Visual Art Education Innovative Learning and Teaching Approach in Secondary School

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ABSTRACT

Learning and teaching in the 21st century have undergone tremendous process due to technological impact on the students and their learning process. The main purpose of this study is to review two academic articles regarding the issue and discussion brought about innovative learning in Visual Art Education subjects in secondary schools in Malaysia. In detail, the articles discussed the uses of technology and gamification methods to enhance the teaching and learning of Visual Art Education, particularly within the secondary school context. Therefore, the articles were chosen based on criteria that were published from 2019 until 2021, and the background of the articles covered the study in Malaysia. Contrary to what has often been assumed, the findings demonstrate that creative and innovative approaches are much more beneficial compared to conventional learning and teaching in school, thus bringing upon research centred in innovative learning around gamification that has emerged as a powerful platform for education making it more fun and effective.

Keywords: *Innovative learning, Visual Art Education, Secondary school, Technology, Gamification*

INTRODUCTION

21st-century education requires a creative and innovative approach to learning and teaching, far apart from a conventional approach that depends on teachers and textbooks. The educational system nowadays should empower learners with skills, competence, and adaptability in a constantly changing landscape. Hence, the learning and teaching approach should equip with a 21st-century mindset and associate pedagogical innovation as it is an approach that focuses on developing students' creativity, and confidence, encouraging indention, and fostering active problem-solving (Saavedra & Opfer, 2012).

The emergence of new technology has reshaped the field of education and made the learning process more enjoyable (Raja and Nagasubramani, 2018). The use of technologies such as videos, digital

cameras, projectors, software, and PowerPoint has come aboard in ICT use to create new aspects of learning in education (Ebrahimi and Jiar, 2018). According to Richtel (2010), students nowadays face distractions and become unproductive, but cell phones and laptops are a constant pleasure-seeking that offers a new challenge to focus on learning. Although teachers can develop different kinds of learning environments, it is also essential to disseminate effective use of technology on a big scale for change (Agélii Genlott et al., 2019). An innovative approach is vast; hence this article review is conducted to explore a few approaches that are non-conventional in the context of Malaysia's schools.

An article review is a critical constructive analysis of the literature in a specific field through summary, classification, analysis, and comparison (Mayer, 2009). The process of conducting this article review is for the purpose of getting a clearer idea and picture of current trends and issues regarding technology utilised in the Visual Art Education subject in secondary school that was researched and discussed by the previous researcher. This review also ensures careful consideration in knowing the current trend that will enhance the knowledge about the topics in the context of Malaysia that will subsequently guide for future research.

RESEARCH METHODOLOGY

In this overview, the researcher reviewed articles within 2019-2021 published in journals and websites. The article search was applied to the following databases: Google Scholar and ResearchGate. The article selection is based on the inclusion criteria which is a non-conventional learning and teaching approach in Visual Art Education and research in the context of Malaysia. Non-conventional approaches are looking into adopting technology or games. Meanwhile, the exclusion criteria considered are the content of the references is outside of the scope of this study. The following figure shows the flowchart of the method of this study.

Figure 1. Flowchart of method

The article selection was organised in the following phrases:

1. Search for publications from online databases. The first search is the combination of keywords: “Visual Art Education”, “Technology”, and “Malaysia”
2. Limited the time frame of articles listed from 2019 to 2021
3. Exploration of title, abstract and keywords.
4. A complete reading of articles has not been eliminated – determining which are to be excluded from the review according to exclusion criteria.

The primary search generated 15,000 results of relevant references (articles, journals, and dissertations). After eliminating duplicates and articles that are not related to the review, 32 references

were identified. Then, 30 references are eliminated after further review due to being full dissertations, locked articles, and not fully relevant to the research area. Among the papers, the 2 articles were reviewed and included in the study (see Table 1).

Table 1. Relevant articles reviewed in the study

	First author	**Year published**	**Study location**	**Subject / sample**	**Method**
1	The Development and Evaluation of an Interactive Multimedia Module for the Topic of Art Elements of the Visual Art Education Subject				
	Harozila Ramli	2019	Fakulti Seni, Komputeran & Industri Kreatif, Universiti Pendidikan Sultan Idris	30 Form-One students (15 girls and 15 boys, with a mean age of 13) from secondary school in Temerloh, Pahang.	Develop interactive multimedia learning module (ADDIE Model)
					Evaluate effectiveness – Case Study (Pre-test post-test control group)
2	Integration of Theatre Game Approach in Visual Art Education at the Secondary School Setting				
	Mohd Zahuri Khairani	2020	Sultan Idris Education University, Malaysia & University of Malaya, Malaysia.	a) Students of Form 1 (Sekolah Menengah Kebangsaan Sultan Azlan Shah) b) 1 Visual Art Education teacher c) 1 Officer (Ministry of Education) d) 3 Lecturers	Case study – data collection method (Observation, interviews, and visual analysis)

