinking and responses throughout the representation and demonstration in class^[16,17]. As Klin (2012) stated, by helping children with autism learn and appreciate artwork, art educators can assist them to understand socio-cultural events happening around them^[18]. Even though having more in-service teacher training and support from the government is effective to an inclu-

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sive art teaching, cultivating professional knowledge and developing specific inclusive training of how to support special students' learning is what we need more focus on in China.

The author has reached out to colleagues, students' parents, and searched literature for related information, resources, and services with autistic children. Because collaborative approaches and activities are limited due to the work schedule and insufficient preservice preparation and experience, gaining more information is necessary for art teachers to get a comprehensive understanding of working with children with special needs. Reflecting on my formal training and professional opportunities working with special needs students specifically with autistic kids, the author attests that it is necessary for art educators to gain more skills about their developmental needs.

Problem Statement

Within the context of the integration of art and special education in China, Chinese art teachers are supposed to adjust the instruction effectively for students from different cultural backgrounds and a wide range of disabilities. According to Shieh, Chou, & Ersozlu (2018), in many schools in China, there are different syllabuses and curricula designed for kids with special needs that allow students to maximize their potential development in a flexible and humanized environment^[31]. Existing literature also offers the insights into the lives of autistic children. Furniss (2008) indicated how art is an essential part of autistic kid's expression and addressed that pre-service art teachers are requested to know more about effective intervention techniques to teach autistic kids^[9].

In the literature, there are common views of discussion such as the definition of special education (Lauritsen, 2013; Lord, Elsabbagh, Baird, & Veenstra-Vanderweele, 2018; Furniss, 2008), the current status of autistic children (Clark & Zhou, 2005; Kurth & Mastergeorge, 2012; Alter-Muri, 2017; Andrus, 2006; Derby, 2012; Shore, 2003), the challenges teachers face (Bain & Hasio, 2011; Wexler, 2016; Derby, 2012; Kellman, 1999; Alter-Muri, 2017; Klin, 2012), and the suggestions in terms of teaching autistic kids in art (Bain & Hasio, 2011; Shore, 2003; Blackman, 2005; Sun & Shek, 2012; Klin, 2012; Furniss, 2008; Andrus, 2006; Kraft, 2006). Another common literature discussion focuses on contemporary issue is social inequality within the art classroom (Furniss, 2008; Kurth & Mastergeorge, 2012; Alter-Muri, 2017; Clark & Zhou, 2005; Derby, 2012; Wexler & Luethi-Garrecht, 2015). Most of the articles focus on sensory, verbal and physical characteristics that result in confusion and frustration in inclusion art classroom, however, the literature leaves

out the autistic kids learning environment specifically in mainland China.

Even more challenging, the Compulsory Education Law of the People's Republic of China requires all children to enroll in school for nine years of compulsory education starting at age of six, including kids with disabilities. It provides comprehensive guidelines and establishes the requirements for teachers and parents in attaining general education for kids with special needs (Ministry of Education of the People's Republic of China)^[25]. However, there is no national agreement on guiding the implementation of services for students with special needs (Zhang & Spencer, 2015)^[36]. The method of attending general schools does not meet the needs of all autistic students, and they are more possibility to be refused by general schools because they can only access to special education service in special schools (Huang, Jia & Wheeler, 2013)^[15].

Thus, the purpose of the study was to identify ways that art teachers enhance their knowledge and skills in creating adaptations for autistic students.

Research Questions

The research was driven by the following questions:

- What strategies can art teachers use to enhance their pedagogical skills and problem-solving skills when working with autistic students in art classroom?
- How do educators working in schools for children with special needs in China modify and adapt art instruction for children with autism?
- What implications does the study hold for Chinese elementary school art educators working with autistic kids?

Assumptions

I had some assumptions going into the study. First, the author assumed that children with autism have frustration and confusion due to the lack of verbal and physical abilities in inclusion art rooms. Second, children with autism may have different visual memory and show attention deficits from typical individuals. Third, the author assumed that all children with autism need additional help and supervision in art class and their productivity is different from other students. Lastly, teaching autistic students in an art classroom should combine efforts of the art educator, special educator, and parents, and the author assumed that there were methods and ways to create adaptations to meet the needs of all autistic children.

Theoretical Framework

The study used the characteristics and frames inherent

in the theory of Multiple Intelligences. Howard Gardner (1991) defines intelligence as problem-solving ability and states that children are able to learn in different ways through different methodologies and activities, however, the ways to choose appropriate methods are based on teacher's criteria and critical inquiry (p. 6) ^[13]. Gardner (1983) also proposed that "intelligence should be defined widely, and there is no universally accepted list of human intelligences" (p. 60). Yet in his research, he identified eight multiple intelligences: interpersonal, intrapersonal, logical-mathematical, linguistic, spatial, musical, kinesthetic, and naturalist (Gardner, 1983) ^[12].

Each intelligence can be expressed in various ways. Spatial intelligence is often associated with visual thinking strengths in autistic children which is described as the ability of being sensitive to color, line, shape, and space. People with spatial intelligence tend to have ability to perceive the visual spatial world accurately. Spatial intelligence is related to visualization, imagination, and art perception. Thus, art educators should encourage children who have strong spatial intelligence and strengthen them in this area. Klin (2012) stated that by helping children with autism learn and appreciate artwork, art educators can assist them in understanding socio-cultural events happening around ^[18].

Interpersonal intelligence addresses individual's social perception, social effectiveness, and interpersonal understanding. Children who exhibit interpersonal intelligence are less egocentric and more sensitive to their peers, and they gradually start to react to the feelings of others and learn how to adapt to other people's behavior, thus, their social sensitivity increases enormously during that period (Gardner, 1983) ^[12]. However, for children with autism, social communication deficits result in learning disabilities including language delay and difficulties in maintaining conversations with peers in the class. Art teachers can help them to improve the behavior and social skills (Clark & Zhou, 2005) ^[7]. More importantly, Gardner's (1983) key point is: "intelligence can be taught, learned, developed and enhanced" (p. 246) ^[12].

Schools and educators can collect optimal resources intentionally to serve every student with distinct cultural background and personal learning style (Gardner, 1991). Even though it is challenging to carry out individualization in a classroom, the learner-centered curriculum is more willingly attained by students. Gardner (1991) addressed integrated curriculum which relates to the implementation of the curriculum. It represents the educational idea that accords with the cognitive characteristic of children to meet their needs of getting the sense of the world and integrating their own intelligences. All in all,

educators should take active methods of teaching and create relatively informal and comfortable atmosphere in the classroom (p.83) ^[13].

Significance of the Study

Conducting this study served as an impetus for my practice as an art educator by expanding my professional knowledge and developing specific inclusive training in teaching children with special needs, especially children with autism. By knowing the strategies for art teachers to use to enhance pedagogical skills and problem-solving skills of autistic students, art teachers could become aware of the methods of adjusting the learning environment and instructional activities for autistic students. At the time of the study, there were more than 80% students with learning disabilities taking regular education classroom in Hunan, China. Art teachers could help them with not only the pedagogical skills but also the behavior and social skills.

