

# The Impact of Arts Integration on the Learning and Social Abilities of Students with Disabilities: An Approach to an Inclusive Classroom

تأثير تضمين الفنون في المنهج الدراسي على القدرات التعليمية و الاجتماعية للطلاب من ذوي الإعاقة: مدخل إلى الدمج في الفصل الدراسي

# by MADIHA SHOUMA

Dissertation submitted in fulfilment of the requirements for the degree of MASTER OF EDUCATION

at

The British University in Dubai

November 2020

#### **DECLARATION**

I warrant that the content of this research is the direct result of my own work and that any use made in it of published or unpublished copyright material falls within the limits permitted by international copyright conventions.

I understand that a copy of my research will be deposited in the University Library for permanent retention.

I hereby agree that the material mentioned above for which I am author and copyright holder may be copied and distributed by The British University in Dubai for the purposes of research, private study or education and that The British University in Dubai may recover from purchasers the costs incurred in such copying and distribution, where appropriate.

I understand that The British University in Dubai may make a digital copy available in the institutional repository.

I understand that I may apply to the University to retain the right to withhold or to restrict access to my thesis for a period which shall not normally exceed four calendar years from the congregation at which the degree is conferred, the length of the period to be specified in the application, together with the precise reasons for making that application.

Signature of the student

#### **COPYRIGHT AND INFORMATION TO USERS**

The author whose copyright is declared on the title page of the work has granted to the British University in Dubai the right to lend his/her research work to users of its library and to make partial or single copies for educational and research use.

The author has also granted permission to the University to keep or make a digital copy for similar use and for the purpose of preservation of the work digitally.

Multiple copying of this work for scholarly purposes may be granted by either the author, the Registrar or the Dean only.

Copying for financial gain shall only be allowed with the author's express permission.

Any use of this work in whole or in part shall respect the moral rights of the author to be acknowledged and to reflect in good faith and without detriment the meaning of the content, and the original authorship.

#### **ABSTRACT**

Arts Integration (AI) is known as an effective teaching method which contributes to students' engagement and learning in the classroom. It is flexible and can be altered or modified to fit an individual student's needs. This study aims to determine how AI can contribute to the academic and social development of students with disabilities in the classroom. Building on existing literature on Arts Integration in education, it asks: What is the impact of AI on the educational and social development of students with disabilities? How does Arts integration in the curriculum contribute to effective inclusion in the classroom? What are teachers' attitudes in the Emirate of Sharjah towards promoting arts integration in their classrooms? How involved and/or aware are caregivers about Art Integration?

Based on a review of the literature on Arts Integration and theories of its impact on students with disabilities, a case study was conducted in one of the schools in the United Arab Emirates, specifically in the Emirate of Sharjah. The case study examined the impact of AI on the academic and social development of 4 elementary students with different disabilities. Moreover, a printed survey was distributed to the teachers and the Special Educational Needs Coordinator (SENCO) from the same school to measure their awareness and attitudes towards AI in their classrooms. In addition, through a collaboration with an educational governmental institute in Sharjah that caters to the needs of young adults with disabilities, an online survey was sent to their database -which includes caregivers of students with disabilities across Sharjah- to measure their knowledge and level of involvement in AI. The results indicate that AI has indeed a positive impact on the academic and social development of students with disabilities. Moreover, the results of the teachers' survey (TWAS) show an incredible level of teachers' awareness and willingness to increase the integration of art in their classrooms. Last but not least, the caregivers

survey also showed how parents strongly encourage AI as they can see its impact on their children's abilities and their attitude in social environments inside the house and inside the school. On these bases, it is recommended that educators consider Arts Integration as a key factor in their classroom as it provides information to a wide range of learners, multiple means for all students to express their understanding, and better engagement for all students in participatory, collaborative and developmental learning experiences. Further research is needed to identify the effectiveness of AI on different ages and different disabilities. Hence, create a clear and unified framework for teachers to practice AI in the inclusive classroom.

**Keywords:** Arts Integration, Students with Disabilities, Academic Skills, Social Skills, Curriculum, Teachers Attitudes

#### SUMMARY IN ARABIC

إن تضمين الفنون في المنهج الدراسي معروف بفاعليته كوسيلة تعليمية تساهم في تعزيز عملية التعلم و التفاعل عند الطلاب داخل الفصل الدراسي. تتميز هذه الطريقة بمرونتها، و سهولة تغييرها او التعديل عليها بما يناسب حاجات الطالب و قدراته. تهدف هذه الدراسة إلى معرفة مدى فاعلية تضمين الفن في المساهمة في التطور الأكاديمي و الاجتماعي لدى الطلاب من ذوي الإعاقة داخل الفصل الدراسي. بناءً على الدراسات السابقة حول (التضمين الفني في التعليم)، يُطرح سؤال: ما هو تأثير (التضمين الفني) على التطور الأكاديمي و الاجتماعي لدى الطلاب من ذوي الإعاقة ؟ كيف يمكن لتضمين الفن في المناهج التعليمية أن يساهم في تحقيق دمج فعال داخل غرف الدراسة؟ ما هو موقف المعلمون في إمارة الشارقة تجاه استخدام (التضمين الفني)؟

بناءً على المصادر و المراجع حول (التضمين الفني) و النظريات المتعلقة بتأثيره على الطلاب من ذوي الإعاقة، تم عمل در اسة ميدانية في إحدى المدر اس في دولة الإمار ات العربية المتحدة، تحديداً إمارة الشارقة. تناولت الدر اسة تأثير (التضمين الفني) على التطور الأكاديمي و الاجتماعي لدى أربعة طلاب من ذوى إعاقات مختلفة. بالإضافة إلى ذلك، تم توزيع استبيانات مطبوعة على المعلمين و منسقة برنامج التعليم الخاص لذوي الإعاقة من نفس المدرسة لقياس مدى وعيهم و استخدامهم و كيفية سلوكهم تجاه (التضمين الفني) داخل صفوف الدر اسة. و أيضاً، من خلال تعاون مع مؤسسة تعليمية حكومية في إمارة الشارقة، و التي تركز على احتياجات الفئة الشابة من ذوي الإعاقة، تم إرسال استبيان عبر الانترنت لقاعدة البيانات الخاصة بهم والتي تتضمن أولياء أمور لطلاب من ذوي الإعاقة في إمارة الشارقة لقياس مدى معرفتهم و درجة مشاركتهم في (التضمين الفني). بالفعل أشارت النتائج على التأثير الإيجابي للتضمين الفني على التطور الاجتماعي و الأكاديمي لدى الطلاب من ذوى الإعاقة. كما أن نتائج استبيان المعلمين أشارت إلى درجة كبيرة من الوعى و الاستعداد للعمل على زيادة مستوى (التضمين الفني) داخل الفصل الدراسي. أخيراً و ليس آخراً، استبيان أولياء الأمور أشار أيضاً إلى تشجيع و دعم الأهالي إلى (التضمين الفني) لما الاحظوه من آثار إيجابية على قدرات و سلوك أطفالهم في البيئات المجتمعية و في المنزل و داخل المدرسة. و على هذا الأساس، يجب على العاملين في المجال التعليمي الأخذ بعين الاعتبار (التضمين الفني) كعامل هام و فعّال داخل صفوف الدراسة إذ أنه يقوم بتوصيل معلومات المنهج الدراسي لفئة كبيرة من المتعلمين، و يوفر وسائل متعددة لكل الطلاب بمختلف اهتمامهم و قدراتهم ليعبروا عن أفكار هم، و أيضاً، يوفر تفاعل أفضل لكل الطلاب عن طريق تجارب تعليمية تعاونية و تطويرية. المزيد من البحث مطلوب لتحديد فعالية (التضمين الفني) على أعمار و إعاقات مختلفة. بالتالي، وضع خطة عمل موحدة و واضحة للمعلمين لممارسة (التضمين الفني) في الغرف الدراسية الخاضعة للدمج.

الكلمات الرئيسية: تضمين الفنون، الطلاب من ذوي الإعاقة، القدرات التعليمية، القدرات الاجتماعية، المنهج الدراسي، سلوك المعلمين.

# **DEDICATION**

This dissertation is dedicated to my mother Rabab whose unyielding love, sacrifice, support, and encouragement have enriched my soul and inspired me to pursue this programme. May your soul rest in peace.

#### **ACKNOWLEDGEMENT**

I would like to express my appreciation to my friends for believing in me and for their emotional and mental support in completing my dissertation. Their unconditional love and willingness to help in every way has been invaluable to me during my writing process. I am blessed to have them in my life and I hope that our friendship continues. I would also like to extend my gratitude to the facilities in the Emirate of Sharjah for providing me with all the data required for my research topic. Last but not least, I would like to extend my deepest gratitude and appreciation to Dr. Eman Gaad who has helped me with her valuable suggestions, enormous understanding, and incredible guidance in all phases of the completion of this project. Your extreme patience, support, and prompt replies (even during your days off) are the reason in making this happen. You are inspirational. Thank y

# TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION	
1.1 Statement of the Problem	1
1.2 Purpose and Objectives	3
1.3 Research Questions	5
1.4 Rationale for the Study	5
1.5 Structure of the Dissertation	8
CHAPTER 2: LITERATURE REVIEW	
2.1 What is Arts Integration?	9
2.2 Historical Overview	10
2.3 Benefits of Arts Integration for Students with Disabilities	12
2.4 Arts Integration: Cognitive, Academic and Social Development	13
2.5 Teachers Attitudes Towards the Integration of Arts in the Curriculum	14
2.6 Situating the Current Study	15
CHAPTER 3: METHODOLOGY	
3.1 Research Questions	17
3.2 Research Approach and Instruments	18
3.3 Data Collection and Analysis	19
3.4 Procedure	25
3.5 Ethical Considerations	28
3.6 Trustworthiness and Reliability of Data	29
3.0 Trustworthness and Renability of Data	29
CHAPTER 4: FINDINGS	
4.1 Overview	30
4.1 Overview 4.2 Case Study Analysis	30
4.2 Case Study Analysis  4.3 Interview with the Head of Inclusion	36
4.4 TWAS Analysis	38
4.4 1 w As Analysis 4.5 Caregivers' Survey Analysis	43
4.5 Caregivers Survey Analysis	43
CHAPTER 5: DISCUSSION	
5.1 Overview	44
5.2 Summary of the Study	44
5.3 Key Findings	45
5.4 Educators and Caregivers Attitudes Towards AI	47
5.5 Limitation	48
5.6 Future Recommendations	49
REFERENCES	52
Appendixes	32
Appendix A	55
Appendix B	57
Appendix C	58
Appendix D	59
Appendix B Appendix E	60
Appendix F	61
Appendix I	67 68
Appendix J	00
	1

# LIST OF TABLES

Table	Page	
Table 1: Students Demographics	26	
Table 2: Student A before and after AI	31	
Table 3: Student B before and after AI	32	
Table 4: Student C before and after AI	34	
Table 5: Student D before and after AI	35	
Table 6: Case Study: Teachers' Notes	35-36	
Table 7: TWAS Teachers' Demographics	39	
Table 8: Rubric Score Before and After AI	46	

# LIST OF ABBREVIATIONS

AI: Arts Integration

SWD: Students with disabilities

UDL: Universal Design for Learning

TWAS: Teaching with Arts Survey

#### **CHAPTER 1: INTRODUCTION**

#### 1.1 Statement of the Problem

Linking the arts with learning across the curriculum in educational settings has a long tradition (Loughlin and Anderson, 2015). However, with the focus on traditional teaching methods in schools, Arts Integration remains unpopular. Similar to the Universal Design for Learning (UDL), AI's goal is to provide an equal opportunity for all students from different ages and abilities to learn. It also aims to provide multiple means of representation, action, expression, and engagement. Originally, the impetus for UDL has been the belief that many students -including students with disabilities- access to learning has been unequal. Many researchers in the field of education believe that this unequal access has resulted from a reliance on teaching strategies that use traditional forms of instruction such as lectures and learning from textbooks, which can be challenging for students with disabilities (Silverstein, 2020).

With the growing diversity of students in the classroom, and with the push to encourage inclusion in mainstream schools, educators have been seeking effective ways to make teaching and learning more accessible to the students. AI is promoted as one of the modern effective pedagogical strategies that adapt to the needs of the 21<sup>st</sup> century inclusive classroom. Studies show that AI improves students' learning outcomes, and has positive influence on their civic and community participation (). It is also a productive way to improve the academic and social abilities for SWD (). Yet, arts are often seen as additional, rather than integral, parts of the academic curriculum in the schools in UAE. Moreover, there is little data available about AI and its impact in the gulf region, which limits policy makers and educators to have data regarding AI status in the UAE, and build on it.