FINDINGS

A total of 2 articles were chosen out of 32 found on primary search on Google Scholar which both have evaluated innovative approaches that can enhance learning and teaching while one article developed the technology to be applied and tested in their research. A study done by Harozila et al. (2019) evaluated the effectiveness of the interactive multimedia module through developing the module using the ADDIE model and testing it on 30 Form-One students. On the other hand, the study by Mohd Zahuri et al. (2020) explores the potential of theatre games to be integrated into Visual Art Education through a case study. The 2 articles are analysed through 5 classifications: objective, issues, process, results, and conclusion (see Table 2). The analysis shown in Table 2 is to derive the information and details in the article which will then be discussed in the discussion sector.

Table 2. Studies of the article reviewed

[1] The Development and Evaluation of an Interactive Multimedia Module for the Topic of Art Elements of the Visual Art Education Subject

Objective	a) Develop and design an interactive multimedia module for the topic Elements of Art of VAE subject. b) Evaluate the effectiveness of the module on students' learning performance.
Issues	The researchers are concerned about the lack of student participation in learning VAE. Hence, multimedia was chosen due to its benefit in improving student's motivation and learning performance.
Process	The researcher carried out the development stage in creating the multimedia interactive module using the ADDIE model (5 phases – analysis, design, development, implementation, and evaluation). The design of the learning module adopted several theatrical principles of behaviourism, cognitivism, and constructivism. After the module was developed, the evaluation was done through pre-test and post-test comprised of 50 multiple-choice questions distributed to two types of groups: experimental (using module) and control (using the conventional method).
Result	The results of the case study are reported through 3 tables: Percentage score of experimental groups, percentage score of a control group, and the result of t-test and descriptive statistics of the pre-test and post-test of both groups. For the experimental group, the higher percentage shows that the students understand more through learning using the module created while a slight decrease in the understanding of the students in the control group that is learning through the conventional method. The pre-test score analysed to show that both groups consist of the same learning intervention, however the post-test score analysed afterward clearly indicates that the interactive multimedia learning module is highly effective compared to the conventional method of learning.
Conclusion	The researcher concludes the study with firmly reasoning that a multimedia interactive learning module is a tool that can enhance learning efficacy through presenting and explaining the concepts in various formats such as animation, 3D graphics, or video. All individuals and organisations should try to incorporate technology into teaching culture which will become an integral part of teaching and learning.
[2] Integration of Theatre Game Approach in Visual Art Education at the Secondary School Setting	
Objective	To highlight the importance of theatre games in learning VAE
Issues	Theatre games in learning and teaching is a creative approach however the research in this area particularly visual art education is scarce and unfamiliar to individuals teaching and learning VAE.
Process	The theatre games employed are Improvisation, Atomic Exploding, Magic If, and Actor Toolbox after consulting and interviewing senior lecturers in theatre Education, participants (visual art teachers, students, a lecturer, and an officer from MOE). The researcher identifies the method of learning and teaching from the Lesson Plan provided by the Visual Art Teacher and information from document analysis. The data collected through the interview, observations, and documents are analysed through The Nested Model and characterised the data into 4 categories:

	objectives, questions, targets, and methods. The researcher also analyses the theatre games performance and learning behaviour.
Result	The result is shown in two sectors: suitability of integrating theatre games in VAE and integrated learning method-based theatre games in VAE for lower secondary students. First and foremost, data obtained about the theatre games were tested and justified that it corresponded well with learning and teaching activity. The theatre games also provided joy in learning and teaching workshops thus increasing student participation and deep learning outcomes. The second sector further discusses the integration of theatre games with firstly teachers have to adopt a role-play approach while implementing the theatre games and the student's enthusiastic participation is influenced by their teacher participation, theatre games, and themselves. Theatre games were also found to develop students as active learners and enhance their ability to express creative ideas freely. Moreover, the skills that consist within the theatre games are a basis for 21st-century skills and lifelong learning skills.
Conclusion	With proper planning, the approach of theatre games is beneficial for students and teachers can use various approaches that enable students to be active, engaged, and collaborative. Although theatre games resulted in more engaging learning, it is not widely adopted due to the limitation of art teachers: knowledge skills, practised time. Through theatre games, students were able to work together, enjoy and gain enhanced learning outcomes.