Beyond helping my practice and experience as an art teacher, this study could further assist other educators in China. According to many of my colleagues who are new to working with children with special needs, there are various challenges and difficulties. As a result of the study, preservice art teachers should gain more information and get a better understanding about working with autistic children.

Limitations of the Study

Since the study was conducted at a time that in person instruction was suspended due to the corona virus (COVID-19), the author was not able to observe teachers working with autistic kids. Furthermore, due to the limited time, the number of teachers that the author could interview was very limited. Last but not least, the research was based in China, and the author interviewed in Mandarin Chinese, so the translation might have influenced the meaning of interview data.

Summary

In this chapter, the author introduced the personal context for the reason why the study served as an impetus for my practice and how it expanded my professional knowledge in teaching children with special needs. It was my opinion that art teachers can create adaptation for autistic students through different methods. Further, The author contented that Chinese art educators are supposed to adjust the instruction effectively for students from different cultural backgrounds and even with special needs. This qualitative study gained insight into the challenges that art

educators are now facing in teaching children with autism and provide a comprehensive background and strategies for them to improve how kids with autism are taught in today's art classroom in China. The next chapter focuses on the literature of strategies art teachers use and the challenges art educators face to enhance knowledge and skills of children with special needs in art classroom.

Definition of Terms

Autism. According to Lauritsen (2013), Autism spectrum disorder (ASD) refers to a neurodevelopmental disorder with symptoms either be diagnosed in early childhood or later^[21].

Inclusion. According to Wexler (2016), the term inclusion describes children with identified disabilities, spending their school days in general education classrooms with nondisabled peer students^[35].

Relational aesthetics. According to Bain & Hasio (2011), relational aesthetics and participatory art both influence art education in children with autism. Relational aesthetics is defined as the tendency to create art depending on social context and human interaction^[5].

Special needs. According to Armstrong (2003), it describes various difficulties or impairments with clinical diagnostic for individual requiring specialized services^[4].

2. Literature Review

Introduction

This qualitative study explored the strategies art teachers use to enhance different skills of children with special needs in art classroom. Specifically, this study explored the challenges art educators face and identify ways that art teachers can enhance their knowledge and skills in creating adaptation for autistic students within elementary school curriculum in China.

There are five themes investigated through the literature and they provided the context for the study. First, a context of the definition of autism spectrum disorders is provided (Lauritsen, 2013; Lord, Elsabbagh, Baird & Veenstra-Vanderweele, 2018; Furniss, 2008; Huang, Jia & Wheeler, 2013; Clark & Zhou, 2005). Second theme further examines how autism influences children's learning in regards to their social communication deficits, emotional issues, and neurological differences (Furniss, 2008; Kurth & Mastergeorge, 2012; Alter-Muri, 2017; Clark & Zhou, 2005; Derby, 2012; Wexler & Luethi-Garrecht, 2015). Third, the importance of art to autistic children is investigated. Given the connections between art and children with autism, art emerging as an important aspect is applied to children with special needs and the ways art

educators can work with children with autism is examined in this theme (Bain & Hasio, 2011; Wexler, 2016; Furniss, 2008; Kellman, 1999; Golomb & Schmeling, 1996; Derby, 2012; Klin, 2012). In the fourth theme, physical settings of art classroom for children with autism are discussed. This theme also describes the methods for art teachers to create an effective and positive learning environment (Wexler & Luethi-Garrecht, 2015; Bain & Hasio, 2011; Sun & Shek, 2012). Lastly, the strategies of art teachers working with autistic children is addressed. Art teachers could ask more specific questions to guide children with autism to appreciate art (Klin, 2012; Furniss, 2008; Kraft, 2006).

Definition of Autism Spectrum Disorders

Autism spectrum disorder (ASD) refers to a neurodevelopmental disorder with symptoms ranging from mild to severe, which is either diagnosed in early childhood or later in childhood (Lauritsen, 2013)^[21]. The main features of autism spectrum disorder are shown by social communication deficits and unusual sensory (Lord, Elsabbagh, Baird, & Veenstra-Vanderweele, 2018)^[23,32]. Specifically, autism is one of autism spectrum disorders, which is described as a pervasive developmental disorder.

The criteria for diagnosis of autism most often include the impairments in interpersonal skills and communication skills (Furniss, 2008)^[9]. Autism spectrum disorder diagnosis assessment includes developmental history of children, detailed interview with parents, various findings through clinical observations and complicated presentations. Commonly, ASD diagnosis takes approximately 12 months for children after their parents raised concerns for the first time (Moh & Magiati, 2012)^[27].

As far as the diagnosis process of ASD in China, it most often includes three steps. First, professional interviews of a parent are conducted to get detailed symptoms and developmental history of the child. Second, a structured observation is conducted by a doctor to assess child's cognitive abilities, motor skills, communication development, and so on. What's more, instruments including Child Autism Rating Scale have been widely used over the years. Third, aimed at making an official diagnosis, the doctor uses specific "diagnostic criteria" according to the result of observation (Huang, Jia & Wheeler, 2013)^[15].

In regard to the treatment of ASD, applied behavior analysis (ABA) combined with behavioral intervention with sensory integration strategies is used as the most effective treatment for autistic children. However, the application of behavior analysis is not a familiar practice in China (Clark & Zhou, 2005). These authors also discussed the use of traditional Chinese medicine and acupuncture

(Chinese method of treating pain) to treat autistic behavior and also noted that western medicines are also used to improve autistic children's hyperactive behavior and their psychiatric and emotional symptoms (pp. 285-295) ^[7].

How Autism Influences Children's Learning

Symptoms and impairments caused by autism influence children's learning. First, social communication deficits result in learning disabilities including language delay and difficulties in maintaining conversations with peers in the class. In addition, social deficits also reflect via facial expressions or body language among children with autism.

Furthermore, it can be challenging for autistic children to identify emotions in themselves and others. These impairments result in failing attending group work and general presentation in the class (Clark & Zhou, 2005) ^[6].

Second, children with autism show attention deficit due to the neurological differences, which could be a challenge for art teachers to obtain attention from students with autism in art activities (Kurth & Mastergeorge, 2012) ^[20]. More specifically, kids with autism need some instructions on pretend play. Autistic children are not only strongly interested in particular objects or activities, but also have a strong preference in routine and sensory challenges (Alter-Muri, 2017) ^[1]. When they are not interested in activities, they tend to be distracted, lack concentration, and might appear absent-minded in class. Thus, this performance results in slow learning process and inefficient learning performance.

Third, children with autism may act apathetically and irritably due to emotional issues among them. These emotional issues are often shown as feelings of aloneness as well as the anxiety and fear. Consequently, art educators should be sensitive to students' emotional alterations and then unconsciously reveal their understandings without deviating from their prepared instructive objectives. Art teachers are also suggested to have clear concise directions and reasonable expectations and art activities to draw autistic children's interests and address their concerns (Derby, 2012) ^[8]. In this teaching framework, students with special needs can both vent their negative emotions and achieve academic performances. Otherwise, the passive emotion negatively impacts students with autism especially on their enthusiasm towards study.

