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History Of Learning Interesting Using The Visual Art Approach

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ABSTRACT

Teachers' and students' perspectives on the value of visual arts in the classroom were explored using a mixed-methods qualitative and quantitative study approach. An online survey administered to students and faculty at an international school in Malaysia provided the information needed for this study. The researchers determined that children were inspired to study science when they were exposed to visual arts. Literature evaluations by other educators provided further support for the study's findings. The research concluded that the learning of science alone does not stimulate or improve children's mental and physical development, but that the addition of visual arts does help. The results also showed that practically all educators and students viewed the use of visual arts in scientific classes favorably. Students' attitudes toward science improved when teachers let them to use whatever artistic medium they wanted to document their newfound knowledge. In addition, educators have shown that using visual arts to teach science inspires children to do better. The conclusion reached is that the visual arts contribute to the scientific education of students.

Keywords: History, Learning, Interesting, Visual Art and Education.

INTRODUCTION

Since the 1980s, the educational system as it is now implemented has undergone extensive reform (Tsimboukidou, 2010) for the benefit of all students. There have been many shifts, but one that has shown significant benefits on children's learning capacities and school performance is the incorporation of visual arts into their academics (Gelineau, 2011). Art has been around since prehistoric times, when cave paintings depicting tales were drawn and colored using natural pigments (Dickinson, 2005). Having experience in the visual arts is beneficial because it provides a different lens through which to see and comprehend the world (Mcdougall et al., 2011). Young children may begin to investigate, invent, and create what they see via the many visual arts aspects. That's why "the arts make a contribution to education that reaches beyond their intrinsic value as direct forms of thinking," as the saying goes.

Educational authorities have emphasized the integration of visual arts with other courses like mathematics, physics, geography, and history because of the significant impact visual arts has demonstrated throughout the years on children's growth (Nunan, 2009). Since "the essence of art and science is discovery," as Alberts (2010:1) puts it, "art and science are intrinsically linked." Arts are main sources of material with which to participate in scientific thought, as agreed upon by Shlain (2007, referenced in Gelineau, 2011:9). In addition, they link different areas of thought, which might lead to unexpected discoveries. Children's cognitive development is aided by exposure to the visual arts. Therefore, the importance of the arts and sciences in the classroom is discussed.

Students at Inner City Arts immediately launched into a debate on texture, or textura in Spanish. By rapidly rubbing her pencil at an angle, their art teacher picked up the features of an item placed under a sheet of vellum paper, demonstrating how to capture varied textures. The children were mesmerized as she used the floor and her shoes to create a variety of patterns on the paper. Because intricate patterns would suddenly form on the paper, the pupils thought this was a magical process. The kids did rubbings of the things on the tables when it was their time, and then moved on to the pencil sharpeners, the computer, and the metal partition. When the teacher threw open the classroom doors, the kids poured out into the courtyard, which had a fountain, ceramic tiles produced by other pupils, and palm and lemon trees. Magically catching the most intriguing phrases and patterns they came across, they raced from tree to tile. It was an age of discovery. The students were ecstatic to see textured patterns on previously thought smooth surfaces. The kids eventually utilized their papers to cooperatively build a three-dimensional cityscape, after filling the square pieces of vellum totally with gray pencil rubbings, producing collages of discovered textures. One of the kids commented after seeing the finished work, "I believe in art now.".

Children may learn to control the paintbrush and uncover the secrets of the artistic process as they engage in the creative process. Learning to be creative over time requires students to assimilate information about both their own and their instructors' techniques, their own intentions, the public character of classroom art-making, and the significance of both positive and negative feedback from their classmates and teachers. Children may react more actively and intensely in the art studio than in the classroom to these types of demands, but they may also be present in other learning environments. The reaction may be an example of what Abelson called "hot cognition" (1963), the idea that all experiences include both thinking and feeling, and that these two aspects mutually influence and color one another. Students' perceptions of themselves and their futures are examined in connection to their exposure to a rigorous visual arts curriculum.