As a former elementary classroom teacher, AI was always a part of the class in order to accomplish an advanced level of understanding and engagement, or to use it for enjoyment and fun. Both ways resulted in better learning, showing a direct link between Arts Integration Pedagogy and the students' academic and social accomplishment in various subjects. However, due to the researcher's interest in art, it was somewhat easy to plan an arts integrated lesson. On the other hand, not all teachers are artsy, consequently, it would be challenging for them to plan and provide such effective strategy. Moreover, Arts Integration in the classroom is not compulsory, not part of the curriculum, and is not addressed enough. Hence, it would also be difficult to have a positive attitude towards a teaching method that they are not interested in or have never tried before. Therefore, with the absence of a clear and unified AI framework for every school level, and a clear explanation of AI techniques that adapt to different types and levels of disabilities, educators would not know how to invest in AI. Similarly, with no trainings for teachers to enable them with a clear concept mapping of AI, how to integrate it in their classrooms, use it to set goals, and develop a higher understanding of the students' perceptions and needs, teachers will not have enough knowledge to practice it in classrooms.

Schools, teachers, and parents equally play an important role in education. Caregivers should be involved in any decision making related to their child's education. Afterall, to get the best outcome of the student, there should be a clear and continuous collaboration between the classroom teacher and the caregiver. The involvement of caregivers has such high importance to the researcher because she believes that they have a crucial role in determining the degree of the development of their child's abilities and achieving their academic and social goals. According to Kandel and Merrick (2007), when caregivers are told that their child has a disability, they go through different stages such as anger, embarrassment, concern, anxiety, denial, confusion,

rejection, shame and shock. These reactions can result in tension in the household which eventually affect the child who has the disability, and lead to a decline in his/her abilities and mental/emotional state. One might ask, what does arts integration has to do with parental reaction to disability? Arts Integration in the curriculum has the ability to help SWD reach their academic and social goals. Its positive impact on so many aspects of the child's life will be mentioned in this research. Therefore, AI could act as a medium to calm things down at home, and pave the way to the parents to reach the most important stage which is acceptance. The findings of this research will contribute to explore the influence of AI on the students academically and socially. It will also display teachers and caregivers input on the topic.

#### 1.2 Purpose and Objectives

The UAE is striving towards achieving the academic and social inclusion of students with disability. According to the UAE Federal Law No. 29/2006 on the Rights of Disabled People, and the resulting 'School for All' initiative, supports the gradual transition towards the inclusion of students with disabilities into mainstream classrooms. It calls for equal chances in all educational institutions (Alborno and Gaad, 2014, p.233). As an attempt to achieve inclusion, Arif and Gaad (2008) explain that schools in the UAE are using what is referred to as a 'paracurriculum' for those with disabilities, which is based on deleting challenging lessons and studying less material than their non-disabled peers. Moreover, it was also found that there is a 'misalignment in the education system' with respect to curriculum development, curriculum delivery and curriculum assessment, concluding that there is a need for developing new curricula to support the effective inclusion of disabled students in mainstream schools.

With the rise of the 'School for All' initiative, it is important to find teaching methods that suit all kinds of learners. One of the most effective pedagogies is AI, which caters for all types of learners: auditory, visual, verbal and kinesthetics. The main purpose of this research is to shed the light on the impact of AI on SWD, and how it is able to decrease the above-mentioned challenges. If Art is integrated in the curriculum, it would have an impact on SWD academically, cognitively, and socially, which would lead to better inclusion, and less deleting of lessons. Instead of deleting and drastically decreasing knowledge to SWD, educators can use ways and methods to adapt to the students' learning type and ability.

Moreover, this research measures the awareness, the level of practice, and the attitudes of educators and caregivers towards the integration of Arts in the curriculum with SWD.

Research on the impact of AI and attitudes towards it is minimal if not scarce. The importance of AI on successful inclusion has been well established internationally among researchers in the educational field, however, not much was found in the Middle East. This gap in research and the local schools aim of being inclusive by effectively including SWD in mainstream classrooms, create an urgent need to understand AI and how educators can invest in it to reach an inclusive classroom. This research paper is a result of the lack of knowledge over AI and teachers attitudes towards AI pedagogy in Sharjah schools.

This study sets out to measure different components regarding Arts Integration; its impact, teachers' attitudes, and parents' perception. The results of this study can be used to incorporate Arts Integration in school curriculums and pave the way for further research in this field. The study also aims to guide policy makers to create a guideline for educators to implement Arts Integration in their classrooms with clear instructions, goals, and plans.

#### 1.3 Research Questions

This study is the first of its kind in the UAE and it aims to answer four main questions which are:

- 1. What is the impact of AI on the academic, cognitive, and social development of students with disabilities, and how all factors function codependently to help SWD reach their goals?
- 2. How does AI in the curriculum contribute to effective inclusion in the classroom?
- 3. What are teachers' attitudes in the Emirate of Sharjah towards promoting arts integration in their classrooms?
- 4. How involved and/or aware are caregivers about Arts Integration?

#### 1.4 Rationale for the Study

Today, special education is a diverse field that encompasses multidisciplinary perspectives on development and learning from psychology, linguistics, sociology, medicine, and education. Special education perspectives are informed by developmental linguistics and psychology as well as by practical work with students who have diverse learning needs. Hence, conducting this research has a great significance because it is an approach to add to the current progress in the Special Education field through presenting an effective method -AI- which will help in achieving better inclusion.

Moreover, due to the nature of her work at Sharjah Art Foundation, the researcher was exposed to many individuals with disabilities who practice various art forms, and has personally witnessed how art has an impact on developing their cognitive and social abilities.

There are many participants whom can be mentioned, for example, a deaf student who is passionate about theatre and designing t-shirts. This student started a business, in which he creates his own design on t-shirts, translating names to sign language. On the side, this student joined a group called Sharjah mime, in which he performs in the theatre with his colleagues. Another example is a student with visual disability, who continuously attends sculpture workshops, saying how it enriches her senses and helps her expand her social circle by being connected to individuals who are interested in arts. The last example is an individual with severe mental disability who attends painting class in one of the art institutes in Sharjah. While talking to the mother, she explains how the day of her daughter is completely different when she attends the art workshop, her attitude completely changes at home and she is more relaxed and happier. Therefore, the researched topic is of great importance for the researcher because of her job as an educator in an Art Foundation, and also because of the many encounters with SWD who are passionate about Art. One of the projects done by the researcher is a collaboration with the Visually Impaired department from the Ministry of Education. On that day, the researcher was explaining the importance of art in developing the skills and abilities of students with visual impairment, and how art can be used as a teaching method for them. One of the coordinators from the ministry of education had an interaction in which he stated that their department hired an artist from Mexico to come to the UAE to give an Art workshop for students with visual impairment. The purpose of this art workshop was to create the map of Sharjah using different textures and objects so that the students could feel the bridges, towers, roads, buildings, and other geographical features. The coordinator said that it was a great revelation for the students as it enriched their sense of special knowledge.

For each workshop in the art foundation, different students attend, and the effect of one workshop is communicated by the parents, who witness a great improvement on the students' behaviour and communication after attending. However, the researcher believes it is crucial to measure this on a bigger scale and to explore the effect of Arts Integration in the context of a classroom with the same students and measure the impact of AI on SWD. Teaching SWD through the arts can present difficult concepts visually, auditory, and kinaesthetically, making them easier to understand. AI pedagogy helps children with the development of motor skills, language skills, communication skills, decision-making, risk-taking, and inventiveness. Students engage in creative process which connects an art form and another subject and meets evolving objectives in both.

The strive to an inclusive classroom in the UAE is an ongoing goal. However, teachers face many challenges in their attempts in achieving this goal. According to Gaad and Khan (2007), teachers do not fully support the philosophy regarding inclusion of SWD into mainstream education classroom without training and resources. They also feel that SWD lack skills needed to master the mainstream classroom course and content. The significance of this research is that it introduces a teaching method that could contribute to an effective inclusion, in which teachers invest in AI to educate students with all abilities, and get the intended outcome. This research will also be an eye opener to the teachers and educators, and will help them integrate arts in the classroom routines for SWD.

Just like reading about a new remedy, this paper will act as an advocate for change and inclusivity using art as a teaching method. The research will create new challenges to educators, through motivating them to experiment in AI in their classrooms with SWD. After all, experimenting will help educators understand the psychology behind AI and its impact on their

students. Moreover, by enforcing AI and making it a part of the educational policy and strategy, it will also contribute to change the mindset of the Emirati society regarding the issues of disability, from a charity-based to a right-based approach (Gaad, 2011).

#### 1.5 Structure of the Dissertation

This research paper is arranged in 5 chapters. The first chapter contains of the introduction which displays the statement of the problem, the purpose of the research, the research questions, the rationale for the study and the structure of the dissertation. The second chapter covers the literature review and the previous studies that were published and studied in the field of Arts integration. The literature review is divided into sections that shed the light on various theories studied and conceptual analysis. It also defines Art Integration and how it works, its affect cognitively, academically and socially on SWD, and how it is practiced and perceived by educators around the world. The third chapter explains the methodology used in this research. It highlights the main research questions and the plan to answer them. This section also discusses the data collection process, the analysis, and the ethical considerations. Chapter 4 displays the findings and results of the research tools such as the survey results, questionnaires, and interviews. The fifth and the last chapter ends the research with a discussion of the study, its key findings, limitations, and future recommendations.

#### **CHAPTER 2: LITERATURE REVIEW**

In this chapter, the researcher addresses the definitions, historical overview, and current research findings regarding the impact of Arts Integration cognitively, academically, and socially. It also includes teachers' attitudes and perceptions towards AI, and the important role of caregivers in supporting the use of AI in and outside the school. The chapter ends with situating the study to the location of the research which is the Emirate of Sharjah in the United Arab Emirates.

#### 2.1 Arts Integration Definition

What does Arts Integration in the curriculum mean? And how different is it from traditional teaching? Arts Integration can also be referred to as 'Teaching through the Arts'. Many resources use terms like 'arts infusion' and 'arts inclusion', among others. Other resources use the phrase 'Teaching In and Through the Arts' which is a two-way learning strategy, through and within the Arts. For this paper, we are going to focus on the term 'Arts Integration', as in integrating the arts as a teaching method in the curriculum. Before starting with the definitions, it is important to clarify that Arts Integration does not refer to the Arts subject at school. It is also not a replacement for it.

Arts Integration is defined differently by researchers in the educational field. (Anderson, 2015). define arts integration as the linking of an arts area (e.g. drama, music, dance, visual art) with a content area (e.g. language arts, mathematics) for the purpose of reaching a deeper level of engagement, learning, and reflection than would be possible without inclusion of the art form. The authors also explain that all perspectives on arts integration and special education share the belief that teaching students academic content using the arts is linked to learning-cognitively, linguistically, motivationally, affectively, or socially-and harnessing those linkages enhances

both teaching and learning. Similarly, the Kennedy's Center defines arts integration as an "approach to teaching in which students construct and demonstrate understanding through an art form [e.g. drama]. Students engage in a creative process which connects an art form and another subject area and meets evolving objectives in both" (Silverstein & Layne, 2010, p. 1).

#### 2.2 Historical Overview

Arts Integration was highly mentioned in previous literature; however, it was not referred to as 'Arts Integration'. According to (Horowitz, 2017), teaching a content area through the arts was first mentioned in 1895 by Dr. Shuttleworth who was a specialist in psychological medicine, with a special interest in "differentiating subnormal children and the mentally defective, from the insane..." which now are offensive terms, "... he secured much separate legislation for them and founded "special" schools for the feebleminded" (The King's Candlesticks, 2020). In his book, Shuttleworth displayed many practical methods for engaging and developing the intellectual, emotional, and social skills of students with disabilities, and the most salient would be the arts. He puts a great concentration on music as a teaching method, explaining that hearing is sometimes apparently deficient when the real deficiency is that of attention. He also states that as children learn to "respond remarkably to congenial sounds.... music is sometimes the steppingstone to speech" (Shuttleworth, 1895 as cited in Horowitz, 2017). He goes on to recommend artistic crafts, such as paper-weaving, macrame, woodworking, and the use of other artistic tools for the development of what we now call fine motor skills and to achieve improvement in intelligence and artistic expression (Horowitz, 2017). Hence, Dr. Shuttleworth was one of the first advocates for AI, claiming that arts have instrumental outcomes in supporting the engagement, problem solving and literacy skills of students with disabilities.