Lastly, children with autism tend to have trouble with sensory stimulation. Things like humming of the fluorescent lights can be intrusive for them (Shore, 2003) ^[29]. It also can be a barrier for them to study in a general classroom setting. In a word, autism reduces children's focus, preferences on learning materials, motivation, and positive learning attitudes.

The Importance of Art to Autistic Children

This theme explores how art serves as an important part for children with autism.

Autistic kids are strong in visual learning and processing focused on their particular interests (Kellman, 1999) ^[16]. They tend to present their thoughts and communicate visually and reduce their deficits through their strength of visual processing (Ganz, 2007). Alter-Muri (2017) also noted that autistic kids have strengths in visual thinking and processing with unique style of art perception ^[1]. However, autistic children require more instruction and guidance on the symbolic meaning of visual images ^[11].

Bain & Hasio (2011) stated, the tendency of creating art depended on human interaction and social context which was also known as relational aesthetics. Participatory art might not change every autistic child's preference, but it is probably the most unique form of modern expression without using any modern technologies at that time. It is an exciting and novel artistic direction, especially in the period of helping children with autism to express their feelings ^[5]. What is more, the visual arts narrative provides autistic children an alternate way to tell their own personal stories. Thus, art teachers could use interventionist strategies to invite dialogue with them (Wexler, 2016) ^[35].

According to Furniss (2008), students with autism may have different visual memory from typical individuals. Each part of autistic kids' drawing appears to be with its own approach to detail in color, line quality, space, and type of form. Art teachers are able to make connections between their artworks and performances ^[10]. In this way, art activities which are the mirrors of the students' creative processes could develop a reliable relationship between teachers and students with autism. Consequently, art emerging as an important aspect, cannot only be applied in the general population, but can be also used to satisfy individuals with special needs. Furthermore, art can be considered as a practice that allows people with all special needs to express their identifies, feelings, and communicate their desires. In-service and pre-service art teachers need to learn efficient intervention techniques to teach autistic children in the art room (Kellman, 1999) ^[16].

Specifically, in article by Golomb and Schmeling (1996), the authors stated that many autistic individuals exhibit extraordinary performances on block designs, puzzles, and other pattern recognitions ^[14]. Lee and Hobson (2006) noted that autistic kids are able to create artwork of distinguishable houses but tend to draw similar pictures of humans ^[22], while Derby (2012) stated that children with autism tend to draw similar things repeatedly especially

floating objects and fragmented body parts^[8]. Hence, art educators should take a sole responsibility of appreciating and acknowledging the artistic abilities of kids with autism.

Alter-Muri (2017) examined several behaviors and symptoms of autistic kids from psychological and developmental perspective. She noted that the process of creating art was more crucial than the artwork. That means it is necessary for art teachers to recognize the need of children with autism to help them learn and appreciate art. For many art educators, they work as the leaders to help students in art classroom. The challenge of leadership requires the understanding and appreciation of the individual and culture diversities, especially for students with special needs^[1]. In a word, the artistic education greatly helps autistic children to improve their psychological attention and comfort of emotional imbalances. By helping children with autism learn and appreciate artwork, art educators can assist them to understand socio-cultural events happening around (Klin, 2012)^[18].

Physical Arrangement of Art Room for Children with Autism

Optimal learning experiences are important for diverse thinkers' learning experiences, especially for children with special needs. However, there are social inequality problems within the education system, particularly in the setting of an art classroom. According to Bain and Hasio (2011), "the physical arrangement of the art room can be an obstruction to collaboration, independence, empathy, and dialogue"^[5]. Within this context, Wexler and Luethi-Garreht (2015) explored effective solutions to offset inequalities within the art classroom which was meant to be inclusive but remains to be exclusive, inaccessible, and uninviting for children with autism^[34].

Wexler and Luethi-Garreht (2015) noted that display, auditory and media presentations are issues that directly affect autistic children, so the art room setting should be flexible and satisfy students' diverse physical and cognitive needs^[34]. Ganz (2007) emphasized that the physical classroom setting should be flexible for specific learning tasks. He mentioned some elements in the classroom can promote students' attention to task and prevent distractions, such as "clearing desks and tables of unnecessary materials, and covering windows" (p.252)^[11]. Wexler and Luethi-Garreht (2015) also pointed out that the arrangement of tables can be changed depending on instructors' needs. It can be formed in a U shape which opens in the front or settled in rows. Further, ergonomically designed chairs with height adjustment and the ability of swiveling and rolling are conducive to children with autism. It

makes the children's natural body movement more kinetic and enhances their concentration in class. In addition, the art room should be dark enough for Smartboard presentations to be seen clearly^[34]. According to Shore (2003), as children with autism tend to have more sensory integration problems than not autistic ones, the natural illumination from outdoors is the comfortable and healthy lighting for autistic kids since the humming of the fluorescent lights can be intrusive for them^[29].

Moreover, the size and the dimension of the art room interrelate with how students receive information in class. Whether art teachers convey the message successfully depends on the room space and teachers' attention on each student. When classroom is large, one-on-one instruction with autistic student is recommended. Independent work areas set for students with autism should be visually secluded from other classmates because working with peers can be distracting for them (Webber, 2002)^[33]. The set-up of the art room and the location of art teacher are required to work equally well because most of the children with autism cannot attend to hearing and vision at the same time (Blackman, 2005; Shore, 2003)^[6,29]. Ganz (2007) suggested to provide children with autism more visual cues in class and visual schedules should be done to help them to engage in art classes. It was found that visual schedules can be a useful and valuable tool for autistic individuals to decrease their response latency with visual directions from art teachers^[11]. Sun and Shek (2012) also mentioned, to build a harmonious environment in art classroom, art teachers can create an effective and positive environment by establishing behavior management and class rules. The rules should be simple and easy to follow, especially for special education students^[30].

To avoid distracting from peers, art teachers can also tape boundaries on the floor as a room divider to delineate work areas for autistic children. The classroom should be divided into independent activities area, workshop area, one to one instruction area, group instruction area, and leisure area. Art educators can tape the floor or shelve to clarify areas for children with autism during different tasks (Ganz, 2007)^[11]. In addition to physical arrangement of the art room, teachers should provide various choices for students including diverse materials and different plans (Sun & Shek, 2012)^[30].

The Strategies of Art Teachers Working with Autistic Children

Derby (2012) demonstrated how the contemporary art classroom had reinforced stigmatization among children with autism, especially how they are unable to learn and appreciate art because of their neurological differences^[9].

Nevertheless, other authors like Bain and Hasio (2011) and Furniss (2008) suggested how art teachers could rearrange the learning process with different emphasis to help autistic children to learn and appreciate the art as well as develop skills to assist them in creating art ^[5,10].