DISCUSSION

The study by Harozila et al. (2019) and Mohd Zahuri et al. (2020) has both done intensive research on the effectiveness and the impact of non-conventional approaches in VAE subjects within the context of secondary school in Malaysia. Harozila et al. (2019) has discussed earlier in the study where various researcher has to argue the potential and benefits of ICT in education (Maulan and Ibrahim, 2012, Hassan Mohd Ghazali, 2000, cited in Harozila et al., 2020) and visual art education (Gregory, 2009; Taylor, 2007; Loveless, 2003, cited in Harozila et al, 2020). Similarly, Mohd Zahuri et al.(2020) also considers the benefits of the gamification learning approach where in this case, theatre games can convert reality into new worlds, enable students to reflect and expand their imagination, and motivation for learning (Bany-Winters, 2012; Way, 1998; Landy and Montgomery, 2012, cited in Mohd Zahuri et al., 2020). Although beneficial as it is, the implemented approach has also been surrounded by issues, external or internal. Ramli has discussed the lack of technology would create an ineffective process (Harozila et al., 2019, cited in Harozila et al., 2020) while Mohd Zahuri et al.(2019) state that the theatre game approach is underexplored and can be challenging (Schonmann, 2006; Mayra, 2000, cited in Mohd Zahuri et al., 2020).

An innovative approach in education is the current trend of teaching and learning as it is unique and can be responsive to ever-changing conditions. As of now, the implementation, research, and discussion on any contemporary approach that can be input within education are increasing. Harozila et al. (2019) state that Malaysia has been focused on integrating ICT into the Visual Art Education Curriculum (VAEC) and Mohd Zahuri et al. (2020) discuss theatre games that can act as a stimulus and innovative approach for continuous learning. In fact, in the current period, education 4.0 requires innovation, much on student-centred learning, and a flexible approach that can revolutionise teaching and learning. The

potential of both approaches and their impact are clearly defined positively as the students are much more active in learning and motivated.

Furthermore, the pre-test and post-test conducted by Harozila et al. (2019) have been analysed and their results show an increased performance of the students who learn through interactive multimedia learning modules. Observations made by Mohd Zahuri et al. (2020) during the study also show similar findings in which students are actively learning and increasing in creativity. The theatre games conducted in the workshop being observed also found out that apart from creating joy among students, their enthusiasm was influenced by the active involvement of the teachers. This shows that the effectiveness of the approach can be measured not only from student involvement but also from the influence that came from teachers participating during the process.

Last but not least, this is the gap that has been found in the study done by Harozila et al. (2019) where the researcher hasn't clearly defined the process and participation of the art teachers involved during the study. However, Harozila et al. (2019) does generally inform in the recommendation section for art teachers and possible problems faced when incorporating the technology. On the other hand, the study by Mohd Zahuri et al. (2020) has filled in the research gap about the lack of focus on 21st-century learning skills in visual art education and is sufficiently supported by various arguments and information about innovative approaches (Schonmann, 2006, cited in Mohd Zahuri et al., 2020), integrated learning (Mohd Zahuri and Mohamad Sayuti, 2019, cited in Mohd Zahuri et al, 2020) and the benefits of theatre games as learning and teaching tool (Bany-Winters, 2012, cited in Mohd Zahuri et al, 2020).

CONCLUSION

This article review is focused on studying the utilisation of innovative approaches for teaching and learning in visual art education, particularly in secondary school. Apart from reviewing the findings, this article review has also analysed the method, discussion, and process of the study. Overall, based on the reviewed article, technology and gamification must prove their standing in benefiting the student and teacher through motivation, active participation, and the process of teaching and learning. However, the adopted approach also came with interest and infrastructure limitations according to Harozila et al. (2019) and Mohd Zahuri et al. (2020). Therefore, every individual and organisation should overcome internal and external problems so that integration can be implemented fluidly to enhance both learning and teaching.

To conclude, a non-conventional and innovative approach to education is very suitable for the current generation of learners due to their surrounding area filled with technological appliances, making it much easier to implement and further pique their interest in learning the VAE subject. Gamification has emerged as a powerful platform for education learning where gamification can make learning fun and effective. Moreover, adding gamification during the teaching and learning process can increase student participation as it requires them to be active thinkers thus easier for the student to understand.

