

Teaching Monotype Printing to Educable Children with Intellectual Disabilities in Egypt

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Abstract:

Today, the importance of catering to children with intellectual disabilities and those with special needs cannot be overemphasized. Like most Middle Eastern and developed countries, Egypt is keen on providing all needed services to children with special needs and to help them reach their potential, which is also one of the Egyptian state's national development goals. This research aimed at fostering the artistic skills of children with intellectual disabilities through teaching them monotype printing. It was conducted on children with an IQ between 50 and 80, considered 'educable' at an Egyptian government school for children with intellectual disabilities. This practice-based research explores the process of teaching artistic skills through the craft of monotype printing, with the goal of children producing portraits of a family member. Finally, the results of the experiment will be presented to demonstrate that encouragements and giving this group of students the opportunity for free self-expression without setting any restrictive rules helped them not only develop their creative skills and raise their self-confidence but also boost their sense of independence. Arts can help children with intellectual disabilities express themselves among others, that is, their peers, without judgment, as they are develop their own form of expression. By introducing a specific craft to these children, it was found that they are capable of creating artworks and that they need to be both supported and challenged to excel thus improve their own lives and leave their mark on their community.

Keywords:

*Intellectual Disabilities,
Monotype,
Art Education*

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1. Introduction:

Introduction: **one of** the Egyptian state's national development goals concentrating is providing all needed services to children with special needs and to help them reach their potential to leave their mark in their community. Special education is needed for children with intellectual disabilities to develop their skills in visual arts. Art plays a vital role in the lives of students with special needs, as it allows them the chance for significant engagement in a learning atmosphere to develop their creative skills and raise their self-confidence.

2. Objective:

The aim of this research is to promote the artistic skills of children with intellectual disabilities - with an IQ between 50 and 80- through teaching them monotype printing.

3. The research methodology:

it is a practice-based research by using the craft of monotype printing to teach ten students from different grades to join the and printing workshop from grade one till grade six at Bem Bem School – an Educational School for the mild intellectually

disabled students.

4. Theoretical Framework: Educable children with intellectual disabilities

An intellectual disability is more than a disorder, but "a complex phenomenon that changes over time" and defining the term "has always been a contentious process" (Wehmeyer, 2003, p. 271). According to the American Association on Intellectual and Developmental Disabilities, an intellectual disability "refers to significantly sub-average general intellectual functioning existing concurrently with deficits in adaptive behavior, and manifested during the developmental period" (Grossman, 1973) as quoted in Sherry (1983). However, Sherry argues that "[c]hildren with an IQ between 69 (or 71 depending on whether the Binet or WISC is used) and 85 are no longer considered retarded" (1982, p.21). Furthermore, the World Health Organization (WHO) has demonstrated that children's and adolescents' mental health "is the impact of the infectious diseases with direct and indirect impact on the mental health of children" (2003). Also, the

disability-adjusted life year (DALY) “caused by mental disorders in children and adolescents because childhood psychiatric disorders” (World Health Organization, 2003). Intellectual disabilities manifest themselves before the age of 18. Chia & Wong (2014) have used this term to describe “an individual’s present level of functioning in two primary areas of concern, i.e., limitations in intelligence and adaptive behavior (Hourcade, 2002), and its occurrence in the developmental period (Wehmeyer, 2002).

The DSM-V (Diagnostic and Statistical Manual of Mental Disorder) looks at how the deficiencies of common “mental ability impact adaptive functioning in three domains that determine how well an individual is coping with daily tasks” (American Psychiatric Association, 2013, p. 1). Chia & Wong further added that the diagnosis of intellectual disability “is based on the degree of severity in adaptive functioning impairments. Being chronic in nature, intellectual disability can co-morbid with other conditions such as autism spectrum disorders and attention deficit-hyperactivity disorder” (2014, p. 150). Mental retardation, as Wollenweber has demonstrated, can be “the result of brain damage, and so-called endogenous, familial, or hereditary conditions” but the group argues that “the educable mental retardate obtains intelligent quotient scores of between about 50 and 80”. This child can be “educated and trained to a self-sufficient extent with limited learning capacity” (Wollenweber, 1986, p.4).