LIETERATURE REVIEW

Dhanapal, saroja & kanapathy, r. & mastan, j.. (2014). The purpose of this study was to gain insight into how third-grade educators and students conceptualize and use visual arts in their scientific lessons. Teachers' and students' perspectives on the value of visual arts in the classroom were explored using a mixed-methods qualitative and quantitative study approach. An online survey administered to students and faculty at an international school in Malaysia provided the information needed for this study. The researchers determined that children were inspired to study science when they were exposed to visual arts. Literature evaluations by other educators provided further support for the study's findings. The research concluded that the learning of science alone does not stimulate or improve children's mental and physical development, but that the addition of visual arts does help. The results also showed that practically all educators and students viewed the use of visual arts in scientific classes favorably. Students' attitudes toward science improved when teachers let them to use whatever artistic medium they wanted to document their newfound knowledge. In addition, educators have shown that using visual arts to teach science inspires children to do better. Finally, we conclude that the visual arts contribute to the success of scientific education. Researchers argue that include visual arts in science classes at all grade levels will help students acquire the critical thinking and problem-solving skills necessary to thrive in the modern world.

Zuzana pechova (2020). In 2016, faculty members from the Czech Republic's Department of Primary Education conducted an independent research project to define and investigate the characteristics and approaches to art mediation as an educative approach to facilitate the understanding and experience of art in extracurricular field trips and school outreach programs. The theoretical foundation for the empirical findings is presented in this work. The researchers employed semi-structured interviews as a qualitative research approach to get information from experts in various clubs and organizations. The purpose of this study was to use a research design based on data gathered from six in-depth interviews to gain a comprehensive understanding of the contemporary concept of visual art in light of extracurricular school programs and their pedagogical potential. The approach of open-coding analysis utilized here provides a broad overview of the subject. Because of this, the rationale for and strategy for bringing artistic mediation into classrooms from the broader community will be very evident.

Lisa rendely (2016) This Master of Education thesis explored the issue, "How can educators theoretically and practically utilize arts-integrated instruction to enliven their students' learning of historical content?" I asked three history instructors about their experiences incorporating visual art into their lessons via semi-structured interviews. Art, architecture, and artifacts were employed as historical texts that students deciphered in order to gain insight into the values

and beliefs of the era in which they were created. Teachers also encouraged students to produce original works of art that reflect the ideas and information they gained from studying a certain time period, historical event, or people. Teachers were able to better introduce pupils to the historical period, setting, themes, and concepts they were studying by using visual art. Teachers said that using this method with their pupils led to increased critical thinking, collaboration, risk-taking, and interest in the historical analysis and creation processes. The results suggested ways in which both aspiring and practicing educators may use similar tactics in their own classrooms to better engage and inform their students about historical topics.

Saroja dhanapal, ravi kanapathy, jamilah mastan, (2014) The purpose of this study was to gain insight into how third-grade educators and students conceptualize and use visual arts in their scientific lessons. Teachers' and students' perspectives on the value of visual arts in the classroom were explored using a mixed-methods qualitative and quantitative study approach. An online survey administered to students and faculty at an international school in Malaysia provided the information needed for this study. The researchers determined that children were inspired to study science when they were exposed to visual arts. Literature evaluations by other educators provided further support for the study's findings. The research concluded that the learning of science alone does not stimulate or improve children's mental and physical development, but that the addition of visual arts does help. The results also showed that practically all educators and students viewed the use of visual arts in scientific classes favorably. Students' attitudes toward science improved when teachers let them to use whatever artistic medium they wanted to document their newfound knowledge. In addition, educators have shown that using visual arts to teach science inspires children to do better. Finally, we conclude that the visual arts contribute to the success of scientific education. Researchers argue that include visual arts in science classes at all grade levels will help students acquire the critical thinking and problem-solving skills necessary to thrive in the modern world.