The issue that emerges in the art room is the ability to apply children's consciousness to understand aesthetic values of art. According to Bain and Hasio (2011), children with autism tend to have a highly active intuitive knowledge of the world due to "their greater bodily and sensory ways of knowing" ^[5]. Art teachers should provide more participatory art that social interactions are prompted by the work to make sure children who experience art are physically engaged in it. Their behaviors become manageable through their participation in art. Furniss (2018) noted that "autistic kids do not often generalize images they have seen, but rather can retrieve specific details of an object with great accuracy" ^[10]. Art teachers can inspire and excavate more possibilities of autistic students in this area by conducting various participatory art activities. The limited teaching time of arts education could be enhanced, mixing theoretical ideas with practical works. It can also be achieved by joining diverse art subjects with similar themes that connect them (Nompula, 2013) ^[28]. Thus, it can be concluded that educators should learn different artistic ways to enlighten children with autism.

Andrus (2006) justified the necessity of art experiences in learning, clarified the definitions and distinctions of various forms of teaching with art experiences and provided the principles for teachers to follow. The benefits of effective and efficient communication are including psychological safety and mutual trust. In teaching children with special needs, art educators should provide students problem-solving suggestions by asking some guiding questions like "Could you please tell me...?", or "What will you do next?" to lead students to study step by step. Andrus offered an example taken from actual practice and provided two key concepts drawn from this instance, namely, being empathetic and educational. The therapeutic part requires the teacher to remain empathetic to students' various forms of experiences and emotions, like anger, upset, anxiety, mania, and so forth. As a result, art educators should firstly be sensitive to students' emotional alteration, and then unconsciously reveal their understanding without deviating from their prepared instructive objectives (pp.178-182) ^[3]. In a word, educators should concentrate on autistic children's emotional changes and try to positively change such negative emotions, like anger and anxiety, and always be empathetic to students' various experiences.

Besides, teaching kids with special needs should com-

bine efforts of the special educators, and parents. With their help, art teachers get to know more about the autistic students. In the following, art teachers should focus on students' attention and ask more specific questions to guide their thinking approaches and responses (Kraft, 2006) ^[19]. It can be concluded that the education on autistic children should be based on efforts from professional educators and parents to ensure the practical guidelines.

Parental stress usually caused by their children's developmental problems (Andersson, Miniscalco & Gillberg, 2014) ^[2]. While some autistic children's parents worry about their kids' lack of basic living skills and social skills for leading an independence life in the future, others are aware of some skills and behaviors that children with autism have and can assist them to create art that further helps them in improving social skills (Huang, Jia, & Wheeler, 2013) ^[15]. The partnership between parent and art teacher contributes to autistic kid's learning and they would share information and review autistic kid's representation and study process in the conference.

Either at school or at home, students with autism should have individualized education plan and learning objectives. The curriculum should be appropriate to each individual's ability level and combined with student's special interests to motivate their participation. Then, preparing a copy of the lists of learning tasks for every student, and dating the task when they achieved can be helpful for art teacher to adjust the teaching objectives (Ganz, 2007) ^[11]. Van, Reichle, and Schopler (2003) also noted that teachers should recommend different schedule for each student with autism. Schedules should be individualized depending on students' needs and abilities and designed by using special symbol, color, name-labeling, or students' pictures. In conclusion, the curriculum, learning objectives, and schedule should be easy to follow for every student with autism ^[32].

Summary

By understanding more about children with autism, art teachers can help them to improve the pedagogical skills and the behavior and social skills. This chapter explained the core features of autistic kids— social communication deficits, emotional issues, and unusual sensory (Furniss, 2008; Lord, Elsabbagh, Baird & Veenstra-Vanderweele, 2018) and examined how autism influences children's learning.

The importance of art to autistic children was investigated and pointed that art serves as a crucial therapeutic method to children with special needs. The ways art teachers could rearrange the classroom to help children with autism to develop skills and create art were also

addressed. Furthermore, the condition and the physical setting of the classroom and the coordinate of art teachers are required to work equally well to provide children with autism a comfortable and relaxed environment to study (Bain & Hasio, 2011; Furniss, 2008; Klin, 2012; Blackman, 2005; Shore, 2003; Ganz, 2007). Lastly, the ways art teachers could ask more specific questions and provide resources and problem-solving suggestions to guide children with autism was discussed. Art teachers should use different artistic ways to set the curriculum, learning objectives, and schedule that is appropriate to every student with autism individually (Bain & Hasio, 2011; Klin, 2012; Furniss, 2008; Andrus, 2006; Kraft, 2006; Huang, Jia & Wheeler, 2013). The next chapter focuses on the methodology of the study including the design of the study, site and participants' selection, data collection and analysis.

3. Methodology

Design of the Study

This was a qualitative study which's purpose was to research the methods art teachers use to enhance their pedagogical skills and problem-solving skills of autistic students in an art classroom. Qualitative methodology was best suited for this particular research. According to Miraglia and Smilan (2014), qualitative research is best suited for the study of human behavior. Furthermore, qualitative research is referred to as the interpretative or naturalistic research design^[26]. This research technique mainly focuses on the collection of data aimed at deriving the underlying meaning and is mainly suited to the study of humans.

In this study, the research question aimed to study the challenges associated with the teaching autistic children, thus the best data collection technique involved interviewing the art teachers in special schools to get their points of view.

Site Selection

This study was conducted at Aimier training center in Hunan and Beijing Stars and Rain institute for Autism in Beijing. Both are non-governmental organizations based in China. Aimier training center was founded in 1999 in Hunan province in China. Its mission is to offer various courses and training for children with special needs from toddlers to age fourteen. Children attend courses and activities there on the weekends and on special events like Mid-Autumn Day, Christmas, Spring Festival, and so on. Most of the activities require that parents accompany their children, and the courses mainly focus on art making or outdoor parent-child games and sports meetings.

Beijing Stars and Rain institute for Autism was found-

ed in 1993, and the founder is a mother of an autistic child. The institute aimed at helping children with autism to integrate into society and providing counsel and family training, art training, guidance service and online classes for kids with autism. They have helped over 10,000 autistic children with comprehensive interference blending play therapy and sensory integration therapy implemented with professional teachers. They also help autistic children's parents to analyze information in detail, so as to make proper interventional plan for each kid.

For kids from three to six, Stars and Rain institute provides the training for eleven weeks through individual education plan, applied behavior analysis, and demonstration classes from Monday to Friday. In addition, the institute offers free Applied Behavior Analysis training online for teachers who desire to gain more information about teaching children with autism. **Participants of the Study**

In qualitative studies, the sample size is carefully selected by the researcher and is rather small. The selected three participants were from different organizations teaching art to children with autism, and they were willing to participate in this research.

The first participant, Kiki was working in Aimier training center. She has taught art for eight years after she graduated from a local college in Hunan. Before she joined the institution in 2018, she worked as art teacher in public elementary school. At her previous school, she was teaching grades 1 to 3.

The second participant was the dean of the Aimier training center, Lisa, and she served as art and music teacher there at the time of the study. Lisa loves to take part in social practice activities, and she enjoys baking.