Educable children with intellectual disabilities—previously called “educable mentally retarded (EMR) children—are able to produce artistic works which can gain credit by artists. “Even though an individual is mentally retarded this, in and of itself, does not prevent the individual from developing his creative potentialities” (Rapaport, 1964) as Carter 1973 noted. Reinforcing the contribution of children with mental disabilities in the art classroom, Carter also argues that “[t]he EMR in an art class functions in interest closer to his chronological age and development rather than to his mental age and IQ. The art projects of this student should therefore encompass the materials and interests of the child’s chronological age” (1973, p.141). Furthermore, he pinpoints that educable children with intellectual disabilities can “convey a sense of permanence, solidity, and three dimensions” and adds that it is preferable for these children’s art activities to be kept to a minimum and to be connected to “two dimensional experiences in painting or designing (and drawing)” (1973, p.141).

Art for Children with Intellectual Disabilities

Novel arts can be used as a method to elicit feelings and thoughts. Adams and Atherton (2018) have noted that for many young children, art can be as an expression to of the most reflective and perceptive of their early education. They have also added

“Children’s images reveal the colour of personal expression, the lines of their experience, the shapes of their thought, the textures of their imaginations, the forms of their being, the patterns of their learning, the inner and outer spaces of their worlds, and the contrasting elements between the real world and the imagination“ (Adams and Atherton 2018, 4).

Special education is needed for children with intellectual disabilities to develop their skills in visual arts. The ability of students with intellectual disabilities to make a contribution in different art activities is developed a certain well-arranged skills taught to them, without pressure, which in turn boosts their self-esteem and confidence in their abilities. For example, if a child with average intelligence was asked to draw a flower on a piece of paper, s/he can do it even without looking at a flower or a drawing of a flower. However, it would not be the same case for a child with an intellectual disability, who would need to study the steps of drawing a flower and to have more practice on paper. When teaching these children to draw a flower, for instance, the steps must be sequenced from simple to more difficult, with each step being taught separately. This would include explicitly showing the onset points of lines, interval points and the direction of the lines (Salderay 2012, p.152). In this experiment, the researchers followed the same steps to build the children’s drawing skills by starting with a simple shape to draw and progressing with more difficult steps like teaching details of face drawing, as will be shown later.

Art plays a vital role in the lives of students with disabilities, as it grants them the chance for meaningful engagement in a learning atmosphere when they exercise their “cognitive processes”, develop their “unique voices”, and tell their own stories. It also lets them convey sophisticated ideas and experience authentication of their work (Malley 2014, p15). We depart from Mason *et al.*’s premise (2004) that art helped students continually engage in “the acts of observation, rehearsing, weighing, judging all of which are essential tools for learning in general” (p x). Art is considered a means to fill the professional space with creative activity, “paving the way for a

positive reevaluation of lifestyle, and self-image” (Fuller *et al.* 2009, p. 6). Finally, through art, students with disabilities can improve their functional and expressive communication, which should enhance their self-esteem and boost their chances of being functional and productive.

5. Monotype Printing: Experiment Procedure

This is a practice-based research. Students with intellectual disabilities were taught monotype techniques to produce portraits of a family member. It was the first time for this printing method to be introduced to this school. It was selected to give free rein to the students’ self-expression. It can also benefit them in the future if used in an appropriate project, especially because it has a degree of safety. Monotype is a single procedure, where one can use a combination of printmaking techniques and painting and is valued because of its unique textural qualities. “It results in a one-of-a-kind image” or design that is drawn on a flat plate (made of glass or other materials) with oil- or water-based colors and the drawing is then transferred to another surface like paper or fabric. The transfer of the drawing/image can be made either by pressing applied to the pressing bed - or by hand using the bowl of a spoon, wooden rolling pin, wooden or rubber roller. The two fundamental processes of working on the plate are encapsulated in the additive and subtractive techniques. Whereas the image/design / drawing is painted in positive in what is called an additive approach, “the subtractive approach [ensues that the] medium is applied over the entire plate and the image is developed in negative by removing the medium with various tools” (Ayres 1991, p 8). Both the additive and subtractive methods were used in this experiment. Most of the artwork were created by inking / coloring using oil paste and plastisol—which used for printing garment—over the entire surface and then eliminating the oil paste with the help of brushes, pens or rags to create a subtractive image. In this experiment, ten students from different grades were encouraged to join the monotype workshop, in which they came from grade one till grade six in Bem Bem School –an Educational School for the mild intellectually disabled students.

