

The Impact of Field Trips on Students' Creative Thinking and Practices In Arts Education

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Abstract: This study was to explore the relationship between the field trips and the potential benefits of these visits to students' creativity and practices in art tasks. In particular, it considered the following research question: Can field trips positively affect students' creative thinking and practices in art tasks? The study sample consisted of 60 female students in the third level, for the academic years (2011 – 2012) from Rofaidah basic school level of the African Council schools in Khartoum - Republic of Sudan. Descriptive, analytical and experimental methods are used in this research to explore the benefit of field trips to natural and industrial environments to stimulate students' creativity and practices on art tasks. Research from the area of environmental psychology suggests that humans will benefit both psychologically and physiologically from spending time in the natural world and outside environment. Additionally, designers also commend the natural world as a source of inspiration for their conceptual designs and art ideas. The results showed there was a significant difference between the performance of students on an art task within the experimental and control groups. It was concluded that field trips to natural and industrial locations were a beneficial learning aid and a means of fostering students' creativity and practices in art education. The contribution to new knowledge in this study included the development of advice for all participants working within and related to the field of education and in particular art education the benefit of field visit to the natural and industrial places. The researchers recommended that educational trips should be included in the art curriculum wherever possible.

[Yassir M Mahgoub, and Abeer A Alawad. **The Impact Of Field Trips On Students' Creative Thinking And Practices In Arts Education.** *J Am Sci* 2014;10(1):46-50]. (ISSN: 1545-1003). <http://www.jofamericanscience.org>.

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Keywords: creative thinking, art education, field trips, practices, and natural environment.

1. Introduction:

In the Republic of Sudan, the Government has recognized the importance of arts education and the consequential need for policy support and implementation. This recognition provided the foundations of an announcement by the Ministry of Culture and the Ministry of Education to promote a comprehensive initiative to facilitate arts education. Over the last two years, the Ministries have planned and implemented various policies to promote arts education across the country. The enactment of The Arts Education Support Law is underway to provide further institutional support.

Two fields within society are positively affected by arts education. Firstly, it creates a demand for professionals in the arts with an understanding and appreciation of cultural diversity. Secondly, it supports the programmes and activities that are needed to establish respect for each other's diversity of historical experience and culture.

The Curriculum of Arts in the republic of Sudan (Ministry of Education) describes four strands each with eight levels of achievement objectives. The four strands include: Developing Practical Knowledge in The Visual Arts, Developing Ideas in The Visual Arts, Communicating and Interpreting in The Visual Arts

and Understanding the Visual Arts in Context. A range of resources supports teachers in interpreting the achievement objectives and implementing the curriculum. These resources include the Arts Curriculum Exemplars (Ministry of Education) and a matrix that identifies progress indicators at each level. The matrix describes broad levels of progress that cover up to two to three years of learning, with wording of some indicators remaining constant across two to three levels, in accordance with the achievement objectives. Teachers require further support and guidance to identify indicators of shift in student learning within these levels.

Literature Review

Before describing the systemic context of the potential influences of the field trip, the researchers will first define some key terms including creativity, practices and field trips. There are numerous definitions of creativity. Santrock (2004) defined this term as, "the ability to think about something in novel and unusual ways and come up with unique solutions to problems". In summary, creativity involves the discovery of innovative and unique ideas, concepts or links of the creative mind between ideas and concepts. In relation to this research question, the term practices refers to the way a student goes about completing their

work and it can include influences, ideas, materials, tools and skills.

This study looks at the role of field trips on the previous two terms: creativity and practices. Krepel and Duvall (1981) define a field trip as “a trip arranged by the school and undertaken for educational purposes.” A field trip involves the students visiting places that should enhance their own work and understanding. Sorrentino and Bell proposed another useful definition: “A field trip, by definition, is any journey taken under the auspices of the school for educational purposes” (Sorrentino and Bell, 1970). On the whole, students are removed from their classroom (their normal learning environment) and taken to another location for a day or designated period of time. These field trips enable students to witness a real life location and view their topic/subject of learning within the everyday context and these visits enable students to gain knowledge and perhaps a different perspective on their topic.