Jing was the third participant, and she was working as a volunteer art teacher in Stars and Rain institute in Beijing. Prior to that, she has completed the bachelor's degree in Brandeis University in 2017, and she had various volunteer working experiences after graduating. Her major was accounting, and her minor was painting. She enjoys art very much.

Ethical Considerations

To protect art teachers' privacy, the interviews did not include the imagery record of the participants. Also, the author did not disclose the teacher's names and asked for their consent to conduct the interviews.

Data Collection

Data were collected during three separate semi-structured and open-ended individual interviews with the three participants. The author used semi-structured interviews

as they allowed me to ask more open-ended questions and provide a free, comfortable, and dialogue like interview. The questions focused on the strategies art educators working in schools for children with special needs in China use to modify and adapt art instruction for children with autism. Each interview lasted one hour. All the interviews were conducted and recorded online using Zoom and were later transcribed. The first interview with Kiki was conducted online on March 20, 2020. The second interview with Lisa was conducted online on March 21, 2020. The third interview with Jing was conducted online on March 22, 2020.

Data Analysis

After conducting three interviews with art teachers, the author first translated the interviews from Chinese into English and then transcribed them. The constant comparative method was used to analyze data.

Validity and Reliability

Rich, thick description was used in the research to convey the findings. The researcher has checked the transcripts and clarified the bias that she brought to the study.

Summary

In this chapter, the author introduced the purpose and the design of the study. Site selection of this study at two non-governmental organizations based in China was described. Further data collection conducted by interviewing three art teachers through separate semi-structured and open-ended questions was elaborated on. To protect the privacy of the art teachers, their names were not disclosed. After the interview, the comparative method was used in data analysis. Validity and reliability were also proved. The findings of the study are introduced in next chapter.

4. Results of the Study

Introduction

This qualitative study explored strategies of enhancing pedagogical skills and problem-solving skills for art educators who work with autistic children in art classroom. The study investigated how the art educators working in schools for children with special needs in China modify and adapt art instruction for children with autism. The constant comparative method was used to analyze data collected through interviews with three educators. This chapter describes bias and validity of the study, the data analysis process, and presents the result of the study.

Bias and Validity

Rich, thick descriptions were used in the research to convey the findings. The author has checked the transcripts and clarified the bias that the author brought to the study. Researcher bias may be present in my experience of teaching art in general education school instead of special education. The author has never been to any special education training school, and the author is not familiar with the curriculum and management there. Without spending any time in special schools, the author presume the condition of curriculum and management based upon the views from the three participants and my working experience in public elementary school. Bias may also exist in three participants that they were selected based on different organizations teaching art to autistic students. There were two art teachers from Aimier training center in Hunan, and one was a former art teacher in Stars and Rain institute in Beijing. They had different working experience, so the teaching philosophy and curriculum may vary depending on the training they had.

According to Merriam and Tisdell (2016), to ensure my validity of the study, I solicited feedback on my preliminary findings from three participants that the author interviewed. After the process of the “member check”, the author asked the participants to comment on my findings regarding their views and experiences. At last, the author asked a colleague who had experience teaching children with autism in general school to scan the data and assess if the findings are reasonable, which served as a thorough peer examination. Thus, several approaches were used to ensure trustworthiness in my study (pp. 246-249) ^[24].

Data Analysis

Data were collected by separate semi-structured interviews with three art teachers. After conducting three interviews with art teachers, the author analyzed data in Mandarin and then wrote about the findings in English. The author reads the interview transcripts and read through the notes and comments that the author jotted down. Next, to categorize the ideas, the author assigned codes to pieces of data and grouped the comments and notes that shared similar themes such as strategies to engage the autistic learners, modifications, and adaptations, and developing skills through art activities, while focusing on insights that related to my research question. The author comparatively analyzed data within different themes from their strategies of classroom management, teacher training, and parent involvement to lesson scaffolding and activities. Then, the author wrote about what the author have learned from each theme of relevant collection and the phenomenon.

Results of the Study

The study revealed several strategies to enhance art teachers' pedagogical and problem-solving skills for working with autistic students. There are strategies to engage the autistic learners through art works, the methods of teacher training, and parent involvement. Modification and adaptations are crucial when engaging autistic learners and require lesson scaffolding, curriculum adjustments, and suitable art activities for autistic children. Moreover, the art activities that help develop autistic kids' skills are also discussed in this chapter.

Strategies to Engage the Autistic Learners

This theme explored the strategies three participants use to engage students in art activities. All three art teachers thought that identifying the preferred art materials is a good strategy to engage the kids with autism. Kiki (personal communication, March 20, 2020) expressed that having autistic students' attention can be the hardest thing and the only solution is to find out their interests. Kids can be interested in sign language, while others are interested in colorful images. She expanded:

There is a kid in my class, his name is J. At the beginning, J couldn't understand any instruction words, and his parents hired many art tutors to teach him at home. Because J ignored those teachers and doodled himself, they quit in the end. The first day when J came here, I found out J was interested in sign language of hearing-impaired children, and he was mimicking them. So, later, the author tried using sign gesture to give my instruction. In the art class of the first day, we sat closely, and the author set a white paper in front of him and one in front of myself. The author drew a circle on my paper, and then pointed the white paper in front of him. Surprisingly, he also drew a circle. The author gave him a smile and thumbs up. J seemed happy with it. Then the author added eyes, nose, and mouth in the circle. This time, J drew the same thing without my instruction. In the next classes, he accepted this learning style. Even though the scale of what he draws is always large, his artwork has his own characteristics. (Kiki, personal communication, March 20, 2020)

Through the experience of J, Kiki expressed that to get students to participate in art lessons the teacher should use various methods, and it depends on what is the child interested in.

Lisa (personal communication, March 21, 2020) also explained that some kids in her school enjoy watching cartoons and it could be a good way to get them engaged in art making but getting to know and being familiar with autistic children can be a tough process. Lisa suggested

that teachers should get to know autistic kid's favorite snack, toy, or even favorite color as it can be very helpful to motivate a student who is reluctant to art.

Jing (personal communication, March 22, 2020) shared similar thoughts in using autistic kids' interests to engage them in art making. In her former class, different kids enjoyed using different media and art materials, so she used art media to engage her kids. Jing also felt that building the trust between the art teacher and autistic students is the first thing to do.

Three participants discussed the ways to engage the students in art making. They suggest teachers to find out autistic kids' interests and their favorite snacks, toys, and art media to motivate them in art making. Besides, the management of classroom and students' behavior are also conducive to engage them in art making.