The belief that arts had a unique capacity to improve student's learning abilities continued through the early 20<sup>th</sup> century. Solomon (1980) states that music can be used to develop speech as it is "an integral part of the pioneering attempts to educate and train handicapped children" (p.241), and is helpful for enhancing verbal and expressive skills. He also states that historians have traditionally ignored the rich history of arts in special education, with it representing 91% of early special education classes, more so than subjects like history and spelling. Similarly, Derby (2012) displayed a pattern of instructional practice in visual art education that existed in the 1930s. It is also mentioned that the influential Victor Lowenfeld used creative approaches to therapy and according to Derby "left indelible impressions that art can remediate, rehabilitate, and socialize disabled children" (Horowitz, 2017).

The benefits of arts integration became increasingly acknowledged; however, its parameters have historically been a point of debate, with differential terminology, definitions, and implementation being used over the past two decades (Bresler, 2001). Dimensions of arts integration and special education (Loughlin & Anderson, 2015), such as *who* uses arts integration (e.g. teaching artists, arts teachers, classroom teachers), *what* is being integrated (e.g. content standards, thinking processes, individualized outcomes, fundamental concepts), *when* arts integration occurs (e.g. within the general education setting, within a therapeutic/individualized setting, after school), *where* arts integration takes place (e.g. in special education classrooms, therapeutic settings, general education settings), *how* arts integration instruction is developed (e.g. by co-teachers, artists-in-residence, single teachers), and *why* one does arts integration in education, remain variable across the literature base of both fields.

#### 2.3 Benefits of Arts Integration on Elementary-Aged Students with Disabilities

Special education research for elementary-aged students relies heavily on interdisciplinary theoretical frameworks to design and test interventions aimed at addressing individual learning outcomes; thus, the field shares connections and common goals with arts integration research. The individuals with Disabilities Education Act (IDEA) of 2004 defines learning disabilities as: "disorder in one or more of the basic psychological processes involved in understanding or in language, spoken or written, which disorder may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations" (Individuals with Disabilities Education Act IDEA, 2020). Moreover, the study of Special Education or Education for People with Disabilities has started to become an empirically based field of study in the UAE since its education policy and practice have been supported by the UAE Federal law. Studies have shown that students with learning disability have deficits in academic, social and emotional areas. In addition, students with learning disabilities are more likely to experience psychosocial issues than their regular peers (Elksnin, 2004).

Generally, practicing art has been widely associated with its therapeutic characteristics. 'Critical Links' is a major study published in the Arts Education Partnership website, that explains the impact of each art form such as dance, music, visual arts, and drama. The Critical Links studies of large-scale arts integration in school curricula has shown that arts integration in the curriculum causes higher levels of achievement, motivation and engagement in arts-rich school settings (Deasy, 2002). Moreover, studies also display cognitive and effective benefits of engagement in the arts especially for students with disabilities (Deasy, 2002). The American Educational Research Association noted that the arts contribute to SWD as the arts increase their involvement

and as a result, gain self-confidence, increase positive interaction with classmates, and enhance teacher perception of these students. Moreover, AI boosts academic achievement for SWD. The book *Arts Integration and Special Education* aims to explain how and why AI contexts influence learning outcomes in students with language- and sensory-based processing disorders in inclusive classroom settings. Moreover, the book outlines the linguistic-cognitive theoretical contributions to the study of Arts Integration's influence on language and literacy outcomes in the students with learning and sensory processing disabilities, as well as students with social emotional difficulties (Anderson, 2015). The Author managed to gather many case studies done on the Impact of Arts Integration in a table (Appendix A). The table shows the art form used and its outcomes on the students. Students' populations are also mentioned, explaining their disabilities and learning difficulties.

#### 2.4 Arts Integration: Cognitive, Academic and Social Development

In Loughlin and Anderson's (2015) article reflecting on the historical progress of arts integration, they compare the use of arts integration with students in general education and then with those in special education. They cite research that supports the idea that the arts are an important component in students' cognitive, social and emotional development who have moderate to severe disabilities and the arts provide them with a way to discover their personal interests and talents. Arts integration shatters myths of special education students and their capacity to participate in the arts and self-expression (Cruz, 2009). Acquiring those skills would help students with disability to develop their social abilities, which will lead to clearer communication. The term 'cognitive processes' is defined through research as metacognition, expression, construction and connection of content knowledge and meaning, memory, learning, and intellectual processing (Deasy, 2002). Research summarized in Critical Links identifies a

range of cognitive capacities engaged in and nurtured by learning in the arts, including focused perception, elaboration, problem solving, and elements of creative thinking including fluency, originality, and abstractness of thought (Deasy, 2002). The arts contribute to student achievement in many ways—student engagement, academic motivation, and social interaction skills (Cattrell, 1998). Teachers who effectively integrate the arts enjoy an increased display of student cognitive skills, participation in class, and attendance. Social-cognitive literature outlines a similar framework, in which arts integration serves as a facilitating mechanism for learning social communication. Utilizing this theory of action, social-cognition research has demonstrated that theater and dramatic arts integration interventions increase students' social cognition and emotional engagement (Corbett et al., 2014).

#### 2.5 Teachers Attitudes Towards the Integration of Arts in the Curriculum

The integration of the arts provides an enriched learning and teaching environment where teachers become facilitators of meaningful and engaging activities and lessons that increase student achievement. Students and teachers who possess a strong arts foundation can build creativity, concentration, problem solving, self-efficacy, coordination, and self-discipline (Jensen, 1998). Oreck's (2001) study of teachers' attitudes found that although teachers believe that the arts are important in education, their practice (use) was limited by a lack of professional development and high-stakes accountability. In Eisner (2002) it is argued that too little instruction in the arts is present in schools. According to Eisner's (2002) research, the arts allow learners to imagine virtual worlds and develop empathy.

Teachers training plays an important role when it comes to AI. When educators are trained effectively, the possibilities for students are endless. Paraprofessionals either open or close the

gate that provides access to integrating arts in the curriculum. When there is appropriate communication with paraprofessionals, then creative expression and social inclusion are possible and full engagement in the art-making and learning experience is possible (Causton-Theoharis, 2008). Adding emphasis on the teachers' attitudes and important role, Appel (2006) states that quality arts integration requires careful planning and when implemented effectively can cultivate the cognitive and behavioral skills necessary for student success. Collaboration and planning are key to a high-quality arts integration program which includes collaboration with parents, community artists and other teachers (Robinson, 2013).

#### 2.7 Situating the Current Study

It is important to note that under the National Policy for Empowering People with Disability, people with disabilities are referred to as 'people of determination' to recognize their achievements in different fields (The Official Portal of the UAE Government, 2020). However, since the research is situated in the Emirate of Sharjah, and since it targets students, the legal term that is used in this research is (Students with Disabilities).

The 1990s marked a time of intense artistic and cultural growth in the UAE, and specifically in Sharjah. In 1993, The first Sharjah Biennial was launched, creating a buzz in the UAE's art scene. Many museums, art foundations and centres were established, and the focus on art increased day by day. A decade ago, an article in the National was published stating a decision by the Ministry of Education to increase music and arts instruction in schools (Seaman, 2010). Moreover, another local article was published in 2017 explaining why art education is crucial for the UAE's development, mentions the educational shift from STEM to STEAM, adding the letter

A to show that integrating the Arts is as equally fundamental to teaching science, technology, engineering, and Mathematics (Al Dhaheri, 2017).

#### **CHAPTER 3: METHODOLOGY**

#### 3.1 Research Questions

This research combines qualitative and quantitative methods of data collection. It involves comparing the performance of four SWD in primary level, before and after including Arts Integration in the classroom. The students will be evaluated after each method and the evaluation will have the same criteria to ensure a reliable comparison. Both results will be compared to see if there is any difference in the students' behaviour and understanding before and after AI. The main aim of the case study in a school is to explore the effect of AI on students' performance and engagement in the class. Moreover, questionnaires and surveys are sent to educators and parents, to measure their awareness, attitudes, and level of practice towards AI. For this explanatory study, four main questions are targeted to be researched:

- 1. What is the impact of AI on the academic, cognitive, and social development of students with disabilities, and how all factors function codependently to help SWD reach their goals?
- 2. How does AI in the curriculum contribute to effective inclusion in the classroom?
- 3. What are teachers' attitudes in the Emirate of Sharjah towards promoting arts integration in their classrooms?
- 4. How involved and/or aware are caregivers about Arts Integration?

The main purpose of the research is to measure the impact of AI on the educational and social development of SWD. An addition objective is to establish how variables of social and academic development are linked to achieve an effective inclusion in the classroom. The research also aims to shed the light on teachers' awareness, level of practice, and attitude towards the

integration of Arts in the curriculum for SWD. Both case studies and teachers' questionnaires were carried out in an inclusive private school in Sharjah. Consent was sent to the school director as well as the cooperation of the Head of Inclusion and her team of special education teachers (Appendix B). The inclusive school was founded in 2013 and has been accepting students with disabilities. The school is one the most popular schools in Sharjah and has many branches.

Therefore, it can be considered as a representative of the Sharjah population. The research also aims to involve the caregiver's point of view. It measures how aware are caregivers of the impact of arts on their child's development. A survey was sent out to parents through a governmental entity in Sharjah that caters for the needs of children and young adults with disabilities. Consent was obtained from the research coordinator and the survey was sent to their database.

#### 3.2 Research Approach and Instruments

In this research, the mixed method approach is used to provide a comprehensive, three-dimensional overview which includes the student, the educator, and the caregiver. The results will pave the way to answer the research questions. It will also widen the scope and ensure the variability, usability and reliability of the results. The research methods consisted of four case studies, TWAS questionnaires, and surveys for caregivers. The below sections will explain each method.

#### Case Studies:

Four students with disabilities from the primary level were selected by the Head of Inclusion to measure the impact of AI on their academic performance, engagement, behaviour, and presentation skills. students were assessed based on the school's regular rubric. Both evaluations were compared to see if there is any difference in the students' performance. After comparing the results, the students were asked to display/explain the learnt concept to their teacher, in order to assess the impact of Arts Integration on the understanding of the topic and the social abilities including confidence, presentation and communication skills.

*Teaching with the Arts Survey (TWAS)* 

In this research, the Teaching with the Arts Survey (TWAS) questionnaire is used with permission of the author (Appendix C). Created by Doctor Barry Oreck, the TWAS questionnaire is designed to gather data on teacher attitudes, self-efficacy, and personal characteristics concerning their use of the four major art forms: -dance, music, theatre, and visual arts- in their teaching practice (Oreck, 2001). The TWAS employed a five-point Likert-type scale with 31 questions. (23 items) related to attitudes towards the arts and (8 items) related to the frequency of use of the arts in teaching. The 23 attitude items encompassed three general constructs that are important contributors to the implementation of AI. These constructs include:

- 1. Importance of using the arts
- 2. Self-efficacy (confidence in facilitating AI)
- 3. Support (from supervisors and the institution).

The TWAS is used to answer the following research question: What are teachers attitudes towards the importance of using the arts with content area instruction? The sub questions that arise from the questionnaire are:

Do teachers believe that AI play an important role in content area instruction? Items (1-8)

What are teachers' attitudes towards self-efficacy in using the arts? Items (17, 19, 21, 24, 26, 30)

What are teachers' attitudes about the support for using the arts with content area instruction?

Items (22, 2, 29).

#### Head of Inclusion Interview:

Data about the status of Arts Integration were not found. Therefore, the researcher decided to briefly interview the Head of Inclusion from the same school as the case studies and the TWAS surveys, to get a general idea about AI movement. The interview questions started with a brief discussion about Arts Integration. The interview questions were divided into 4 parts. The first part was about the impact of AI academically. The second part asked about AI's impact Socially. Part 3 asked about attitudes towards AI and the last part was questions about AI guidelines. The interview started with explaining Arts Integration. Answers will be discussed in the following sections.

The Interview questions are:

- 1- In your opinion, what is the general status of Arts Integration in Sharjah classrooms?
- 2- Does your school integrate Art in the classrooms? which grades?