Erim, gonca. (2020). The purpose of this research is to better understand how seventh graders respond to visual arts instructors who include parts of popular culture into their lessons. One of the qualitative research strategies used in the study was the multiple-case design to achieve this goal. Eleven secondary school art educators from Turkey's Bursa province's central regions participated in the research. Two interview forms and a document review were utilized as the data collectors. The results were analyzed using a thematic framework, and were assembled with "student implications" as the overarching subject. The findings of the study revealed that both the students' attitudes regarding the course and their use of popular culture references in the visual arts class varied. It might be argued

that the most important of these variations were those that piqued students' interest, encouraged their involvement, and aided their understanding.

THE HISTORY OF VISUAL ARTS

The visual arts have a long and storied history. Western Indian Buddhist and Jain writings from the 11th and 12th centuries have some of the first instances of miniature painting in India.

During the 15th century, the western art style was inspired by the Persian art style. The Kalpa sutra manuscripts' borders include depictions of hunters and various face kinds.

The development of the Mughal school of painting was a watershed moment in the evolution of visual art. Bijapur, Golconda, and Ahmednagar were the centers of Mughal-style art in the 16th and 17th centuries. Mughal art flourished, and its impact could be seen in the next years (17th and 18th).

Traditions, civilizations, religious texts, epics, and folklore were given more weight in the visual art of central India's Pahari and Rajasthani area. From the latter part of the 17th century until around the middle of the 19th century, they were quite fashionable.

The art of the period shows the influence of European commerce and rulers on India and their ideals and views. The artists were inspired to provide a fresh perspective on India. As a result, new trends emerged in Indian painting. During and during India's colonial era, the country gave rise to two distinct types of visual art: Imperial art and Indian art.

TEACHERS' PERCEPTIONS ON THE INCORPORATION OF VISUAL ARTS IN SCIENCE LESSONS

The results of the teachers' survey are shown in Table 1. The findings indicate that instructors of third grade have favorable attitudes toward and an appropriate grasp of the intersection of science and the visual arts. Table 1 displays the results of Section A of the teacher survey.

Questions	Teacher A	Teacher B	Teacher C	Teacher D
Question 1: What are the most important learning outcomes in	Knowledge to analyse and predict the	To know the concept of science topics	Understand the scientific concepts being	To be able to understand and apply essential

Science?	outcome.		taught and how to apply it to solve problems.	skills and techniques of various topics with connection of our real life.
Question 2 What are the most important learning outcomes in Visual Arts?	To be creative and think out of the box to develop thinking skills.	To be able to use different elements of visual arts through other subjects.	How to express your feelings using art.	To master and create meaningful pieces of artwork of different designs, patterns and colours.
Question 3 Do you think it is useful to integrate the different strands of Visual Arts into Science? Why?	Yes, possible to include some since both subjects need development of thinking skills.	Yes, they will understand the topic. They seem also to be more interested.	Yes, because it helps them in visualizing their science concepts and processes to understand better.	Yes, because it creates an open learning whereby students are able to express and experiment many things.
Question 4 Based on your personal observation, what do you think interests students the most during their Science	The experiments & hands-on practical.	The experiments that we conduct in classes.	The applications of science concepts in everyday through experiments and	Hands-on activity

lessons?			observation.	
Question 5 As a Science teacher, have you used any Visual Arts' strands such as drawing, painting or colouring, printing,	Yes, using different materials to learn about buildings & making them stable.	Yes I do all the time. There was once we did a diorama.	Yes, the students were involved in construction making for the unit of inquiry.	Yes, creating different life cycle of animals in a paper plate and draw/illustrate the famous Eiffel
using clay, construction making or using fabric and fiber in any of your Science lessons? If yes, please give an example.				Tower on drawing blocks.
Question 6 How often	Quite often	Quite often	Quite often in	Frequently
do you use Visual Arts'			their unit of	
strands in your lessons?			inquiry and	
			science lessons.	