Classroom Management

The participants were asked about the classroom management style and to discuss what to do differently when working with autistic children than working in general art room. Kiki stated, it can be way more difficult for autistic kids to pay attention to teacher's presentation. She explained, I still remember the first day I went to Aimier training center, I was astonished to find a boy's hands "tied up" with scarf to a chair, and the teacher told me he would punch himself or other people if not done so. Teaching autistic kids is never easy. My formal teaching experiences in public schools do help me in setting the class rules, but not in solving all kinds of problems. My classroom management is flexible at the beginning because I know too many requirements and rules can really make autistic kids frustrated, and some kids can be offensive. If you don't want kids to hurt anybody, you shouldn't push them too much. (Kiki, personal communication, March 20, 2020)

When asked what she is struggled with in classroom management at the beginning of teaching autistic kids, and how to handle it, Kiki made a long pause, plainly overcome by the thought, then she described that not only at the beginning of teaching autistic kids but everyday art teachers in their training center face unexpected challenges. Some aggressive kids physically harm others when they feel insecure, even though it is not their original intention. Some teachers cry with grievance, and they cannot complain about it to autistic children's parents. So, the first thing art teacher should learn is to stabilize students' mood swings. The only solution is teacher's ambition, and it takes time and patience (Kiki, personal communication, March 20, 2020).

On the contrary, Lisa held a different view that art teachers should treat autistic kids as regular kids. In her

school, every teacher has a personal training room; it's a small room for training and rest. In her class, she set several rules which must be strictly implemented. First, no one can leave the seat without teacher's permission. Even though the window has a guard bar outside, and it is high enough for preventing kids climbing, it still can be dangerous for kids to move freely. Second, kids should be rewarded for good behavior and punished for breaking the rule. It is necessary for them to understand the connection between their behavior and subsequent punishment. Teachers should treat each child equally without any bias and exceptions. When they behave decently, teachers can show their love, but when they misbehave and are annoying, teachers can express negative emotions as well. Third, there is no criticism of ideas, and kids can offer a large number of ideas. Wild and exaggerated ideas are encouraged in art class. Lisa explained, though many inexperienced art teachers thought autistic kids are good at drawing and even have better drawing skills and imagination than non-autistic kids at the beginning, the truth is, most of the autistic kids had no art talents and teachers should encourage their art creation as much as possible (Lisa, personal communication, March 21, 2020).

Lisa has strict classroom management style compared to Kiki's management which is flexible, and she pays close attention to the child's mood. Jing did not comment of her personal experience regarding classroom management since she had less experience working with autistic kids and was not aware of how to conquer struggles that art teachers face. When asked for their thoughts about some changes about their classroom management style in the future, Lisa and Kiki said they don't have anything special to change for now.

Teacher Training

This theme emerged from the discussion of three participants. They expressed that teacher training is needed to assist art teachers in gaining further knowledge about special education. However, because of lacking unified standards, the content and method of special teacher training system are not consistent in China (Kiki, personal communication, March 20, 2020; Lisa, personal communication, March 21, 2020).

Lisa (personal communication, March 21, 2020) is the dean of Aimier training center in Hunan, and she explained how the teachers are trained in her school. There are two branches of school in Changsha and Yueyang in Hunan province, and each school has about sixty students and six teachers. These teachers have worked here for several years and there are weekly seminars and lectures where teachers learn the latest development and teaching

methods for kids with autism. Kiki (personal communication, March 20, 2020) added that art teachers learn a lot from guest speakers every week. However, when asked further about teacher development opportunities, Lisa (personal communication, March 21, 2020) said that they do not have further teacher development opportunities provided for teachers.

Jing (personal communication, March 22, 2020) as a former art teacher in Beijing Stars and Rain institute, explained teacher training there. They have provided guidance to over 300 institutions though professional teacher training. There are two expert teachers at school who have 24 years working experience in applied behavior analysis (ABA). The teacher training that they provide is about eight weeks long. It includes the understanding of autism spectrum disorder, the diagnostic criteria of autism, the theoretical knowledge of applied behavior analysis, and essential problem-solving skills for special educators. There are also online trainings provided for teachers all over different provinces in China (Jing, personal communication, March 22, 2020).

Parent Involvement

Three participants shared their common views on the importance of communicating with parents of autistic kids. Kiki (personal communication, March 20, 2020) contended that having a conversation with autistic kids' parent at least once a week is necessary but never enough. Parents should be involved and participate in their children's education as much as possible. She also described that in their training center, most of the parents are busy at work, so they offer the online classes that can guide their parents to train their kids at home in simple ways. They also offer parents chances to attend the parent-child baking class once a week. During the baking process, parents help kids with mixing butter, sugar, milk, and flour for the cake. After that, children taste the cake with their parents. Unlike other art classes, baking class is suitable for parents to participate because children need help from their parents during the process of one to two hours and that connection is necessary (Kiki, personal communication, March 20, 2020).

Lisa (personal communication, March 21, 2020) contended that not all the art activities are suitable for parents involving and participating. Some parents can easily worry about their kids and get mad when their kids do not follow the instructions. Thus, they only invite parents on special occasions like the baking class, sports meeting, and festival celebration. Jing (personal communication, March 22, 2020) also mentioned that attending their own child's sports games is certainly important. Parents volun-

teer to coach, referee, or to help organize sporting activities in the whole process. All in all, teaching autistic kids should combine efforts of their parents too.

Communicating with their parents is an effective way to get a comprehensive understanding of how to work with students since gaining more information is always necessary for art teachers. Furthermore, parents should spend more time bonding with their kids. Three participants stated that baking class and sports meeting are especially suitable for parents attending in school. They are great opportunities to nurture relationship for both giving support to and receiving support from their parents in baking process or sports meeting.

Modification and Adaptations

As mentioned in the previous theme, students' interests can motivate them in studying art. So it is very important to design suitable art lessons in order to raise students' interests.

There are two key strategies of modifications and adaptations that emerged in the study: engaging autistic learners in art lessons and lesson scaffolding.

Engaging Autistic Learners in Art Lessons

When discussing what kind of art activities are suitable for kids with autism, three participants shared similar thoughts. Lisa (personal communication, March 21, 2020) suggested to modify or make adaptations to the lessons for each kid, because every kid has different interests. Lisa's son is an autistic kid. When her son was young, he enjoyed children's books and remained quiet when he listened to the story. As Lisa read him bedtime stories every night, it soothed and relaxed him. Later, Lisa found out that her son was interested in reading children's book, and then she stimulated his interests in drawing and creating stories. Besides, some kids in her school enjoy watching cartoons. Thus, she thought it was a good way to get them engaged in character design in her art class (Lisa, personal communication, March 21, 2020). Kiki (personal communication, March 20, 2020) added that some art media can be difficult for autistic kids like oil painting and watercolor, so she suggested that teacher should not get them involved in those materials too soon.

Jing (personal communication, March 22, 2020) stated, art teachers should make adaptations for kids within all autistic group classrooms. Watercolor, collage, pastels, color pencil, acrylics, and crayon should be available for kids to choose their favorite media. In this way, students are willing to participate in art lessons. Jing also concluded that teaching autistic kids is all about repeating.