#### **PART 1: Impact of Arts integration Academically**

1- What is the most challenging topic/concept to deliver to the students with disability?

- 2- Why is it challenging?
- 3- Do you believe that Arts Integration would contribute to the process of learning and delivering this concept?
- 4- Can you provide an example in which a Special Needs teacher previously used art with the students?
- 5- What was the outcome?
- 6- Do you believe that Arts Integration supports Students with disabilities in achieving their Academic goals?

#### **PART 2: Impact of Arts Integration Socially**

- 1- Are there students who developed their social skills through including art in the classroom?
- 2- Does Arts Integration work better one on one or in a group session/class?
- 3- In an inclusive classroom, does Arts integration benefit the students with disabilities only? Or does it also benefit their peers? How?
- 4- Does Arts Integration contribute to achieving inclusion in the classroom? How?
- 5- Do you believe that Arts Integration supports Students with disabilities to achieve their Social goals?

#### **PART 3: Attitudes towards Arts Integration**

- 1- Do any of the Classroom teachers use Arts Integration to deliver a certain concept to the student? Which form of art?
- 2- Is the goal usually achieved through art?

- 3- Did any of the teachers or the students refuse to teach/learn through arts integration in their classroom?
- 4- How do students react during arts integration in a classroom?
- 5- Does gender play a role in accepting arts integration?
- 6- What are the qualifications teachers need to have, in order to ensure the best practice of arts integration in their classrooms?

#### **PART 4: Arts Integration Guideline**

Many Countries have an Art Integrated Learning Guideline. The following questions will explore your points of view regarding creating an Arts Integration guideline in UAE/Sharjah.

- 1- In your views, should Arts Integration be used more as a teaching tool in Sharjah classrooms?
- 2- What are the needs of Students with Disabilities when it comes to Arts Integration? In other word, what are the modifications on the material/space/method of explanation that should be taken into consideration to accommodate the students while integrating art in the classroom?
- 3- What factors affect the success of arts integration in the classroom?
- 4- If there is an Arts Integration Guideline, what are the most important considerations, tips, and instructions that should be included in it?
- 5- What are the points that can be included in the Arts Integration Guideline to ensure the presence of the Arab Emirati culture?

#### END OF QUESTIONNAIRE

#### Survey for Caregivers:

The researcher is a firm believes of the crucial role of caregivers, especially that they know their children best. To evaluate caregivers' opinions, actions, awareness, and attitudes towards AI, a survey was created for the parents to answer. To get a population of caregivers of children with disability, the researcher collaborated with a governmental entity in the Emirate of Sharjah to send out the surveys to their database. A letter of consent was sent to the entity and from their side, they sent what they call: the research contract (Appendix J). They also required an Arabic translation to the survey since most of their population are Arabic native speakers. The entity sent the survey out to their database.

The survey started by saying that it is directed to caregivers of students with disabilities. The questions varied from multiple choice: yes/no, and open-ended questions:

- 1. Please specify the age, gender, and disability of your child
- 2. Have you ever registered your child for art classes/workshops? Yes/no
- 3. What is the form of art your child enjoys the most?
- 4. Is there a noticeable change in your child after joining art classes?
- Did you notice an improvement in your child's academic performance/grades after joining art classes? Yes/No
- 6. Did the school teachers notice any improvement in your child's academic performance/grades after joining art classes? Yes/No
- 7. Did the school teachers notice any improvement in the child's behaviour with his/her peers after joining art classes? Yes/No
- 8. When you are following up with your child at home after school, do you use a form of art such as (dance, singing... etc.) to explain a concept? Yes/No

- 9. Please elaborate on Question 8
- 10. Would you encourage educators to integrate art in the classroom? Yes/No
- 11. Do you believe that integrating arts in the classroom had an impact on the development of your child? Yes/No
- 12. Please Justify.

#### 3.3 Data Collection and Analysis

The study used the case study strategy, since such an approach allows for the investigation of real-life events in the school's daily programme, with respect to classroom activities, teachers' teaching styles, placements and evaluation (Stake, 1995). The researcher created a rubric to evaluate the impact of AI on four areas related to the students' performance at the school, which are: academic, engagement, behavioral, and presentation skills. The goal of the rubric was to show that with an implementation of AI in the classroom, students would improve academically, socially, and behaviorally. The evaluation also included an open-ended question that asks about observational notes by the classroom teacher to allow for more details and explanation. The open-ended question helped with explaining students' enthusiasm for participation and any other relevant details that showed the effectiveness of the AI activity. The goal from this rubric was to measure if there was an increase in the students' enthusiasm and interest in art and if they are more comfortable in using art as self-expression instead of copying directly from a model (Anderson, 2015).

#### 3.4 Procedure

#### Case Study:

The researcher communicated with the Head of Inclusion in the school via email to explain the research and the aim of the case study. The school welcomed the idea and accepted the collaboration. The researcher met with the Head of Inclusion and the special education teachers in the school and explained the research process. Regarding the case study, the Head of Inclusion chose 4 students from the primary level who has different types and degrees of Learning disabilities for the researcher to observe their academic and social performance, for research purposes. Consent form was sent to the school (Appendix B). The consent form guarantees that no private information about the students (name, grade section... etc.) will be revealed. It will also ensure that the students are not in harm in any way. After receiving the consent form, the researcher visited the school for the second time to communicate with the teachers of the chosen students to explain the procedure. The researcher explained the meaning of Arts Integration and gave examples to teachers. As primary educators, the teachers were familiar with the method and did not have any difficulties in understanding it. They showed high level of enthusiasm.

The procedure was as follows: First, a lesson was chosen and explained by the teacher to the students with the usual teaching method. The second day, the teacher will Integrate arts in the lesson. The teachers have the freedom to choose the form of arts they prefer or feel more comfortable with. After each lesson, the teacher will fill the evaluation sheet.

An envelope containing the evaluation sheet and cover letter (Appendix D and E) were provided for the four teachers who are participating. The cover letter explained the purpose of the study as well as the aim of the research and steps to follow while evaluating. On top of previously

meeting with the teachers, the cover letter ensured that all participants were informed of their rights and responsibilities. All forms of the collected data were kept private and secured in a technology database. The data remained secure and in a secure location at all times throughout the duration of this study. After meeting with the teachers, dates and times were scheduled for the observations. Due to the spread of Covid-19, the researcher was asked by the administration of the school to take the Covid-19 test, and thankfully was tested negative. After providing the school with the test results, the researcher was allowed to enter the classrooms to observe the students.

Below are the demographics of the chosen SWD:

Student	Gender	Grade	Disability	Other Characteristics
A	Female	5	Autism	Impaired expressive language, repetitive, communicates with non-verbal sounds when irritated, easily distracted, low level of engagement, behavioural needs
В	Female	4	Dyslexia	Very low level of engagement, difficulty reading, writing, and receiving oral and written instructions
C	Male	3	Learning Disability	Easily distracted, low span of attention, behavioural needs
D	Male	2	Learning Disability	Language delay, Panayiotopoulos Syndrome, behavioural needs

Table 1 Students Demographics

The researcher visited the inclusive classrooms to observe the students on a normal school day. Notes were taken on the students' academic and social performance during a normal school day, while the teacher is using the usual explanation methods. After the observation, teachers were asked to fill the first evaluation created by the researcher (Appendix D). The evaluation had a coversheet created by the researcher to guide the teachers and provide more information for them

(Appendix E). For the second visit, teachers integrated a form of Arts (chosen by the teacher) in the lesson. The researcher observed the classroom and evaluated if arts integration impacted the social and academic performance of the SWD. Teachers filled the evaluation for the second time after Integrating Arts in the lesson and sent it by email. The researcher asked to take photos of the students' artwork but only one teacher agreed.

#### TWAS:

The TWAS questionnaire was sent out to teachers to measure their use of AI and its effectiveness in their classrooms. The survey will also measure the teacher's attitude and awareness towards AI. The TWAS is used to determine if statistically significant differences exist on teacher attitudes, self-efficacy, and personal characteristics concerning their use of the four major art forms - dance, music, theatre, and visual arts - in their teaching practice. In addition to demographic information included in the TWAS, the researcher gained permission (Appendix C) from the author to edit the questionnaire to accommodate the purpose and the culture. The (TWAS) used in this study sought demographic data relative to grade taught, art specialist, gender, classroom size and design, academic degree, major, number of years in education, .... Etc. Copies of the TWAS were delivered by the researcher to the Head of Inclusion. The participants in this study received the TWAS questionnaire in its printed form from the school's Head of Inclusion. Participants were encouraged to voluntarily complete the questionnaire knowing that it is for research purposes. The participants had the opportunity to complete the survey during their free time in the school. The participants were chosen by the school's Head of Inclusion. The researcher received the results in their printed form.

#### 3.5 Ethical Considerations

This research followed the university's guidelines regarding research ethics. Following are the ethical considerations in the research:

The research will involve case studies on children/students with disabilities in which they will be observed in their classrooms as their teacher integrates arts in the lesson. To avoid any ethical issues, consent forms was sent to the school for approval. Moreover, the researcher made sure that information of the children will not be shared, and that the children are in their usual safe classrooms, with the presence of their peers and teacher(s).

To measure the teacher's attitudes towards Arts Integration in their classrooms, the research will use a survey called The Teaching With the Arts Survey (TWAS), created by Dr. Barry Oreck. After communicating with Dr. Barry through email, he agreed to give the permission to use the survey and also to add/alternate questions based on the needs of the research.

The research involves a survey in which caregivers of students with disabilities are asked questions about the role of Arts in their child's life, and the caregivers' attitudes towards Arts Integration. The participants will be identified as Caregivers of students with disabilities. The survey link was sent to a governmental institution in Sharjah, that caters for the needs and rights of children and youth with disabilities. The survey was shared by the institute to their database. The researcher will not have any access to their names, nationalities, or any personal information. The caregivers are adults and parents who are educated and completely aware that they have the right to choose whether or not to take the survey. The researcher is expecting 10-15 responses. The survey will be taken online, hence, there won't be any face to face communication with the parents due to the Covid-19 pandemic.

#### 3.6 Trustworthiness and Reliability of Data

According to (Boswell & Cannon 2017), trustworthiness of data is only as good as the tools and instruments used to gather it. Meaning that if the instrument used is unreliable, the collected data would not be trusted or relied upon. The validity of a study relies on the instrument measuring what it has set out to measure. Reliability and validity of data collected in a study go hand in hand in ensuring that the data collected is correct, reliable and can be used. If either one of these is missing from a study, it can lead to making uninformed decisions and inaccurate information. To ensure that validity and reliability of the data, the researcher undertook a mixed methods approach. Various qualitative and quantitative methods were utilized to maximize the trustworthiness and usability of the results. First, the researcher used an evaluation rubric to compare 4 case studies before and after Arts Integration. Second, the TWAS survey was used to measure teachers attitudes towards AI. Third, an online survey was created and sent out to parents using 'monkey survey' website. In order to avoid any biases, all questionnaires were filled in anonymously, ensuring the privacy of the students, teachers, and caregivers, while providing honest answers. In addition, the researcher was not familiar with any of the participants, which eliminates any pre-existing bias.

#### **CHAPTER 4: FINDINGS**

#### 4.1 Overview

The first stage of this study consists of four case studies that are set out to explore the impact of AI on the learning and social abilities of SWD. The next stage of this study involves the assessment of teachers' attitudes towards the Integration of Arts in their classrooms. The third stage involves the caregivers' point of view towards the impact of AI on their child. This study aimed at answering two main questions. The first was to understand the effect of AI by evaluating the components of students' performance in the classroom (academic, behavioural, engagement, presentation skills) before and after AI. The second section was to understand how open are teachers to the idea of Arts Integration and how aware are they of this teaching method. The third section is very brief, it evaluates caregivers' awareness and involvement in Arts Integration and their attitude towards integrating it in the inclusive classroom. Before sending out the surveys, a pilot study was sent to a focus group of parents of children with disabilities, to measure the validity and reliability of the survey question. The results of the 3 methods are detailed below:

#### **4.2 Case Studies Analysis**

The aim of conducting the case studies was to measure SWD performance (academically, behaviourally, engagingly, and on a presenting level) before and after integrating the Arts in the classroom. The results of this study showed an increase in students' performance in the lesson explained using AI. The rubric total score was calculated by adding up the scores for each lesson. Below is an explanation for each case study and tables to compare the results for each student:

#### Student A:

Student A is a female student in grade 5. For this evaluation, the **science** teacher was teaching the parts of respiratory system for the students. The first day, the teacher explained the lesson verbally, and ended the class with a written worksheet. As seen from the table below, the student had difficulty paying attention during the lesson, the instruction, and the completion of the worksheet. The student was somewhat engaged, however, refused to present by the end of the class. For the second lesson, the teacher used a 3D virtual model of the respiratory system on Nearpod platform. Then the teacher asked the students to draw it on their science activity book. It was the 5<sup>th</sup> period and even though students have already had a long day, they got so excited when the teacher gave them the drawing task. As seen from table 2, student A's score has almost doubled. She showed understanding of all concepts, paid attention all of the time during the instruction by the teacher, and presented while using eye contact and good voice.