Bem Bem school for intellectual education (a Government school) started as an adjunct in Al-Munira Elementary School in 1961. The school serves students with special needs for intellectual disabilities according to specific conditions by the educational administration of the Ministry of Education in Egypt. The number of students is

about 90 students. And the age of 6 years to 16 years All mental disabilities are accepted (Students must have IQ from 50 to 75 - the Quotient Intelligence test.

The students are endowed with average to less than average language and social skills; they have prominent artistic disposition and desire to learn new methods. A semi-structured teaching plan was used to give the researches the opportunity to be more open in changing or adding any idea to encourage the students to develop their skills and to motivate the students to continue learning—given that they have poor memory skills and low concentration.

The Number of teaching classes was twelve and the period of each class was thirty minutes. The students were divided into three small groups; each group consisted of between two to four members. Tools and materials included papers, fabrics, wood roll, glass surface size 40/30 cm, brushes, pencils, wooden sticks, small balloon, woolen threads for printing on fabric and papers and Plastisol inks, which is widely used in clothes printing.

The Stages of Experiment and its Objectives:

1. **Developing drawing skills and tactile experiences (Six lessons)** : This stage started with having the children drawing circles using pencils *and* asked them eventually to draw oval shapes along with other different type of shapes while adding more details to gradually present the face of one of their parents. This method was used to sharpen children’s ability to retrieve their memories—a common symptom of mental disability is poor memory and inattention. In the drawing phase of the experiment, one of the researchers sometimes intervened to help students draw circles several times. Later, they started observing the details of faces such as eyes and mouth inside the circle while adding further details, i.e. eyelashes, nose, ears and lips. **In the following sessions, researchers** were focusing on additional details like the Hair in which students were asked to draw them and were quizzed on the differences between the hair of man and woman as to excite their attention. They were further required to focus on drawing their father and mother increasingly by adding minute details of their parents, such as: glasses, mostash, necklace and earrings, to help make their drawings in resemblance with their fathers and mothers.
2. **Expressing personality by drawing their parents:** In this phase, (in lesson no. sixth) few portraits from Paul Klee and Amedeo Clemente

Modigliani were presented to give them confidence and to tell them the style of their drawing and expression can be similar to other artists. When the images of the artists were displayed, the students were encouraged to speak and to present their opinions about color, and styles of the drawing. Then they returned back to practicing the use of brushes and oil paste. In this stage they learn more about the subtle differences between surfaces and other materials (paper, fabrics, glass tools ...). They were guided to develop their drawing skills and to develop their expressions by depicting their parents' faces, which made this stage an aid to the development of their artistic and tactile experiences.

3. **Stimulating Children's creativity:** At this juncture, the monotype technique of textile printing is commenced in the last six lessons. This phase is kick-started by preparing students to deal with colors through giving them instructions on the intricacies of working with the plastisol (textile ink)—only basic colors were selected besides the white. Students were persuaded to wear plastic bags to keep their clothes clean. As a matter of fact, this phase aimed at training them to hold the brush and draw faces on the glass and then print them by superimposition on paper. In Lesson no. 9, they learnt how to mix colors by distributing the ink onto a glass surface using brushes and balloons as an easy way for improving their motor control. Aided by the researchers, students acquire the know-how of placing a sheet of paper very lightly on top of their drawing. Students rest their hands with help on the surface where pressure is applied. Their drawings were hence being imprinted on paper. In addition, one of the exercises they learnt involved using wooden sticks to engrave on the

inked surface and putting the wool threads on some engraved areas to confirm the shape of the face along with some other details (as hair). The end of experiment printed artworks were spontaneously achieved without any initial sketches.

4. **Means of communication with others & professional preparation:** Children engaged and communicated with each other in their practice during the printing process through sharing their ideas and experiences as well as through communicating their feelings to each other. It was noted that children began criticizing their work and introducing new innovative methods which reflected their evolving self-expression and heightened self-esteem. In the end of finishing an artwork, they were praised and applauded by their peers and researchers which made jubilant and willing to create more .