Michie examined factors that affected whether secondary science teachers organised and conducted field trips. Michie interviewed 28 secondary science teachers to determine the influences on those teachers. The interviews were evaluated using an interpretivist methodology. These interviews revealed conclusively that the field trips were invaluable for the students’ cognitive, affective and social development. Michie stated there were a number of advantages, which can be gained from field trips, based on the opinion of teachers. These included the opportunity for real-world experiences; enhancing the quality of education; providing teachers with opportunities for cooperative learning and improving the socialisation between students and also teachers/students (Michie, 1998).

A survey tool entitled ‘Field TRIP’ (Teacher Resources Interest Project) was administered to 843 elementary teachers. There was a 69.4% return rate and the results suggested that teachers that were personally familiar with a certain science facility were more likely to take a group of students to this site. Teachers who believed that these trips provided cognitive, social or affective value tended to offer more class/field visits. In addition, science teachers who relied heavily on textbooks for teaching seemed to have less effective strategies for field trips (Lessow, 1990).

However, a recent survey by the American Association of School Administrators found that more than 50% of schools abolished their planned field trips in the school year 2010-2011. The University of Arkansas commissioned research into this worrying trend and they found that teachers with over 15 years of experience were more likely to believe that the purpose of a field trip is to learn whereas younger teachers thought the main purpose of a trip was

‘enjoyment’. This study by the University of Arkansas also discovered that field trips contribute to the development of student’s critical thinking skills and increase their knowledge of Art and culture. Therefore, these trips should be implemented and maintained in schools across the globe (Greene et al., 2013).

Students do seem to benefit from the learning experiences that occur outside the classroom and another key researcher into the area of field trips is Patrick. Patrick, 2010, proposed that field trips should be weaved into the teaching schedule as this will provide an opportunity for students to view information for themselves and use their own senses to touch, or feel materials that they had previously only heard about (Patrick, 2010). This immediacy and accessibility is a key feature of field trips and one of its redeeming features. Leaving the school premises is a social experience and one, which provides a change of tempo and scenery for students.

Patrick’s study considered the effects of field experiences on students’ knowledge in relation to their science achievement, in particular biology. Patrick’s sample consisted of a total of 100 biology students. Patrick found that there was a significant difference in test scores between the students that had participated in field trip experiences and those who were not included on field trips. Patrick concluded that these field trip experiences significantly improved the students’ understanding of science and also improved their motivation/attitude towards the subject. This subsequently influenced and increased their overall achievement in biology (Patrick, 2010). Therefore, results indicate that science field trips can enhance learning and motivate students. However, can this be applied to the subject of art education?

Art education encourages each student to express themes, emotions and ideas about the seen and unseen elements in an environment (Jody, 1997: Alhila, 2002). Art education provides an outlet for imagination and creativity. Art is simultaneously an artistic and mental activity, which encourages the creative abilities of each student and helps them to structure their ideas and to produce fine art and/or beautiful conceptual designs. Art education is taught in schools in Sudan at all levels. The art curriculum in Sudan consists of four strands. These include: Developing Practical Knowledge in The Visual Arts, Developing Ideas in The Visual Arts, Communicating and Interpreting in The Visual Arts and Understanding The Visual Arts in Context. Nowadays, schools seem to be focused on strict rules of the transmission of art within the curriculum, which can affect the students’ natural and creative motivation. The student needs to develop their own creativity and often the art classroom/curriculum can be limiting or inhibiting.

The government of Sudan has realized the significance of arts education and therefore the need for support and implementation of new tools/techniques to develop creativity. Recent educational research was focused on the need to develop effective ways to raise the standards in education in Sudan and also the level of student achievement (Alton-Lee, 2003; Timperley, 2004; Hattie, 2005; Holmes and Tozer, 2005). Some of the principles of quality education can be applied to arts education. In relation to this study, a key principle is the relevance of the teaching content in relation to the social and cultural environment. Reid and Petocz (2004) concluded that creative thinking in relation to education is seen as a “component of the environment”. Furthermore, the natural environment should be utilized as and when possible to create enjoyable and fulfilling learning opportunities.

Previous research has highlighted the link between creativity and the natural world. For example, Mayer et al., (2009) considered the reason why nature can be beneficial to creation. In all three of their studies they discovered that exposure to the natural world enhanced the positive emotions of the participant as well as increasing their attention, motivation and the way they meditate and problem-solve. Alawad examined natural sound and whether this could be of benefit to the art classroom environment. She considered whether natural sound could foster creativity. This study found that natural sound in the art classroom enhanced students' creativity and raised students' marks in their art tasks (Alawad, 2012). Therefore, looking to the natural locations for field trips, such as a desert and outside space could stimulate a student's creativity and thirst for knowledge. This study will explore the role of field trips within the art curriculum. In particular, it will consider if field trips positively affect students' creative thinking and practices in art tasks.