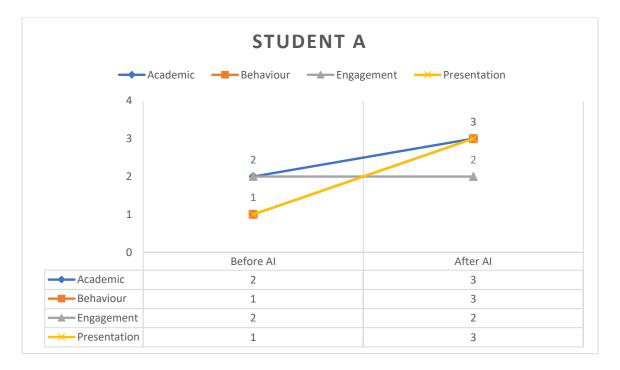


Table 2 Impact of AI Case Study, Student A

#### Student B:

Student B is a female student in grade 4. She has Dyslexia and she struggles with reading and writing. The **science** teacher was explaining the explaining the external structures of animals. The teacher spoke about the exoskeleton of the insect, then she asked the student to read the lesson from the science textbook then summarize the information on their notebooks. Even though this evaluation was done on the first period where students are expected to be energetic and engaged, the SWD did not show understanding of any of the concepts. She was also easily distracted and somewhat engaged. She refused to present. In the second day, the teacher used different materials such as (clay, cardboard, colour paper, cotton, aluminium) and asked the students to model the exoskeleton for the insect. The student was completely engaged, and she paid attention all of the time. Her final product is displayed in (Appendix I). The student displayed the information and presented her art work in an excellent manner. Below are the scores before and after AI.

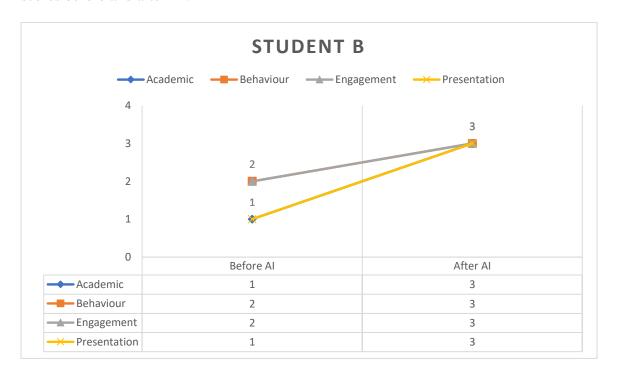


Table 3 Impact of AI Case Study, Student B

#### Student C:

Student C is a male student in grade 3. He has a learning disability and he is easily distracted. The teacher wrote in the evaluation when asked about other characteristics: "span of attention is very low". The first evaluation was on the second period and it was an **English** Class. The teacher was explaining the lesson: Introduction to Venn diagram, compare and contrast. The teacher briefly explained the concept, then she gave the students a task, in which they had to read a short passage of a story about two different characters, and fill the similarities and differences in a previously drawn Venn diagram. The teacher evaluated the student and as predicted; the score was low. The student seemed interested for the first 10 into the lesson, and then showed signs of disinterest and quickly lost focus. The student did not complete the worksheet and was distracted. He also did not participate to answer questions during the lesson.

For the second observation, the teacher was asked to prepare the lesson with arts integration.

Students were shown a visual story that had songs and bright colours. Students were also asked to draw a Venn Diagram themselves and colour the sides.

Activity: The teacher asked the students to draw the Venn Diagram, colour the contrasting sides red, and the similar side blue. Then watch the story clip and jot down the differences and similarities in the Venn diagram; then connect the points and write a compare/contrast paragraph od 5 sentences at least. The student was certainly way more active and willing to participate answering the questions asked after he watched the story clip. The student was focused throughout the story. The student completed his task of colouring and collected the contrasting and similar points from the story. However, the student only wrote two sentences instead of five. Table 4 shows the scores before and after.

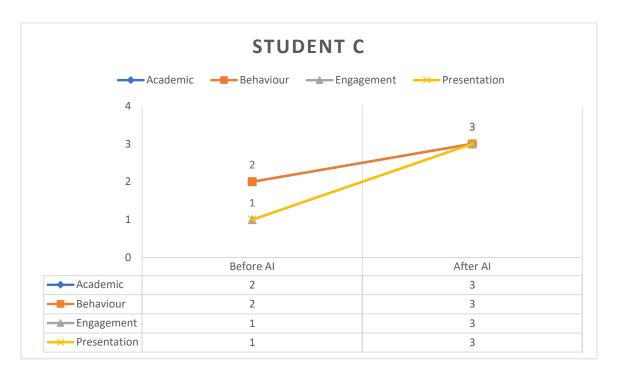


Table 4 Impact of AI Case Study, Student C

#### Student D:

Student D is a male student in grade 2, who has learning disability, speech delay and behavioural needs. He also has Panayiotopoulos Syndrome. The first evaluation done by the **English** teacher was about the vocabulary of a story called 'Diary of a Spider'. After explaining the vocabulary, the teacher asked the students to write the words in the notebook using direct instruction method. After the teacher's evaluation, the SWD scored 4. The student was distracted and moving around the class which also distracted his peers. For the second observation, the teacher prepared an art activity to explain the vocabulary. She used visual aids, colours, and had a little discussion with the students while integrating art. The student score doubled and became 8. The student was completely engaged, and he was able to concentrate more. The student was eager to try more

activities and he was busy with the visual aids that he did not disturb the class. The below table shows the impact of Art Integration on the student's performance:

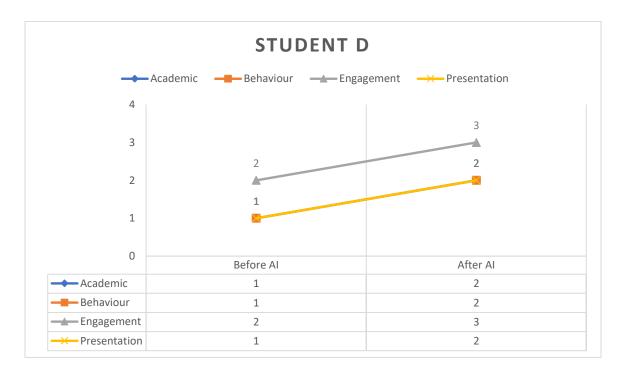


Table 5 Impact of AI Case Study, Student D

The last section of the evaluation rubric asked teachers to write notes about how the class went with and without AI. The answers are listed in the table below:

Student	Teacher Notes Before AI	Teachers Notes After AI
A	"Student needs teacher support most of the time to finish the given activity on the worksheet."	The student was more active during the activity and asked the teacher to see her achievement many times, she understood the structures of the respiratory system and was able to draw it too.
В	"Student needs teacher support most of the time because she wants	The student was so excited during the class, she understood the different between the internal and external structures of the animals,

support in reading, then she will able to do the task by herself, and that makes the student waste the time because they need one to one help all the time." and how the exoskeleton protects the internal parts of the insects."

C "The student seemed interested for the first 10 minutes into the lesson and then showed signs of disinterest and quickly lost focus. Student didn't complete their worksheet and was distracted. Student did not participate to answer questions during the lesson."

The student was certainly way more active and willing to participate answering the questions asked after he watched the story clip. The student was focused throughout the story. The student completed his task of colouring and collecting the contrasting and similar points from the story. However, the student only wrote 2 sentences instead of 5."

O "The student was distracted a lot during the class. He was moving around in the class."

"When we integrated art with our lesson, the student was able to concentrate more. He wanted to try more activities. He was so busy with it that he did not disturb the class."

Table 6Case Study: Teachers' Notes

#### 4.3 Interview with the Head of Inclusion

The interview with the Head of Inclusion was very beneficial as she seemed to have great knowledge and experience about the effective inclusion and the importance of using various teaching methods that adapts to the needs of SWD. For the first question, the participant believes that AI exists in the emirate of Sharjah especially in the primary level, but there is a gap in the knowledge about it and its importance and strategies to use it. In the question about the most challenging topic/subject, the participant believes that it depends on the level and type of disability. For example, if the student has dyslexia, the most difficult topic would be reading and writing. When asked, 'why is it challenging'; the participant answered "because it may lead to low self-esteem. Behavioural problems, anxiety. The inability to read and comprehend can

prevent the student from reaching his/her potential. The participant believes that AI will definitely benefit the student to process the information more effectively. She added "AI helps students to develop creativity, development of fine motor skills, and it will reflect on their work." When asked to provide an example of used AI in the school, the participant explained that visual arts is the most used form. She added: "when using visual art, students develop more interest and show effective participation, it happened in the math lessons" (Appendix J). The participant believes that AI helps achieve the academic goal for SWD. She also believes that AI should be used in most of the subjects and lessons.

The second part of the interview asked about the social impact of AI. The participant states that there are SWD who develop social skills through AI, as they were less expressive and they were having low self-esteem issues. The participant also believes that AI is better done in a group rather than one on one, to achieve effective inclusion in which both SWD and their typically developed peers' benefit. The participant adds "Art Integration is a valuable tool for reaching multiple learning styles across the curriculum and is linked to enhancing academic outcomes as well as positive social and emotional development for the students." She adds: "AI helps SWD express their thoughts, ideas, and feelings."

The third part of the interview asked about attitudes towards AI. The participant says that Mathematics teachers are the most teacher who use AI in the 'Turn and Rotate' activity. The participant says that most teachers feel happy while using art as an effective resource of teaching. She added: "the student feels excited when the lesson is explained through art." Regarding the required qualifications for teachers to use AI, the participant believes that teachers need to know how to include the students of different age, and to provide appropriate needs in the lesson.

The last part of the interview asked about Arts Integration guideline. The participant believes that AI should be used more as a teaching method in Sharjah schools due to its benefits on all students. She also things that there should be an AI guideline in the UAE, in which it includes how to use the material 'with clear direction and methods' to be explained to accommodate the students, and to provide extra time to express. When asked about factors that affect the success of inclusion, the participant stated that "environment, clear direction, extra time, modelling, repeated directions, step by step approach."

#### **4.4 TWAS Analysis**

Due to the small sample size, data were analysed in a simple way using numbers and tables. The responses listed for the two open-ended survey items were summarized and examined for theme and content using a form of ground theory. The answers were analysed to generate and discover themes and theories that would help in further develop this research.

The following table is the summary of selected demographic data:

Demographic	Number of teachers out of 10
Current Grade	
Elementary	4
Middle School	2
Middle and High	3
High School	1
Subject	
Art	4
English	3
Math	1
Science	1
Social Studies	1

Gender Male 3 7 Female Major Art 3 Education 3 Other Number of Years Teaching 1-5 years 6-10 years 7 More than 10 Attended teachers' development in Art 4 (just the art teachers) No 6 SWD in the Classroom Yes 5 No

Table 7 TWAS Teachers' Demographics

The second part of the TWAS includes 31 items for the teachers to answer. To explain this in a clear way, the questions were divided into three themes which are: importance of AI, self-efficacy, and level of support. The results of each theme are explained below.

**Theme 1:** Level of importance teachers attributed to the use of various art forms and artistic activities to help students learn and demonstrate acquired knowledge. This theme is included in questions 1-8 and 28. The teachers chose from a scale of 1-5, 1 being 'not important' and 5 being 'very important'.

Importance of AI	Number of Teachers
Not Important	1
Somewhat Important	3
Very Important	6

The result show that most teachers are aware of the importance of integrating arts in the curriculum, and the positive impact it has on students. Interestingly enough, the researcher noticed that most answers did not support 'dancing' as a form of AI in the classroom, which raises the question of whether or not teachers allow their cultural beliefs to interfere with their teaching methods. It also suggests that further research is recommended to explore how teachers' identity affect their choice of teaching methodology. Moreover, the results raise another question which is: which forms of art teachers are more comfortable in using in the classroom?