Brett Trill (2008) cited in Gatta et al. (2015) frequently talked about gamification and described it as "taking game mechanics and applying them to other web properties to increase engagement." Previous research has established that the concept of gamification is the use of game design elements in non-game contexts (Deterding et al., 2011) and the use of "game-based mechanics, aesthetics and game thinking to engage people, motivate action, promote learning, and solve problems" (Kapp, 2012). To date, several studies have investigated gamification both in practice and in field study (Dichev and Dicheva, 2017). The concept was first coined in 2002 by Nick Pelling and became well-known in the second half of 2010 due to the effect of the conference and players. Furthermore, as stated by Deterding et al. (2011),

Marczewski, Werbach & Hunter, and Zichermann and Cunningham, researchers interpreted gamification in a dissimilar way of study (Welbers et al., 2019)

According to Zichermann and Cunningham (2011), gamification is the game mechanics and thinking to engage users and to solve issues. The base idea of gamification is the application of game elements that can make the education experience more engaging and effective. Certain game elements are effectively effective in learning. Welbers et al. (2019) found that Malone (1982) uses game elements designed for featured computers to make them applicable and enjoyable. The article reviewed in this study helps in giving deeper insight into the possibility of innovative approaches such as theatre games and interactive multimedia learning modules enhancing and beneficial for learning and teaching VAE subjects in secondary school.

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REFERENCES

Agélii Genlott, A., Grönlund, Å., & Viberg, O. (2019). Disseminating digital innovation in school–leading second-order educational change. *Education and Information Technologies*, *24*, 3021-3039

Ebrahimi, S. S., & Jiar, Y. K. (2018). The use of technology at Malaysian public high schools. Merit Research Journal of Education and Review, 6(3), 54-60.

Deterding, S., Khaled, R., Nacke, L. E., & Dixon, D. (2011, May). Gamification: Toward a definition. In *CHI 2011 gamification workshop proceedings* (Vol. 12, pp. 1-79).

Dichev, C., & Dicheva, D. (2017). Gamifying education: what is known, what is believed and what remains uncertain: a critical review. *International journal of educational technology in higher education*, *14*(1), 1-36.

Gatta, V., Marucci, E., Sorice, F., & Tretola, G. (2015). A Gamification approach to promote positive behaviours in Urban Logistics. *Recuperado de: https://www. researchgate. net/publication/282609851_A_Gamification _approach_to_promote_positive_behaviours_in_Urban_Logistics*.

Harozila Ramli, Tajul Shuhaizam Said, Mohamad Nur Hanif Hazman, Syamrul Nizam Abdul Malek & Ridzuan Hussin. (2019). The development and evaluation of an interactive multimedia module for the topic of art elements of the visual art education subject. International Journal of Innovation, Creativity and Change, 10(6). https://www.ijicc.net

Kapp, K. M. (2012). *The gamification of learning and instruction: game-based methods and strategies for training and education*. John Wiley & Sons.

Mayer, P. (2009). Guidelines for writing a review article. Zurich-Basel Plant Science Center.

Malone, T. W. (1982). Heuristics for designing enjoyable user interfaces: Lessons from computer games. In *Proceedings of the 1982 conference on Human factors in computing systems* (pp. 63–68). Gaithersburg, Maryland, USA. New York: ACM.

Mohd Zahuri Khairani, Ibrahim, Md Nasir Ibrahim, Che Aleha Ladin, & Harleny Abdul Arif. (2020). Integration of Theatre Game Approach In Visual Art Education At The Secondary School Setting. *Psychology And Education*, *57*(8), 193-205.

Raja, R., & Nagasubramani, P. C. (2018). Impact of modern technology in education. Journal of Applied and Advanced Research, 3(1), 33-35.

Richtel, M. (2010). Growing up digital, wired for distraction. *The New York Times*, *21*, 1-11.

Saavedra, A. R., & Opfer, V. D. (2012). Teaching and learning 21st century skills: Lessons from the learning sciences. *A Global Cities Education Network Report. New York, Asia Society*, *10*.

Welbers, K., Konijn, E. A., Burgers, C., De Vaate, A. B., Eden, A., & Brugman, B. C. (2019). Gamification as a tool for engaging student learning: A field experiment with a gamified app. *E-learning and Digital Media*, *16*(2), 92-109.

Zichermann, G., & Cunningham, C. (2011). *Gamification by Design: Implementing Game Mechanics in Web and Mobile Apps*. Sebastopol, CA: O'Reilly Media.