The participants were first tasked with enumerating the scientific and artistic goals of their education. Researchers were able to get a sense of how well instructors understood the material they were covering and incorporating into their classes thanks to this. The participants' list of scientific learning goals included the expectation that students will use their "knowledge to analyze and predict the outcome." Furthermore, as stated by Instructor C, it is expected that students would "grasp the underlying scientific concepts and be able to apply this knowledge to solve problems." The ability to solve problems is an essential skill for today's young students to acquire (DfE, 2012). The Department of Education (2012) identifies scientific inquiry and the use of "a range of scientific methods and techniques to develop and test ideas and explanations" as two of the most important processes for all pupils in Key Stage 2. In his lesson plan, Teacher D emphasized the need of having students "understand and apply essential skills

and techniques of various topics with connection to our real life." Devereux (2007:5) cites Reis's definition of science as "a body of knowledge about the world" as evidence that this is true. Instead of just remembering facts, it's crucial that kids at an early age acquire a conceptual grasp of science that they can use in the actual world. The Department of Education (2012) curricular options also promotes studying science via real-world exemplars, such as engaging people in actual life events or providing lesson material in multiple settings.

The samples included scientific instructors, but all participants were familiar with the results of art education. Teacher D emphasized the importance of pupils being able to "master and create meaningful pieces of artwork of different designs, patterns, and colors." Teacher C chimed in that via exposure to the arts, pupils develop the ability to articulate their inner experiences. Overall, classroom instructors value visual arts because they encourage students to think beyond the box. Dobbs agrees, stating, "the study of art promotes attention to perception and expression, and thus contributes to the building of language and communication, critical thinking, and problem-solving skills" (1998:9).

According to the study's findings, all participating educators agree that visual arts may enrich students' understanding of scientific concepts. D's observation was that allowing pupils to explore and analyze scientific issues via any artistic medium promotes open learning. According to the findings of this research, all educators use visual arts practices like drawing, painting, or coloring; printing; using clay; creating their own constructions; or working with fabric and fiber into their scientific lectures. Teachers said that students showed more interest in science when they were able to conduct experiments and participate in hands-on activities during class. Science is a subject where student interest in using visual aids to promote and explain learning has been noted by Teacher A. 'In drawing, painting, creating, and inventing, the child assimilates and reacts to experience and strives to make sense of it,' as stated in the Primary School Curriculum published by the National Council for Curriculum and Assessment. (1999:11). This learning objective is also attained when instructors guarantee that their students "explore and develop ideas" and "evaluate and develop work" as part of the "investigating and making" process. This procedure has to be based on "knowledge and understanding." (DfE, 2011). Teachers allow students to ask questions and investigate concepts, and then they have students produce or take part in hands-on activities designed to get their brains working in new ways. Teachers who took part in the study agreed that students of all backgrounds benefit from having scientific ideas and procedures presented visually.

Students' perception on the incorporation of visual arts in science lessons

To collect the information needed to respond to the second study question—"What are students' perceptions on the incorporation of visual arts in the teaching

and learning of science?"—another survey questionnaire was developed and administered. The results of the students' survey are shown in Table 2. The primary purpose of the survey was to learn how they felt about using art in their scientific classes.

Table 2. Students' perceptions on science lesson using visual arts

Question	Yes (%)	No (%)
Do you enjoy doing Visual Arts such as drawing, colouring, painting or using clay?	100	0
Do you enjoy your Science lessons?	97	3
Are you happy with the activities in your Science lessons?	100	0
Do you like to work in groups with your other classmates?	90	10
Do you enjoy making 3D models for your Science topics?	94	6
Do you like it when your teacher allows you to draw something for your Science topic?	97	3
Do you think it is fun to learn Science through Visual Arts?	77	23
Did you like today's Science lesson?	94	6

Results demonstrate that, in contrast to the 97% who preferred their scientific classes, 100% of students preferred their visual arts classes. The children were pleased with the scientific classes since they were able to demonstrate their understanding via visual means. While most students (77%) found learning science via visual arts to be enjoyable, 23% did not. Ten percent or fewer of students expressed disinterest in creating 3D models or drawing graphics related to their scientific courses. The researchers who observed classes found that instructors accommodate these pupils by placing them alongside individuals who excel at visual arts education. The findings, however, reveal that 10% of students did not like group work. Table 2 also reveals that all students value visual arts education highly. Some people have said that art classes are enjoyable and informative, while others see them as just another required subject for graduation. In addition, as one student put it, "it helps us to explain the drawing." Except for two, all of the students who took part in the study were enthusiastic about the way visual arts enhanced their understanding of scientific concepts. Researchers have found that having students sketch, construct, and build models as part of their scientific education makes the topic more engaging and enjoyable. Students described ways in which their science instructor had blended visual arts into instruction. Making dioramas of environments, sketching organisms and their processes, and building 3D models of man-made buildings are all examples.