**Theme 2:** Level of self-efficacy teachers possess to the use of various art forms and artistic activities in the classroom. This theme is included in questions 17, 19, 21, 24, 26, and 30 of the TWAS. (Appendix F). The scale ranged from 1-5, with 1 being 'strongly disagree', and 5 being 'strongly agree'.

Ability to facilitate art related activities	Number of Teachers
Strongly disagree	6
Somewhat	2
Strongly agree	2

Two teachers strongly believe that they are able to facilitate an art integrated lesson. Both teachers come from an artistic background, hence, they acquire the needed skills for practicing arts. This result raises the question of what does it take to Integrate Arts effectively in the classroom? Does the teacher have to be an Art graduate? Does being an Art graduate automatically qualifies the educator to integrate art? AI is not a replacement for the Arts subject. The subject teacher needs to have the needed tools related to the content subject to explain the lesson, and in order to integrate the arts, students have to be aware of the artistic tools and materials.

The majority of teachers believe that they do not acquire the ability to use arts integration in their lesson. Interestingly, those teachers chose 'highly important' in the questions about the importance of Arts Integration. This means that teachers are aware of AI importance, however, they are also aware that they need more training, clear guidelines, and teaching tools to perform AI in their classrooms.

**Theme 3:** The level of support teachers has to the use of various art forms and artistic activities in the classroom. This last theme is included in questions 22, 27, and 29 of the TWAS. The scale ranged from 1-5, with 1 being 'never' and 5 being 'daily'. Results:

Teachers get the needed support for AI	Number of Teachers
Never	6
Somewhat	3
Daily	1

In question 22, most teachers believe that they are encouraged by the Head of Departments in their school, to implement AI in the classrooms. However, only few teachers use an Art form to teach or engage in an art activity. This section suggests that educators need more encouragement, trainings, support, and involvement in art activities, in order to be more confidence in using AI in their classrooms.

#### **Open ended Questions:**

Questions 32 and 33 are the last two pen ended questions in the TWAS. The answers were very interesting and showed great awareness and motivation from the teachers towards AI. Question 32 asked: What do you feel is the strongest current motivation for you to use the arts in your teaching? The following are themes emerged from an analysis of the answers:

#### Theme 1: Awareness

Many respondents acknowledged the different learning styles their students possess. The responses to this question indicated that teachers are aware that each student has a way of learning, and that Integrating Arts 'is a powerful tool to accommodate and enhance students learning in all areas." Moreover, English teachers are aware that the Drama Art form is vital "to teach the kids more about literature". In addition, Math and science teachers believe that "linking" their subject to Art is beneficial for all students.

#### Theme 2: Students' Engagement

One teacher said "Art creates challenges for students, which encourages them to come up with strategies to use arts in various types". As discussed in the Literature Review, AI develops students' problem-solving skills and allow them to think more like an artist which leads to more engagement and creativity.

#### Theme 3: Limitations

"The strongest current motivation would be the ability to use Art, music, and theatre freely. The school limitation stops that motivation". This answer suggests that the school might have a role in limiting the educators in choosing the teaching methods. Unfortunately, many schools force the teachers to follow one unified plan that includes unified teaching methods. Having a unified plan is a two-edged sword. From the positive side, all classrooms will learn the same way and there will not be any difference between classrooms. On the other side, this could result in hindering the teacher's creativity, hence, losing motivation to think outside the box and try new teaching methods to accommodate all students. This could result in ineffective inclusion and many learning and teaching challenges.

#### 4.5 Caregivers' Survey Analysis

17 caregivers took the survey, all of them were parents of children with intellectual disabilities. 12 parents out of 17 have previously took their children to art workshops. The results of those participants will be discussed here. Answers to What is the child's favourite art form varied from music, drawing, colouring, sculpture, and theatre. Parents believe that the most noticeable change on the child's behaviour are the following: happiness, sense of achievement, calmer, and reduced hyperactivity. Question 5, 6, 7 asked if parents and teachers noticed any change on the academic and social development on the child after joining an art workshop/course. The 11 out of 12 parents said yes, they and the teachers noticed a positive change on the child academic and social abilities. 12 parents said that they themselves use AI at home with their kids to explain a concept or a topic. The following question asked why do parents use AI at home with the children. Answers were: "higher understanding to the topic when using art, the child becomes more positive and enthusiastic to learn, develops skills, attract the child's attention and motivate him/her, to increase the love of art in my child" Last 3 questions asked if parents encourage the use of AI in the classrooms. All parents answered 'yes'. The last question asked parents to elaborate on their answer. Some of the answers were: "to develop skills and creative thinking. the more involved the senses are in the process of learning the more understanding happens, the child becomes more social and make more friends, verbal explanation leads to boredom and losing interest, the information connects to the memory if it was delivered through arts, increases sense of independency, helps the child explore his/her talents and interests, the positive social impact, and being more able to express and make his/her own decisions." The results were incredibly fascinating as it showed great encouragement and awareness from caregivers towards AI.

#### **CHAPTER 5: DISCUSSION**

#### **5.1** Overview

What is the impact of AI on SWD in the self-contained classroom? The steps of this research helped to see how arts integration impacts students' academic and social development in the classroom. Children with disabilities often feel left-out, unwanted and unwelcomed in inclusive settings and amongst their typically developed peers (Ison et al 2010). However, through observing their behaviour and participation in the art instructed classroom, the researcher could see the positive impact AI had on their confidence, self-expression, and excitement to show their knowledge of basic arts skills. The study and research also showed how important it is to have high quality instruction in the art integrated classroom. The educator needs to be qualified and have enough knowledge to Integrate Arts in a content area. Similarly, caregivers' support would add a positive impact to this step and would encourage students and teachers to facilitate AI more in the classroom due to its qualities.

Despite the very little amount of research being conducted in the UAE on the effect of Arts

Integration on students with disability in the inclusive classroom, many detailed researches are
done worldwide with evidence to display the most effective aspect of AI and its impact. This
chapter contains the following: summary of the study, key findings, overall attitudes towards AI,
limitations, future recommendations, reflections, and concluding note.

#### 5.2 Summary of the Study

This study is set out to measure the impact of AI on 4 elementary students with different disabilities that are combined with learning difficulties. The measured components are the cognitive, behavioural, and engagement aspects of the students in the classroom. Next, the

results were analysed and compared to assess what effect AI had on the performance of the student. For the purpose of this study, the researcher designed an evaluation strategy to use in the assessment of the students. The case study began with meeting the educators and the head of inclusion at the school. After presenting the aim and purpose of the research and case studies, the educators were enthusiastic to be part of the study. The also had an 'Ah-ha' moment, in which they realized that they already implement AI sometimes in their classroom but without any clear instructions or consistency. The observations started in October 2020 and data was collected by the end of the month.

Moreover, the *Teaching with Arts Survey* (TWAS) was printed and distributed to the teachers and the Head of Inclusion from the same school to measure their awareness and attitudes towards AI in their classrooms. Despite the small sample size, the results actually were very beneficial in obtaining a general background on the educators' attitude, awareness, and openness towards the Integration of Arts in the classrooms.

In addition, through a collaboration with an educational governmental institute in Sharjah that caters to the needs of young adults with disabilities, an online survey was sent to their database - which includes caregivers of students with disabilities across Sharjah- to measure their knowledge and level of involvement in AI.

#### **5.3 Key Findings**

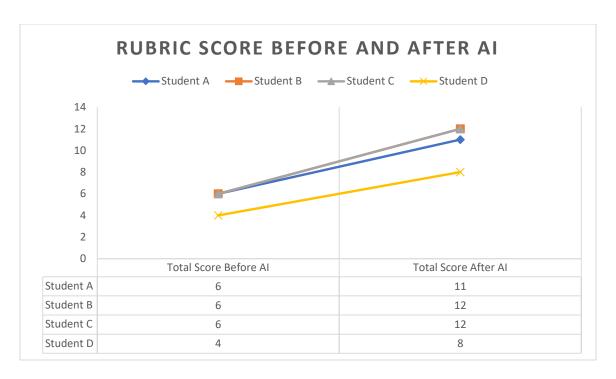


Table 8 Rubric Score Before and After AI

As seen from the table, the results indicate that AI has indeed a positive impact on the academic and social development of students with disabilities. The scores are higher, displaying a before and after effect. Dickerson (2011) states that if someone believes that AI is important, they believe: 1) the arts are languages that all people speak; 2) the AI provide opportunities for self-expression; 3) AI develop both independence and collaboration; 4) the arts make it possible to use personal strengths in meaningful ways and to bridge into understanding; 5) the arts improve academic achievement; 6) the arts exercise and develop higher order thinking skills; and 7) the arts provide the means for every student to learn.

Moreover, the results of the teachers' survey (TWAS) show a good level of teachers' awareness of the importance of AI and willingness to increase the integration of art in their classrooms.

Last but not least, the caregivers survey also showed how parents strongly encourage AI as they can see its impact on their children's abilities and their attitude in social environments inside the house and inside the school.

On these bases, it is recommended that educators consider Arts Integration as a key factor in their classroom as it provides information to a wider range of learners, multiple means for all students to express their understanding, and better engagement for all students in participatory, collaborative and developmental learning experiences.

#### 5.4 Educators and Caregivers' Attitudes Towards AI

Based on the results of the analysis, it is evident that educators and caregivers have a significant overall positive attitude towards AI. This indicates that both groups are willing to invest time and effort to integrate arts whether in the classroom, or following up at home with the student.

Moreover, the key to high-quality arts integration in the classroom includes continuous collaboration with parents, art teachers, subject teachers, and community artists (Robinson, 2013).

In order to build up on the results, sending surveys to more teachers and caregivers may display even clearer attitudes towards arts integration. This could result in a three-way collaboration between the educator, the caregiver, and the policy makers, creating a more effective inclusive setting in which knowledge is more accessible to students with different abilities through Arts Integration. It could also potentially have a positive affect not just on the SWD, but also on their typically developed peers, as Art is known for its therapeutic and developmental characteristics to people from different ages, abilities and backgrounds.

#### **5.5 Limitations:**

Due to the unfortunate situation the world is in right now with Covid-19, I was unable to include more variables to my research. It wasn't until after the lockdown ended in late July end of August that I was able to freely move and some of the schools and libraries needed for my research started operating regularly very late during the year. When I was finally able to properly meet caregivers and heads of schools, I was also very limited there. I wanted to include more children with different disabilities such as physical or intellectual disabilities and see the different effects of Arts Integration based on different disabilities but those children were nearly impossible to find. Their immunity being the lowest, most, if not all of them continued the yearly curriculum online and they were not easy to find in the schools. It could have been interesting to reach out to certain caregivers and see Arts Integration be included in the school curriculum in general but also in the online curriculum at home, where the caregivers can be given the opportunity to track progress and change in their children. I hoped to be able to reach out to those caregivers through institutions but I was told they could not disclose that kind of information. In the interest of completing the work in the assigned deadline, the scope and population size could not be increased. While doing my research, I was forced to take small sample sizes, mainly in one school, and with one Head of inclusion. Furthermore, the schools that work with children with disabilities in Sharjah and in the UAE are Arabic schools where the main language is Arabic, and where parents mainly or sometimes only speak Arabic. As a result, I had to translate back and forth caregivers' surveys between English and Arabic. The survey programme and platform I was using was also not very Arabic friendly, so I also encountered some issues while working with that. Moreover, I struggled as well as I lacked the knowledge in

using statistical tools. Schools in the UAE, but in the Arab region as well lack resources about Arts Integration, making it difficult to reference all the points and add statistical information.

#### **5.6 Future Recommendations:**

Themes emerging from the data include:

#### Further research:

The research could be taken further by looking at more schools, some inclusive and some not. A lot of schools that do already integrate art classes could be analysed and surveys could be given to see how it can improve a student's life. It would be interesting to analyse data of students who took art at an earlier age and students who didn't and put them against each other to see if there were any major differences in their social skills or academic skills. Seeing and materializing results of how art, as a healthy form of expression but also as a universal access point would be ideal, for inclusive schools and none exclusive schools.