As an art teacher, she can teach a child how to draw a circle and a straight line for weeks and longer. Drawing is not the only thing in every day's training, they also have some gross motor trainings and fine motor trainings. She stated, I remember I had a very special student when I was in there (write under the pseudonym of CC). CC was five years old. Neither he has spoken language nor body language. He always peed on himself, because he had no idea how to express his thought and he was not able to understand anything we said. I have taught CC how to clap his hands for two months, it's about two hundred times repeating each day...but I failed. Two months after I left Stars and Rain institute, one of my colleague Miss Chen called me the other day, and she said CC finally learned how to clap his hands. The author cried very loudly on that day. (Jing, personal communication, March 22, 2020)

From the experience of three participants, they suggest art teachers ensure to set a realistic adaptation level for autistic kids, and that means allowing kids to experience some frustration and surprises when appropriate.

Lesson Scaffolding

When asked how to plan an art lesson for children with autism, Kiki (personal communication, March 20, 2020) described that a successful lesson must follow the rule of "step by step", because kids learned art in a gradual way. Kiki suggested,

The first stage is called doodle stage. Art teacher should encourage students to doodle anything they want in a slightly freer way. Children can even doodle with eyes closed to relax and express themselves. In this stage, art teachers shouldn't tell them too much about how to draw, but observe the symbols and lines in their drawings. This is also a necessary stage to build trust between art teachers and students, so encouraging words and smile are crucial factors. The second stage is requiring students to learn more about color and basic shapes. Art teachers could require the kid to draw a straight line first, if the kid finished it well, then start drawing the shape using different colors. Later, ask the kid to compose something by using those shapes like a sun or clouds from easy to hard. Attention focusing would be the biggest problem at this stage, so do not make the pace too fast. Art teachers should pay attention to the shape that the kid interested in drawing and encourage them to create more. In the third stage, more art materials should be prepared for autistic kids to have fun with. Watercolor can be a great media played with brush or straws. They can also use fingers or palms to create art. Basically, in this stage, we want children with autism to find out the world is colorful and beautiful. They can have more possibilities while developing their imagination.

The fourth stage requires autistic kids to draw their family members and express their characteristics like long hair or short hair, big eyes or small eyes and things like that. To make the task harder, art teachers can ask kids to draw some memories when they are staying with parents or friends. Art teachers should also encourage them to draw their parents with exaggeration to promote their communication later in life. In this stage, we can also have some lessons about drawing houses, with natural environment. This is aimed at helping them connect everything together consciously. (Kiki, personal communication, March 20, 2020)

After Kiki explained lesson plans of the beginning four stages, she said Lisa has more experience in teaching the higher level. So, Lisa further expanded the later stages: The fifth stage demands kids with autism to have more connections with group members in class. Drawing a greeting card or a birthday card is a great choice for them to realize their social presence. They are required to draw flowers, candles, and balloons on the card with few words. Everyone is going to get his or her own card. To conclude, in the fifth stage, kids will also gain self-confidence and self-identification.

In the sixth stage, autistic kids are provided with colorful tissue papers. They can tear them, cut them into all kinds of shapes, and glue them on cardboard. Through experiencing various materials, their interests in new things will be motivated.

In the seventh stage, children create art with music on and they are encouraged to express their feelings and emotions. Children will be suggested to use cool tone to show expression and warm tone to express happiness.

The eighth stage is the last stage. In this stage, art teachers should combine children's characteristics and experience, thus help them with satisfaction. Clay will be used, and children will pay more attention to details. (Lisa, personal communication, March 21, 2020)

When asked Jing about the lesson plan, she explained that Beijing Stars and Rain institute provides one on one training class to their students depending on their abilities. They emphasize the method of customized training instead of teaching in a group of small class (Jing, personal communication, March 22, 2020).

Generally speaking, all these methods and lesson scaffolding show the principle of teaching students in accordance with their aptitude. In regard to teaching art to autistic kids, most kids acquire dynamic interaction with art teachers. Teachers should have a definite objective for each student and check teaching results regularly so as to modify teaching as needed for each student's unique needs.

Developing Skills Through Art Activities

When discussing the art activities to develop autistic kids' skills, three participants shared similar thoughts. Both Kiki and Lisa agreed that students gained appreciation of art from several art activities and gave examples of how to integrate different activities. Kiki noted the importance of finding out what textures of materials will the student be sensitive to. She further stated that if a student is good at drawing birds, then teachers should inspire the student to draw all kinds of birds in different colors or different shapes and so on. Basically, most of autistic kids enjoy drawing shapes and lines, and they are attracted by beautiful and bright colors. Reading children's book with them is also a meaningful art activity. The children's book or illustration book can help them to have more connections to human relations (Kiki, personal communication, March 20, 2020). Lisa noted that there are several art activities suitable for kids with autism. Paper-cut art is their favorite art media at her training school. Kids usually draw something and cut it out from colorful paper or using scissors to cut some basic shapes and glue them on a cardboard. It's suitable for kids with autism because it can develop autistic children's visual recognition skills, eye-hand coordination skills, and problem-solving skills by using scissors and glue stick. What's more, clay and plasticine making is also a great choice for them. Most of them can concentrate in the process of clay making and they prefer working alone without teacher's intervention. However, art teachers should pay attention to children's facial emotions and movements in case they have any difficulties or problems that require help from teachers (Lisa, personal communication, March 21, 2020).

Jing (personal communication, March 22, 2020) also contended that in Stars and Rain institute, they have art trainings for kids of different levels. Distinctive activities are suitable for different level students. Copying a picture on the white paper is the first step, because most of them are not willing to draw anything at the beginning. It could be difficult for low-functioning autistic students to hold a pen and they can spend a whole day practicing how to draw straight lines. Thus, art teachers shouldn't set expectations too high for them. For high-functioning autistic students, they can have more lessons in training them how to use the materials like watercolor, markers, crayons, and so on. She noted that they get different thoughts and ideas through different art activities. Even though autistic children don't usually want to express their thoughts and feelings and most of them have difficulty with verbal expression, art activities can develop their problem-solving skills and stimulate their potential (Jing, personal commu-

nication, March 22, 2020).

Talking about the skill development through art works in conjunction with other activities, and Kiki and Lisa shared broader student schedules used in their training center. Each week, autistic kids have classes like circle time, music games, fine motor trainings, sporting games, social stories reading, activity of daily life training, art classes, one on one instruction, and baking classes. All these activities are designed to keep autistic kids focus and develop their living skills. Lisa further explained,

Fine motor trainings are as important as art trainings to develop their fine motor skills and the coordination requires the cooperation of multiple small muscles. Daily activities are like art of origami is soothing and relieves anxiety for kids with autism. What's more, colorful paper is used to create a menagerie of origami animals: bunnies, puppies, cats, and so on. Paper plane is the easiest item of origami, and kids love it so much. Colorful drawings stimulate baby's sense of sight, hearing and touch, and it can be a great art activity to develop their multiple skills. (Lisa, personal communication, March 21, 2020)

Kiki (personal communication, March 20, 2020) added they also have toys in their school that involve the actions of putting together them or taking apart, which can help develop an autistic child's hand and eye coordination. Games, music videos, and story books are also aimed at developing their fine motor, cognitive, language, and sensory skills, so they have these activities in a typical working day (Kiki, personal communication, March 20, 2020).