Importance of the study:

1. According to the researcher's knowledge, there is a lack of studies in the field of creative thinking and practices in arts education. This encouraged the researcher to conduct this study.

2. The researcher is expecting that the results of this study will be of great help to the Ministry of Education in the preparation of curricula and teaching methods as well as improving creative thinking on the educational process.

3. The study will provide teachers with an effective strategy to develop their performance and advance the currently used teaching methods.

4. The researcher predicts that this study will encourage further studies designed to develop different strategies in the field of arts education.

Objectives of the Study:

1. To identify the impact of field trips on students' creative thinking and practices in arts education.

2. To develop the means and methods to ensure the development of student's skills and knowledge, and to identify aesthetics of Islamic arts.

3. Introduce new methods that help students develop their creative thinking performance.

2. Methodology:

The study sample consisted of two classes each consisting of 30 students. Therefore, a total of 60 female students in the third level, for the academic years (2011 – 2012) from Rofaidah basic school level of the African Council schools in Khartoum - Republic of the Sudan. The researcher took 30 students (the experimental group) on two separate field trips to the desert and a museum. The field trips were each a day in length. The students in this group were also given art materials and supplementary material prior to each trip. The control group of students (30 students) was not taken on these trips. The level of randomization was done at the classroom, not the student level. Each class was randomly allocated to each group. Each student, from both groups, was then given a task to undertake. The task was marked out of 10 marks. The task was chosen as a valid measure of critical thinking. A teacher from the school that was not directly involved in researching this project marked the task work. Therefore, the marker was unaware of whether the students were in the experimental or control groups. The breakdown of marks is as follows:

- Idea: the originality of idea (3 marks).
- Colour: choice of colour and the use of primary, secondary and tertiary (2 marks).
- Value: lightness or darkness of an item within a work of art (1 mark).
- Application: accuracy of artwork painting (2 marks).
- Finishing off the artwork: originality of ideas such as adding elements to the artwork to give a more interesting appearance (2 marks).

A comparison of students' marks achieved with experimental and control group test revealed that the experimental group performed significantly higher than the control group on the task's criteria. Inter-rater reliability was used to ensure the results/markings was consistent across the two groups.

3. Results:

The marking of art projects was scored out of ten marks. All students obtained marks of between 5 and 10 out of a possible ten marks. Table 1 summarized the mean of marks obtained by test (and controlled groups, it revealed that it was (8.0) and (6.8) respectively, which indicated an increase of (1.2) in the mean students' obtained marks. Figure 1 illustrates

the distribution of obtained marks amongst test and controlled groups. The collected data were statistically analyzed by t-test using version 20, SPSS Inc., the performed statistical test revealed that the P-value

($P=0.002$) which represents that there is a high statistically significant difference in the comparison of students' marks achieved by test and controlled group.

Table 1: Students' marks for test and controlled groups

Marks	5	6	7	8	9	10	Mean	±Standard Deviation
	Frequency							
Test Group	1	4	6	6	8	5	8.0	1.4
Control Group	6	9	5	2	5	2	6.8	1.6