Students' motivation when visual arts are used in the science classroom

The researchers were able to answer the study's final question, "How does the use of visual arts motivate students to learn science?" using the classroom observation approach. The findings demonstrate that students are more motivated to study and comprehend difficult scientific concepts when visual arts are included into the classroom setting. Dickinson, who argues that "the arts are an incredible tool for 'ratcheting up' the quality of work and standards in a school," backs up this idea (2005:4). Teachers that took part in this research agree that their pupils are more motivated to try and finish assignments on time. They found great benefit in engaging with many visual art forms, particularly sketching. This is backed by the research of Perin (1994), who shows that allocating 25% or more of a student's time to the arts has positive consequences.

To corroborate the information gleaned from the surveys, the researchers also watched two of the four third-grade classrooms. In Classroom A, students learned about the stages of an insect's life cycle, while in Classroom B, students studied the anatomy of a flower. The professors began each class by projecting pertinent graphics onto a screen, after which they facilitated a conversation on the day's subject with the students. All of the children were able to participate actively by answering questions and passing on what they had learned. Teachers were able to gauge their pupils' levels of familiarity with the topic at hand before assigning any work. Teachers communicated expectations clearly and consistently, with an equal emphasis on the significance of demonstrating knowledge via the students' own unique creative expression.

Both sets of children were enthusiastic about their scientific projects, which included drawing the life cycles of insects and flowers, respectively. They had a great time chatting with one another while they colored and drew in their groups. Drawings in Class A were colored with pencils and markers, while those in Class B were colored with paint and crayons. Scientists found that students were more motivated to understand a difficult scientific idea when visual arts were included into the classroom. The class in Room A was instructed to give oral presentations of their final projects to the rest of the class as a culminating activity. All the students were able to give impressive presentations because to the images, which helped them go through each stage of the life cycle.

During their classroom observations, the researchers found an encouraging atmosphere for teaching and learning. They watched how the pupils reacted to the assignment they were given during the scientific class. Some of the pupils really cheered when told to visually represent their comprehension of the topic at hand in science. Good job's and excellent's were among the many words used by both classroom instructors to boost their students' spirits and keep them motivated. As a result, several students demonstrated a desire to study and an

intention to do well on the assignment. When professors demonstrated genuine interest in each student's creative expression and promoted higher levels of both spontaneity and risk-taking, student participation rose. The study participants' confidence levels increased when they were allowed to choose the visual art medium most appealing to them. This is consistent with the results of a research by Jensen (2002), which were quoted by Riley (2012), showing that students' attendance increased when they came to school with an interest in learning and a desire to develop their skills. Teacher feedback was solicited to supplement the data from the researchers' classroom observations, which focused on how engaged the children were throughout instruction. The results from the educators are shown in Table 3.

Table 3. Teachers observation of students' motivation level

Questions	Teacher A	Teacher B	Teacher C	Teacher D
Question 1: What arethe most important learning outcomes in Science?	Knowledge to analyse and predict the outcome.	To know the concept of science topics	Understand the scientific concepts being taught and howto apply it to solve problems.	To be able to understand and apply essential skills and techniques of various topics with connection of our real life.
Question 2 What arethe most important learning outcomes inVisual Arts?	To be creative and think out of the box to develop thinkingskills.	To be able to use different elements of visual arts through other subjects.	How to expressyour feelings using art.	To master and create meaningful pieces of artwork of different designs, patterns and colours.
Question 3 Do you think it is useful to integrate the differentstrands of Visual Artsinto Science? Why?	Yes, possible toinclude some since both subjects need development ofthinking skills.	Yes, they will understand the topic. They seem also to be more interested.	Yes, because it helps them in visualizing theirscience conceptsand processes to understand	Yes, because it creates an open learning whereby students are able to express and experiment many
			better.	things.