When given the time and the resources from inclusive schools, parents and caregivers, specific research can be made with smaller groups focusing on each grade, each disability and various forms of art. A 10-year-old kid with intellectual disabilities might respond better to music while a 3-year-old child with physical disabilities might respond best with painting, for example. There are many different types of art and all have to do with expression, so it could be very fruitful to see each subject respond to different art forms and study why certain forms of art give a stronger result with a subject.

Does Art Integration always work? Are there disabilities where Arts Integration cannot be applied or even have adverse effects? Results of those research could raise possible challenges in implementing AI in the classroom. While furthering the research in each art form and various subjects, things like gender, age or type and severity/degree of disability could all have an impact on the effectiveness of AI. If not studied properly, are there certain intellectual disabilities where AI and certain forms of art would do no difference? Moreover, further studies are recommended to measure how parents and caregivers' support are extremely important in creating a positive impact to AI as their knowledge of their children is irreplaceable.

#### Future Guidance:

For future guidance, a clear guideline and implementation plan of Arts in the class should be created for teachers and educators or even parents whose kids are still being taught online all over the UAE. The guideline should include explanation of all the several art forms and various courses that could be taught, their benefits, and their relation to common core standards and how they can be facilitated in the classroom. Each AI syllabus should have a focus and what the purpose of the course is, the various outcomes they along with how it can develop in the next year for older students. Effective training of educators needs to be made with adequate support services as well as inclusive classroom structures. Specialized teachers would then work hand in hand with other instructors as well to devise syllabuses that integrate art as a course but integrate it in teaching social studies, sciences or languages to emphasize on creativity skills / creative thinking, communication skills and flexibility. Training all teachers would be essential to this process as they would need to understand objectives but also be able to assess the progress in the students and the ways to better reach the students who otherwise are less engaged in the classroom and give them a voice to choose and explore their talents and interest in art.

#### Future Collaborations:

Subject teachers would need to collaborate with art teachers and possibly art therapy professionals in the school while preparing courses and art integrated lessons. True collaboration goes beyond having a guest lecturer or the teaching artist provide information to the students. It empowers the classroom teacher to incorporate the arts across the curriculum that supports the students and provides high quality instruction in both the arts and in the core subject (Pennisi, 2012). Collaborating with Art centres outside the school in specific workshops or courses could be very beneficial for both parties as well. Art centres or school related to the arts include Performing Arts schools, Music centres, Museums and Art Institutes. Some art professionals or artists could be brought into the schools to teach certain topics, in collaboration with the teachers, who have a better understand of the needs in the classes. These collaborations would help create special curriculums and courses that could be carried out in the year or throughout several years. Future collaborations could also be made with cultural departments to understand better UAE culture and their needs in the adaptation of the programmes. As some disabilities might require more attention and support than others, involving assistive technology to help students with physical disability in using art tools would be extremely beneficial. Visual aids, specialized computer software and hardware that increase mobility, or specialized tools used in the arts for people with specific disabilities are few of many examples that would be advantageous. Collaborating with research departments, scientists would be favourable as the caregivers and parents understand better the need and what can be created to support certain disabilities in their progress and development of certain skills.

#### **Reference List**

Abedin, G. (2010). Exploring the potential benefits of arts-based education for adolescents with learning disabilities: A case study of engagement in learning through the arts. Retrieved from Proquest Dissertations & Theses. (3409864).

Alborno, N. E., & Gaad, E. (2014). 'Index for Inclusion': a framework for school review in the United Arab Emirates. *British Journal of Special Education*, *41*(3), 231–248. https://doi.org/10.1111/1467-8578.12073

Al Dhaheri, H. (2017). Why art education is crucial for the UAE's development. Gulfnews.com. Retrieved 3 November 2020, from https://gulfnews.com/opinion/op-eds/why-art-education-is-crucial-for-the-uaes-development-1.2028772.

Anderson, A., & Loughlin, S. M. (2014). The influence of classroom drama on English learners' academic language use during English language arts lessons. *Bilingual Research Journal*, *37*(3), 263–286.

Anderson, A. (2015c). Understanding *how* and *why* arts integration engages learners. In A. Anderson (Ed.), *Arts integration and special education: An inclusive theory of action for student engagement*. New York, NY: Routledge.

Appel, M.P. (2006). Arts integration across the curriculum, *Leadership*, 36(2), 14-17.

Arif, M. & Gaad, E. (2008) 'Special needs education in the UAE: a system perspective', *Journal of Research in Special Educational Needs*, 8 (2), 111–117.

Bresler, L. (2001). Agenda for arts education research: Emerging issues and directions. In M. McCarthy (Ed.), *Enlightened advocacy: Implications for research for arts education policy and practice* (pp. 43–71). College Park, MD: University of Maryland.

Cattrell, J. (1998). Involvement in the arts and success in secondary school. *Americans for the Arts Monographs*, 1(9), Washington, DC.

Corbett, B. A., Gunther, J. R., Comins, D., Price, J., Ryan, N., Simon, D., ... Rios, T. (2011). Brief report: Theatre as therapy for children with autism spectrum disorder. *Journal of autism and developmental disorders*, 41(4), 505–511.

Corbett, B. A., Swain, D. M., Coke, C., Simon, D., Newsom, C., Houchins-Juarez, N., ... Song, Y. (2014). Improvement in social deficits in autism spectrum disorders using a theatre-based, peer-mediated intervention. *Autism Research*, 7(1), 4–16.

Cruz, J. (2009) Stepping into America: an educator's journey to the intersection of special education and the arts. *Teaching Artist Journal* 7(3), 145-154.

Deasy, R. (2020). *Critical Links: Learning in the Arts and Student Academic and Social Development*. Aep-arts.org. Retrieved 2 November 2020, from https://www.aep-arts.org/wp-content/uploads/Critical-Links\_-Learning-in-the-Arts-and-Student-Academic-and-Social-Development.pdf.

Dickerson, D. (2011). *Why the arts are important*. Retrieved from http://www.bembryconsulting.com/?p=385

Eisner, E. W. (2002). *The arts and the creation of the mind*. New Haven, CT: Yale University Press.

Elksnin, L. (2004). Identification of learning disabilities: Research to practice. *Psychology In The Schools*, *41*(5), 581-585. https://doi.org/10.1002/pits.10181

Gaad, E. (2011) Inclusive Education in the Middle East. New York: Routledge.

Gaad, E. and Khan, L. (2007) "Primary Mainstream Teachers' Attitudes Towards Inclusion of Students with Special Educational Needs in the Private Sector: A Perspective from Dubai," *International Journal of Special Education*, 22(2), pp. 95–109.

Horowitz, Rob, "Educating Students in and through the Arts", in *Handbook of Arts Education and Special Education* ed. Jean B. Crockett and Sharon M. Malley (Abingdon: Routledge, 22 Dec 2017), accessed 06 Nov 2020, Routledge Handbooks Online.

*Individuals with Disabilities Education Act (IDEA)*. Individuals with Disabilities Education Act. (2020). Retrieved 16 November 2020, from https://sites.ed.gov/idea/.

Ison, N., McIntyre, S., Rothery, S., Smithers-Sheedy, H., Goldsmith, S., Parsonage, S., & Foy, L. (2010). 'Just like you': a disability awareness programme for children that enhanced knowledge, attitudes and acceptance: pilot study findings. Dev Neurorehabil, 13(5), 360-368. doi: 10.3109/17518423.2010.496764

Jensen, E. (1998). *Teaching with the brain in mind*. Alexandra, VA: Association for Supervision and Curriculum Development.

Kandel, I., & Merrick, J. (2007). The Child With a Disability: Parental Acceptance, Management and Coping. *The Scientific World JOURNAL*, 7, 1799-1809. <a href="https://core.ac.uk/download/pdf/205351449.pdf">https://core.ac.uk/download/pdf/205351449.pdf</a>

Oreck, B. (2001). The arts in teaching: An investigation of factors influencing teachers' use of the arts in the classroom. Dissertation. The University of Connecticut. Retrieved 1 November 2020, from https://opencommons.uconn.edu/dissertations/AAI9999695/.

Pennisi, A. C. (2012) A partnership across boundaries arts integration in high schools. *Teaching Artist Journal*, 10(2), 102-109.

People of determination (special needs) - The Official Portal of the UAE Government. U.ae. (2020). Retrieved 16 November 2020, from https://u.ae/en/information-and-services/social-affairs/special-

needs#:~:text=Under%20the%20National%20Policy%20for,their%20achievements%20in%20different%20fields.

Robinson, A. H. (2013). Arts integration and the success of disadvantaged students: a research evaluation. *Arts Education Policy Review*, 114(1), 191-204.

Seaman, A. (2020). *New lesson will be music to pupil's ears*. The National. Retrieved 4 November 2020, from <a href="https://www.thenationalnews.com/uae/education/new-lesson-will-be-music-to-pupil-s-ears-1.516497">https://www.thenationalnews.com/uae/education/new-lesson-will-be-music-to-pupil-s-ears-1.516497</a>.

Silverstein, L., (2010). *Arts Integration and Universal Design for Learning*. [online]. [Accessed 2 October 2020]. Available at: https://www.kennedy-center.org/education/resources-for-educators/classroom-resources/articles-and-how-tos/articles/collections/arts-integration-resources/arts-integration-and-universal-design-for-learning/

Silverstein, L. B., & Layne, S. (2010). *Defining arts integration*. Washington, DC: The John F. Kennedy Center

for the Performing Arts. Retrieved from http://education.kennedy-center.org//education/partners/defining\_arts\_integration.pdf

Stake, R. E. (1995) The Art of Case Study Research. Thousand Oaks, CA: Sage

Thekingscandlesticks.com. 2020. *The King's Candlesticks: Pedigrees Dr George Edward SHUTTLEWORTH BA (Hons) MD LSA MRCS [558]*. [online] Available at: <a href="http://www.thekingscandlesticks.com/webs/pedigrees/558.html">http://www.thekingscandlesticks.com/webs/pedigrees/558.html</a> [Accessed 6 November 2020].

# Appendix A

Table 13.1 Summary of Arts Integration Intervention and Special Education Research in Dance, Drama, and Music

Art Form	Author(s) (Year)	Title	Arts Integration Area	Design	Student Population	WWC Evidence	Outcomes
Dance							
	Anderson (2015b)	Dance/Movement Therapy's Influence on Adolescents' Mathematics, Social- Emotional, and Dance Skills	Dance-movement therapy	Qualitative	14 seventh- grade students with LD, EBD, and ADHD	Low-moderate	Cognitive: Students demonstrated improved performance in mathematics. Behavioral: Students demonstrated improved motivation, engagement, attention, and self-regulation.
	Harbin (2012)	The Effects of Physical Activity on Engagement in Young Children with Autism	Embedded movement intervention	Single-case (ABAB) design	3 kindergarten students with ASD	Meets evidence standards set forth by WWC for single-case design	Behavioral: Students showed an immediate increase in
Drama							
	Anderson (2012)	The Influence of Process Drama on Elementary Students' Written Language	Four-week process drama intervention, including tableau, improvisations, and in-role writing activities	Intervention with pre- and post-tests	Fourth-grade students with LD and behavioral challenges	Moderate	Linguistic: Students demonstrated increased written language productivity and specificity in contextualized dramatic arts activities as compared to decontextualized language arts activities.
	Anderson and Berry (2015)	The Influence of Classroom Drama on Teachers' Language and Students' On-Task Behavior	Tableau	Intervention with pre- and post-tests	2 self- contained classrooms of third-grade students with LD and ADHD	Moderate	Linguistic: Language arts lessons that integrated classroom drama were associated with significantly higher rates of teachers' assertive statements and lower rates of regulative statements.  Behavioral: Language arts lessons using classroom drama were associated with higher rates of students' on-task behavior than conventional language arts lessons.
	Anderson and Berry (2014)	The Influence of Drama on Elementary Students' Written Narratives and On-Task Behavior	Tableau	Intervention with pre- and post-tests	1 self- contained classroom of third-grade students with LD and ADHD	Moderate	Linguistic: Students used significantly more referential and spatial cohesive discourse markers in the drama than in the conventional context. Behavioral: Students had higher rates of on-task behavior in the drama context as compared to the conventional context.
	Berry (2015)	The Use of Tableau to Increase the On-Task Behavior of Students with Language-Based Learning Disabilities	Tableau	Single-case design; ABAB withdrawal	students with	Meets evidence standards set forth by WWC for single-case design	Linguistic: Students improved their oral story retelling skills. Behavioral: Students improved their on-task behavior.