Jing (personal communication, March 22, 2020) offered example of the curriculum in Stars and Rain institute: The curriculum provided in Stars and Rain institute is very professional, not only for kids, parents, but also for special educators. She concluded that parent training is about eleven weeks of applied behavior analysis (ABA). It is combined with behavioral intervention with sensory integration strategies. For autistic kids, they offer different classes for different age range. The most popular group is from age three to six. The curriculum involves drawing class, music therapy class, and individual living capacity training (Jing, personal communication, March 22, 2020).

Overall, developing skills for autistic kids through art works in conjunction with other activities which occupy a very important position in special education training schools. Distinctive activities are suitable for autistic students at different levels. Most of the activities develop their verbal expression ability, problem-solving skills, and stimulate their potentials.

Summary

Throughout the data analysis process, strategies to en-

gage the autistic learners, modification and adaptations, and developing autistic children's skills through art activities were discussed. In this chapter, the strategies of classroom management, the method of teacher training, and the means of parent involvement were also discussed. Furthermore, lesson scaffolding, curriculum, and art activities were offered by three study participants. Kiki and Lisa provided art educators curriculum and lesson plans and explained eight stages of suitable art activities for children at different levels. Three art teachers revealed the real lives of children with autism in China, and while they agreed that there are many challenges in teaching autistic kids, they also provided the solutions. Chapter 5 explores the discusses the findings of the study.

5. Discussion and Conclusions

Introduction

This study addressed strategies art teachers use in teaching autistic students in art classroom and proved the ways to modify and adapt art instruction to enhance autistic children's pedagogical skills and problem-solving skills. The study also holds implications for Chinese elementary school art educators working with autistic kids. In this chapter, the connection between the result of study and literature review discussed and the suggestion for further research is provided.

Discussion

Several similarities emerged between the literature and the study's findings. Three participants (Jing, personal communication, March 22, 2020; Kiki, personal communication, March 20, 2020; Lisa, personal communication, March 21, 2020) stated that art educators must modify lessons and make adaptations for children with autism in art room. Similarly, Van, Reichle, and Schopler (2003) noted that individualized schedule should be provided for kids with autism that depends on their personal characteristics, needs and abilities, the curriculum, and learning objectives and schedule should be easy to follow for each child^[32].

According to Kellman (1999), children with autism are strong in visual learning and processing focused on their interests. Art teachers should find out children's interests to engage them in art learning^[16]. Three participants also concluded that art teachers should engage the autistic students by drawing onto their interests (Lisa, personal communication, March 21, 2020; Jing, personal communication, March 22, 2020, Kiki, personal communication, March 20, 2020).

In the study, Lisa and Kiki suggested that the curricu-

lum of teaching art to autistic kids should be scaffolded. Their description of eight stages of teaching kids in different levels support this idea (Kiki, personal communication, March 20, 2020; Lisa, personal communication, March 21, 2020). Similarly, Andrus (2006) also provided the principle that art educators should guide autistic learners by asking questions like “Could you show me...?” or “What will you do next?” to create step by step learning^[3]. Derby (2012) also stated that art teachers should have clear concise directions, reasonable expectations, and art activities to draw autistic children’s interests and address their concerns. These are strategies to overcome the challenges in teaching students with special needs^[8].

Behaviors can also present a challenge when working with autistic children. Kurth and Mastergeorge (2012) contended that it is challenging for art teachers to obtain attention from students with autism in art class^[20]. The challenges were echoed in this study when Kiki (personal communication, March 20, 2020) expressed that having autistic students’ attention can be more difficult than non-autistic children, and the solution is to find out what their interests are to engage them. Sun and Shek (2012) recommended to build a harmonious environment in art classroom by establishing behavior management and class rules.^[30] Similarly, Lisa (personal communication, March 21, 2020) stated that she set several strict rules for autistic kids and noted that they should be rewarded for good behavior and punished for breaking the rule to help them understand appropriate behavior in class.

However, most of the autistic kids have trouble expressing their difficulties or problems, in that way art teachers should pay attention to children’s facial emotions and movements (Lisa, personal communication, March 21, 2020). Lisa (personal communication, March 21, 2020) further described some daily activities (such as art of origami) that can sooth and relieve anxiety for kids with autism. Children with autism can act apathetically because of emotional issues like the feelings of aloneness, anxiety, and fear among them. Art educators should be sensitive to students’ emotional alterations and movements (Andrus, 2006)^[3]. Thus, teachers should pay more attention on autistic children’s emotions regarding their social communication deficits, emotional issues.

Relationship to Practice

The process and the result of the study have brought forward some thoughts, measures, and methods for me to teach students in accordance with their aptitude. To properly address this issue, students with special needs must be taught patiently, while art teachers should be able to read students’ performances and identify the patterns to deter-

mine what students really need. The study has inspired me to reconsider advocating for pragmatic educational objectives and the aptitude teaching principle in teaching children with special needs. As a result of the study, it provided me with strategies. The author can utilize in my classes. Art teachers should pay attention to students’ personality, class culture atmosphere, and set up an appropriate lesson plan. The curriculum and the lesson plan should contain the cultivation of autistic students’ interests and enhancement of students’ practical skills.

In addition, the research and the data have influenced my attention in eliminating social discrimination to children with autism and addressing the topic of equality for them. The study empowered me as an art educator to strengthen my connection with every student. As an outcome of this study, the author will develop a lesson on self-portrait that will include adaptations for the autistic student in my class. This lesson intends to tell students it is acceptable to be different and we should respect each other.

Implications for Further Research

If the author were to replicate this study, I would prepare more interview questions to cover all the information. The author wants to acquire from participants. Preparing a list of accessible questions for the interview would be helpful, but the interview questions should be more precise. Time could be increased for data collection and analysis, and the author would potentially expand the number of participants to gain more thoughts. If the author could study this topic further, I would also want to know the time allocation of a successful art class and the most attractive art activities for autistic kids.

This study implied challenges art teachers face and relevant strategies they can use when teaching autistic students. Through the study, the author hopes more art teachers will become aware that students with special needs are increasingly integrated into the general classrooms and demand more attention from the teachers. Thus, teachers should gain more insights into different strategies used in teaching kids with special needs. Cultivating professional knowledge and developing specific inclusive training of how to support special students’ learning for art teachers is as important as having more in-service teacher trainings and support for effective to an inclusive classroom.

Conclusions

This study examined strategies to enhance art teachers’ pedagogical and problem-solving skills for working with autistic students. To engage autistic students in learning

art, art teachers should identify students' preferred art materials and modify and adapt suitable art instructions for them. For art teachers who have insufficient preservice preparation and experience in inclusive education, they should gain more information and comprehensive understanding the method of working with students with special needs.

Through the process of the research, the author learned about the frustration and confusion in inclusion art rooms and learned about the strategies to cope with them. Beyond helping my practice as an art educator, this study could further assist other educators. Art serves as an important part for children with autism and they require more instruction and guidance during the art class. Art teachers' efforts can help children with autism not only to develop pedagogical skills but also to teach them behavior, problem-solving skills, and social skills.

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