6. Examples of the art work:

Six cases were selected because of the quality of their artwork and attending most of the classes. Image 1 presents the artwork of Case no. 1, portraying his parents. The student is 10 years old, and his mental age is 9. This student was transferred from a primary school. He has suffered from his limited powers of observation and inattention which impacted his academic study. It was observed after training in drawing and printing the sharper shift in his focus and the intensity of his emotions. His newly-found interest with the details was also noted especially when he insisted in one instance to use scissors to cut threads of wool into different sizes to match contours of his parents' faces and hair in an attempt to differentiate between his parents.



Image 1: case 1 portraying his parents using monotype on fabric.

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Case no. 2 is nine years old and his mental age is five. He is diagnosed with Down Syndrome. As an active child, he loves producing artworks because of his passion for art. Despite case 2 obsession with drawing, he has difficulty remembering, concentrating and hence he is quickly distracted

by his peers. He has no peculiar style which appeared in his style of expression. Therefore, it was planned to safeguard him against any distraction while his peers were drawing or printing. To help him stay focused, it was also required to ask him different questions about the

details of faces to guide him indirectly. His picture depicts one of his sisters.



Image 2: Printed artwork presents the brothers of case no. 2.
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Image 3: Printed artwork for case no. 3 on fabric and paper
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Case no. 3 is a ten-year-old child with a mental age of six. The state of disability is simple and has a problem with his linguistic skills (lack of communication) and also difficulties in concentration and observation. Because of his communication problems, he is not well-integrated with society and he has a lack of self-confidence.

he was eager to learn a new method and produce a lot of work in fabric or paper. He used a lot of thickeners in his color which may be understood a way to express his presence. He does not have one style to represent one his family members, but at the same time he was passionate about producing a lot of work using any monotype technique.

In this experiment, it was observed in each class



Image 4: Artwork for case no. 4 on fabric and paper
Baba2018

Case 4 is ten years old and his mental age is eight. He has deficiencies in language and academic study and lack of observation and concertation. Despite he his attended all of his classes and his clear impatience to work for considerable time, he has a good sense of color and shapes and he has been influenced by his peers in some of artistic features.

He was diagnosed with epilepsy and hyperactivity (he is under treatment). Similar to most of this group, he has difficulty concentrating, observing, paying attention or recollecting memories. He is a very active child, but he feels he is better than the other children in this school. He is very talkative child and under the impression that he is better than his peers so he was keen to produce distinct works

Case 5 is an 11years old and his mental age is 10.



Image 5: Various style of artwork for case no. 5 on fabric
Baba 2018

Case no. 6 is fifteen years old and her mental age is 10. She is very quiet girl. Image 6 depicts her grandmother who raised her. This girl admires Modigliani's drawings, because of his style of drawing and colors. She did not attend most of the classes because of her health problems with

kidneys. She loves art. It was noticed she were trying to develop her style in drawing. We couldn't expand the length of the experiment because of the approaching end of the academic year 2018 and their upcoming exams.



Image 6: Case no. 6 drawing her grandmother and father
Baba 2018

The results showed that the application of monotype printing methods is a successful means for developing skills, visual awareness and self-expression of educable mentally challenged students. Finally, their abilities and creativity for production can be harnessed through practicing crafts to prepare them professionally for the future to be economically independent.

7. Conclusion

Art learning can provide a way to introduce new social skills in a variety of settings with different people and situations until those skills may have been mastered. Teacher training is key to creating awareness of the importance of arts learning to children's development and the skills to implement appropriate interventions (Mason *et al.*, 2004, p 40). Art and crafting are considered as important means to the development of artistic and creative skills for mentally disabled children by training their senses –such as visual /sight and tactile ones, and strengthening their physical abilities. Furthermore, producing artwork and making some printed fabric can help them gain a sense of confidence and success and reduce the feeling of frustration and failure and increase the feeling of independence. Useful mental capabilities, such as concentration and interest, might be developed by practicing drawing and printing. Finally, part of responsibilities of arts teachers of students with disabilities, as Malley

has noted (2014, p6), is to challenge them to excel so that they are well prepared to lead successful lives in their communities.

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