# Alida Anderson and Katherine A. Berry

# **Appendix A Continued**

Table 13.1	Table 13.1 (Continued)						
Art Form	Author(s) (Year)	Title	Arts Integration Area	Design	Student Population	WWC Evidence	Outcomes
Music							
	Carnahan, Basham, and Musti-Rao (2009)	A Low-Technology Strategy for Increasing Engagement of Students with Autism and Significant Learning Needs	Interactive books with music	Single-case (ABCAC) design	6 students in grades K-4 with ASD and significant learning needs	Does not meet evidence standards set forth by WWC for single-case design	Behavioral: The use of interactive books paired with music showed increased levels of engagement during small group instruction.
	Carnahan, Musti-Rao, and Bailey (2009)	Promoting Active Engagement in Small Group Learning Experiences for Students with Autism and Significant Learning Needs	Interactive reading materials paired with music	Single-case design; ABCAC reversal design	6 students, 5 with ASD and one with OHI, aged 6–11	Does not meet evidence standards set forth by WWC for single-case design	Behavioral: Students with autism and significant learning needs had higher rates of academic engagement during activities that incorporated visual, interactive materials and music.
	Colwell and Murlless (2002)	Music Activities (Singing vs. Chanting) as a Vehicle for Reading Accuracy of Children with Learning Disabilities: A Pilot Study	Intervention with singing and chanting	Intervention with pre- and post-tests for reading	5 elementary students with LD, aged 6–8	Low	Linguistic: Participants' reading accuracy improved, regardless of condition.  Behavioral: Students were more on-task during the music conditions.
	De Mers, Tincani, Norman, and Higgins (2009)	Effects of Music Therapy on Young Children's Challenging Behaviors	Music therapy intervention	Single-case design; multiple baseline	3 children, aged 5–7, with ADHD, ASD, and/ or behavioral problems	Meets evidence standards set forth by WWC for single-case design	Behavioral: Targeted music therapy decreased negative behaviors while increasing more positive replacement behaviors and was at least moderately effective for 2 of the 3 students' gains.

#### Appendix B



October 20, 2020



This is to certify that Ms. Madiha Adel Shouma with student ID number 20170481 is a registered student on the Master of Education in Special and Inclusive Education programme at The British University in Dubai since September 2017.

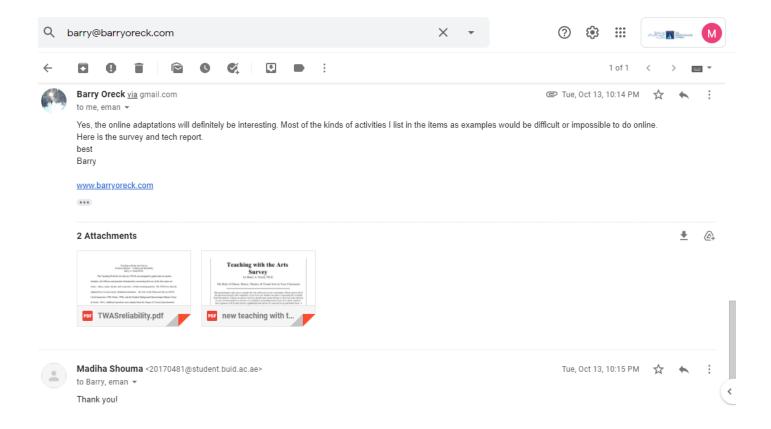
Ms. Shouma is currently working on her dissertation. She needs your support in conducting surveys and case studies to complete the research.

This letter is issued on Ms. Shouma's request.

Yours sincerely,

Dr. Amer Alaya Head of Student Administration

### Appendix C



# Appendix D

Grade:	Date:	/ 10 / 2020	Subject:	Period:	
Student's Disability:			Other Characteris	stics:	
Lesson:					
Activity:					
Teaching Method:					
Teacher's Evaluation	1:				
Please circle the follow	wing base	ed on your evalua	ntion:		
		3	2		1
ACADEMIC		d understanding all concepts	Showed understated of some of the contract that were introduced in the contract that were interesting in the contract that were introduced in the contract that were interesting in the contract that were introduced in the contract tha	ncepts	Did not show understanding of any concept
BEHAVIOR	time du	tention all of the aring instruction by teacher	Paid attention bu easily distract	it was ted	Had a very difficult time paying attention during the instruction, activity, and during the class
ENGAGEMENT	Comp	letely Engaged	Somewhat Eng	aged	Not Engaged
PRESENTATION	orga	ellent display, nization, eye act and voice	Good display organization, contact and vo	eye	Did not present
Total Score:					
<b>Teacher's Notes:</b>					

#### Appendix E

#### **Case Study**

#### This Page is for the Teachers to Read Before the Evaluation

The purpose of this case study is to measure the impact of Arts Integration on the students' academic and social level.

#### What is Arts Integration?

Linking of an arts area (e.g. drama, music, dance, visual art) with a content area (e.g. language arts, mathematics) for the purpose of reaching a deeper level of engagement, learning, and reflection than would be possible without inclusion of the art form (Loughlin & Anderson, 2015).

#### **Steps:**

- 1- Fill the following Page and evaluate the student based on a normal class day
- 2- Plan to explain a lesson using arts integration for the whole class. Meaning that, the teacher will use an art form such as (drama, singing, drawing, art project, ...etc.) to explain the lesson (English, math, science).

#### **Example**

For example, the lesson is about volcanos. The teacher can start the class with a song or a dance about volcanos, then explain to the student's what volcanos are, then ask the students to draw a volcano, or to prepare a small act and pretend that they are near a volcano that is about to erupt. The teacher can also ask the students to create one with clay.

By the end if this class, the teacher will ask few students (including the student with disability) to present what they learnt today.

- 3- After the lesson, the teacher will evaluate the student with disability based on the rubric in the following page.
- 4- The research will compare both evaluations

**Summary:** First evaluate the student with disability on a normal day, then evaluate the same student with Arts Integration.

After filling the document, please scan and send both evaluations by email.

#### Appendix F

# Teaching with the Arts Survey

by Barry A. Oreck, Ph.D.

The Role of Dance, Music, Theater, & Visual Arts in Your Classroom

This questionnaire asks you to consider the role of the arts in your curriculum. Please answer all of the questions honestly and completely; if you leave any blanks your data is automatically excluded from the analysis. Choose an answer even if a specific item seems obvious or does not seem relevant to your current position or practice (i.e. frequency of teaching music if you are a music teacher). Your responses will be kept strictly confidential and will not be reported on an individual basis. A small percentage of respondents will be asked to participate in a voluntary follow-up interview.

Name	Phone # (optiona l)	
	City	
Grade/Class	_ Specialist? Y / N if yes, what subject?	
Gender (please circle); Female / N	Male	
Age:		
Ethnicity (please cirds): African	American / Latino / White / Asian / Other	
# of Students in Class (avg)	# of Years Teaching	
Do you currently practice an art	form?	
Which art form(s)?		
How frequently do you	practice?	
Have you received instruction of	r performed in an art form in the past, eith	ner as a child or as an adult?
Which art form(s)?		
For how long?		
	(Over)	

What is the highest academic degree you have earned?Major
Approximately how many staff development workshops of any kind have you attended this year?
Have you attended any arts workshops for teachers in the past 12 months? Yes / No
If yes, was your attendance voluntary? Yes/No
Did the workshop(s) focus on a specific art form? Which art form?
Visual / Music / Dance / Theater / Literary / Media/other
Which (if any) in-service staff development workshops (arts or other subject ) have you found to be most helpful in your teaching practice?

How would you characterize the arts instruction in your school?

	Inadequate	Adequate	Excellent
Dance			
Theater			
Music			
Visual Arts			

The following questions ask you to rate the importance of using various art forms and types of artistic activities as part of the classroom curriculum to help students learn and communicate what they know.

#### IMPORTANCE SCALE

1 - not important

2 - of little importance

3 - somewhat important

4 - important

5 - very important

Ho	How important do you feel it is for your students to:		ortant<		> very important			
1,	view a video tape of a dance (e.g. to study a culture, concept, or time period)?	1	2	3	4	5		
2.	listen to a piece of music (e.g. to study a culture, concept, or time period)?	1	2	3	4	5		
3.	engage in dance activities (e.g. create a short movement study to explore natural processes such as the water cycle, or the movement of planets)?	1	2	3	4	5		
4.	read or attend a play (e.g. to study a culture, concept, or time period)?	1	2	3	4	5		
5.	engage in music activities (e.g. create a sound score to accompany a story, write and sing a song in the style of a different time period)?	1	2	3	4	5		
6.	look at works of art (e.g. to study a culture, concept, or time period)?	1	2	3	4	5		
7.	engage in theater activities (e.g. play a role from a piece of literature, write a play with characters students developed)?	1	2	3	4	5		
8.	engage in visual arts activities (e.g. draw a cartoon of a current political situation, create a storyboard of the major events of a book)?	1	2	3	4	5		

(Over)

The following questions ask you to estimate how frequently, on average, you use various art forms and different types of artistic activities in your classroom.

#### FREQUENCYSCALE

1 = never

2 - rarely

3 - on ce a month

4 - once a week

5 - daily

How frequently do you:		never	<}	daily		
9.	lead a movement activity with your students?	1	2	3	4	5
10.	show a video tape of a dance to your students?	1	2	3	4	5
11.	lead a music activity with your students?	1	2	3	4	5
12.	lead a theater activity with your students?	1	2	3	4	5
13.	actively listen to a piece of music with your students?	1	2	3	4	5
14.	read or watch a tape of a play with your students?	1	2	3	4	5
15.	study works of art with your students?	1	2	3	4	5
16.	lead a visual arts activity with your students?	1	2	3	4	5

The following questions refer to your own attitudes and potential concerns about the arts in the curriculum. Please respond to the following statements based on how strongly you agree or disagree with the assertion.

#### AGREEMENT SCALE

1 - strongly disagree

2 - disagree

3 - neither agree nor disagree

4 - agree

5 - strongly agree

To what extent do you agree with the following statements?	strongly disagree	4		۵	stron gly agree
17. I feel confident in my ability to facilitate dance activities.	1	2	3	4	5
<ol> <li>I feel that I don't have enough time to teach the arts along with the rest of the curriculum.</li> </ol>	1	2	3	4	5
19. I consider myself an artist.	1	2	3	4	5
<ol> <li>I am concerned that music, dance, and theater activities are too noisy or disruptive for the classroom.</li> </ol>	1	2	3	4	5
21. I feel confident in my ability to facilitate music activities.	1	2	3	4	5
22. My su perv isor encourages teacher creativity.	1	2	3	4	5
23. I don't have enough space to use movement effectively in the classroom.	1	2	3	4	5
24. I feel confident in my ability to facilitate visual arts activities.	1	2	3	4	5
<ol> <li>My students have trouble concentrating on other work after an arts activity.</li> </ol>	1	2	3	4	5

				agree
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
1	2	3	4	5
hy you t	ıse tl	he arts	and v	what
he arts in	your	teaching	?	
n you alre	sady d	lo?		
	1 1 1 hy you the arts in	1 2 1 2 1 2 1 2 hy you use the arts in your	1 2 3 1 2 3 1 2 3 1 2 3 hy you use the arts	1 2 3 4  1 2 3 4  1 2 3 4  1 2 3 4  1 2 3 4  hy you use the arts and when the arts in your teaching?

Thank you for your time.

Teaching with the Arts Survey © 2000 Do Not Reprint without Permission

# Appendix I



The British University in Dubai	The Impact of Arts Integration
2- Why is it challenging?	
Because dyslexico may lead to	ow-self-esteem,
Because dyplexico may lead to le behavior problem, anxiety. The comphished can prevent a child 3- Do you believe that Arts Integration would contribute to the	inability to read and from reaching his other ne process of learning and potentials.
delivering this concept?	
Yes, Art integration will de kid to process the information	efectively benefit the
4- Can you provide an example in which a Special Needs tead	ther previously used art with the
students as a teaching tool?	
develop more interest and aid 5- What was the outcome? (It happened out	s, pictures Stredent will man effecture participalier re mates lessons)
Student with special needs more effectively and quick	by with less essons.
6- Do you believe that Arts Integration supports Students with Academic goals?	disabilities in achieving their
yes, it helps to achieve ;	their academic
7- When should Arts Integration be used in the classroom?	
Art integration should be	used in most of
the subject and lessons.	5531