Question 4 Based onyour personal observation, what doyou think interests students the most during their Science lessons?	The experiments& hands-on practical.	The experiments thatwe conduct in classes.	The applicationsof science concepts in everyday through experiments and observation.	Hands-on activity
Question 5 As a Science teacher, have you used any Visual Arts' strands such as drawing, painting or colouring, printing, using clay, construction making or using fabric and fiber in any of yourScience lessons? If yes, please give an example.	Yes, using different materials to learnabout buildings & making them stable.	Yes I do all the time. There was once we did a diorama.	Yes, the studentswere involved in construction making for the unit of inquiry.	Yes, creating different life cycleof animals in a paper plate and draw/illustrate thefamous Eiffel Tower on drawingblocks.
Question 6 How often do you use Visual Arts'strands in your lessons?	Quite often	Quite often	Quite often in their unit of inquiry and science lessons.	Frequently

Teacher A emphasizes that pupils would rather use pictures and simple explanations than complex prose. This is consistent with prior study showing that "drawing the content of science, geography, and social studies lessons resulted in noticeable differences in speed of learning and retention" (Brooke, 1997, quoted in Dickinson, 2005:9). Teachers have found that when visual arts are included into a topic area, not only do students become more actively engaged and learn during sessions, but they are also more driven to study that area. Every educator who took part in the survey felt that students were more interested in science when visual arts were included in the classroom. After incorporating visual arts into their scientific lectures, instructors saw a variety of improvements in students' abilities. Among them include learning to think creatively, communicating effectively, seeing things in the actual world, and organizing and evaluating information.

Teacher B emphasized the enhancement of students' communication abilities after visual arts integration activities, such as model construction. This result is consistent with those of other studies. The Department of Education (2012) noted, for instance, that students may make connections and provide explanations for scientific concepts by using very simple models and frameworks. Arts education, according to the Department of Education (2012), allows students to "examine and communicate learning." The instructors think that the pupils will benefit from incorporating visual arts into their scientific classes. Teachers' and students' favorable reactions to using art as a teaching tool for science demonstrate the effectiveness of this approach. Teacher A notes that the students will "draw diagrams to predict the outcomes and draft and plan the experiment." Freedman (2003) argues that children who are taught to express themselves creatively in response to their environment and social context develop a deeper appreciation for those cultures. The data gathering methods used by the researchers yielded unambiguous findings. The results demonstrate that when students were given the chance to use various visual arts aspects to represent their understanding of science, they made significant gains in both academic and cognitive abilities. The results also showed that students and educators have optimistic perspectives about this amalgamation, and that students' enthusiasm to study science is increased when visual arts are included.

CONCLUSION

The primary goal of this study was to investigate how educators and students feel about using art as a learning tool in the scientific classroom. The study also looked at the role of visual arts in inspiring pupils. Children are most prepared for life in the 21st century if they are exposed to both the visual arts and science (Alberts, 2010). Educationists are always reevaluating the educational system and the methods of teaching and learning that are put into practice in light of the rising need for competent persons. Teaching and studying science in an integrated way helps children grow intellectually, emotionally, socially, and behaviorally. This study's results show that students learn and retain information better when they are given chances to engage in active learning that allow them some degree of autonomy while using components of the visual arts. Teachers often adjust their lessons to better suit the needs of their students. Teacher perspectives reveal that when visual arts are included into scientific classes, students are more motivated to finish their assignments on time, making teaching and learning simpler for everyone involved. Teachers have a favorable impression of visual arts because they have seen their students' creativity, expressiveness, and critical thinking improve because to their use of these tools. Students' enjoyment of studying both visual arts and science is reflected in the study's findings, suggesting that they have good attitudes regarding the integration of the two disciplines.

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