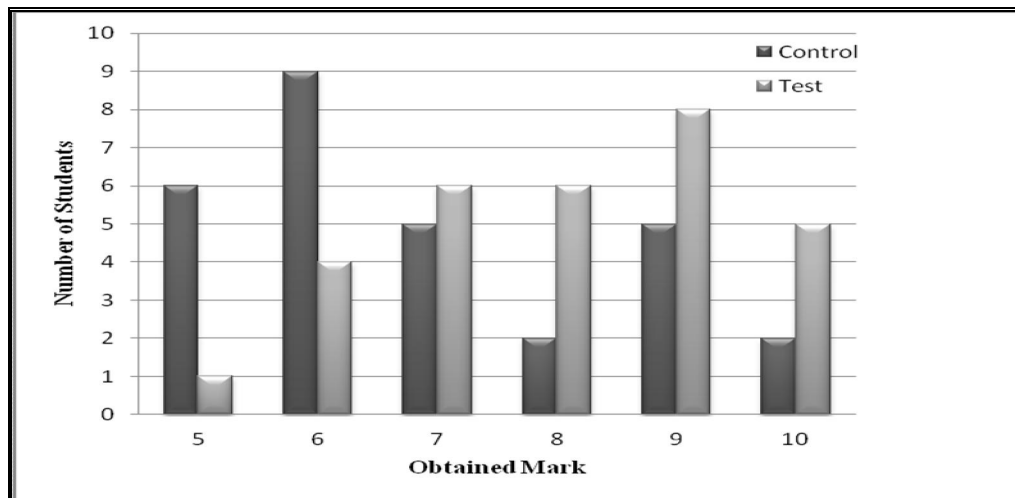


Figure 1: Distribution of obtained marks among test and controlled groups

4. Discussion

The results revealed that that the experimental group performed significantly higher than the control group on the art task's criteria. Therefore, it could be argued that the field trips assisted the students within the experimental group, boosting their creativity and thinking skills. Subsequently, based on these findings the researchers advise that schools/colleges must consider providing more field trips for art students and more opportunities to view real-life examples of the topics they are studying. These trips should be weaved into the curriculum as the results of this study indicate that these visits are invaluable to learning and the development of creativity. These results concur with Reid and Petocz's proposal that creative thinking in relation to education is seen as a "component of the environment" (Reid and Petocz, 2004). However, it may be that these results may not be generalizable beyond the context of this particular study.

The researcher chose this sample of students and the specific age group, 8 years of age, for a particular reason. This is because at this age the child's character is being formed. He/she is mentally and socially mature and this will reflect through his/her art expression, where we can see the drawing at this stage is more spontaneous and free. This age group is

beginning to actively embrace art and their creative thinking is emerging.

According to the researcher's knowledge this study is one of the first studies that considers the development of creativity in Sudan arts education. In particular, this study should assist the government and planners in the arts education field in Sudan. This study supports Patrick's 2010 proposal that field trips should be incorporated into the teaching schedule as this will provide an opportunity for students to view information for themselves and use their own senses to touch, or feel materials that they had previously only heard about (Patrick, 2010). This immediacy and accessibility is a key feature of field trips and one of its redeeming features. Teachers play a crucial role in nurturing and stimulating creativity and interest for their subject amongst the students.

Recent research has indicated the emergence of virtual field trips and how this can provide an opportunity to solve real life problems in a safe and controlled environment. Peat and Taylor indicate that a virtual space avoids the pitfalls and potential hazards of a real world trip and do not require a safety assessment before undertaking (Peat and Taylor, 2005). Furthermore, programs allow people to interact through the Internet and communicate with others.

These types of virtual worlds could also be employed as a tool to develop creativity within art education (Prestridge *et al.*, 2006).

Practical recommendations from this research include the need to establish more opportunities for field trips within the current curriculum as the findings revealed that students' creativity was enhanced by these visits. Using this study as a benchmark should enable curriculum development to be effectively geared towards further visits and practical trips that could help develop innovative skills and creative thinking of each student. It would be interesting to consider if it was a particular field trip e.g. the desert or the museum which was deemed significant. Alternatively, it may just be going on field trips in general which is beneficial.

Case studies and recent research has found that arts education can make a significant contribution to the total education of children. It can impact their attitude to learning, perceptions of learning and motivation. Creativity is a skill that employers think worthwhile in their potential employees. Therefore, it is fundamental that schools recognise these findings and support each teachers' use of these field trips to facilitate achievement of learning outcomes throughout the curriculum. The researchers hope that this method of incorporating more field trips within the art curriculum could be widely applied in classroom practice and ultimately challenge current pedagogical practices.

Conclusion:

It was concluded that field trips to natural and industrial locations were a beneficial learning aid and a means of fostering students' creativity and practices in art education. This assertion is based on the fact that after experiencing two field trips the experimental group's scores were significantly higher in comparison to the control group. A field trip can motivate and enrich students' learning opportunities as they experience the natural environment, which can then impart inspiration and significantly enhance a student's creativity, motivation and attitude towards the subject of art. The contribution to new knowledge in this study included the development of advice for all participants working within and related to the field of education and in particular art education. The researchers recommended that educational field trips should be included in the art curriculum wherever possible.

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