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UPCYCLING JUNK ART AND CRAFT MODULE TO NURTURE CREATIVITY OF CHILDREN

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ABSTRACT

Up-cycling is a sustainable alternative incorporating the prevalent 3Rs of Recycle, Reuse, and Reduce of used items in campaigns to save the environment. The 'DIY Art and Craft Activity Module' is used as a scaffolding tool to enhance environmental awareness and its impact among primary school children through Visual Arts Education. This research utilised the Design Development Research Method (DDR) comprising of three phases namely; Phase 1: Needs Analysis, Phase 2: Design and Development, and Phase 3: Implementation and Evaluation. The data was collected by interviewing Visual Art teachers on the usability of the module and document analysis on the collection of artworks produced by students. Findings of this study demonstrated positive feedback from the teachers and students on the usability of the Junk Art module as supplementary learning material in order to enhance recycling awareness among Primary School students through Visual Art Education.

Keywords: *Junk art, Module, DIY Craft, Acceptance, Usability, Recycle, Reuse*

INTRODUCTION

Global environmental and geographical cataclysm have heightened people's awareness on sustainability and the importance of conservation and up-cycling. The United Nations (UN) through its Sustainable Development Goals aims to create 'sustainable development to improve human lives and protect the environment' (United Nations, 2015). Through the SDGs, communities across the globe are encouraged to explore and engage in sustainability efforts such as up-cycling with more informed actions. In demonstrating its unconditional accountability, Malaysia has integrated the SDGs indicators into various national frameworks by integrating its economic, social and environment dimensions (Siti Eshah, 2018) while also giving focus to more equitable education. Though the use of three Rs – Reuse, Reduce, Recycle; in environment campaigns have been exploited for many years, up-cycling which is relevant to these three words are becoming more pertinent in contemporary society to reduce carbon footprints while moving towards more responsible consumption. One such efforts is through Visual Arts Education (VAE) where students can be taught at school level in Malaysia.

Through Visual Arts Education, teachers can use the up-cycling technique to incorporate creativity and problem-solving skills. The activities may include repurposing materials to refurbish and innovate or create a new item for a different usage. It was suggested by Tonglet, (2004) that attitude is a major contributor to recycling behaviour which is influenced by having the appropriate opportunities, facilities, and knowledge to recycle. Hence, it is elemental that sustainable education should start and be gradually developed at the school level (Hanifah & Shaharudin, 2016). Ultimately, any environmental awareness activities held in schools should be able to raise the awareness of students on the importance of the common 3Rs in efforts towards creating a more sustainable environment (Nguyen, 2011). Consequently, such activities should be able to encourage students to practice the good habits of reusing, especially in reusing items around them to minimise waste volume in the environment.

Most environmental awareness campaigns can be considered enjoyable for school students and topics included on issues concerning the environment in the Malaysian school syllabus are insightful. The Visual

Arts Education curriculum is adopting a similar approach whereby various topics are included in the syllabus. By doing so, it will require students to produce their art product using various techniques by making posters on topics concerning the environment using the montage technique, producing a stabile sculpture with reusable items, and creating models such as a rocket for space awareness using upcycle material (CDC, MOE, 2019) in the Primary 5 VAE. Nevertheless, such approach shall remain momentary if students cannot embed the intended objectives of the syllabus in creating proactive citizens for environment conservation (Thang, 2006).

However, it was further brought to light that school students at the primary and secondary levels were incapable to translate the learnt elements into practice despite having participated in various environmental campaigns and classroom activities (Hassan & Mohd. Nor, 2013). This could be one of the reasons for the low involvement in environmental awareness practices beyond the school setting such as recycling among school students. It needs to be further enhanced that recycled materials can be used in more interesting approaches and this is possible if teachers can guide students to develop new items through do-it-yourself (DIY) art and craft components with up-cycling. Ultimately, such activities could further heighten the younger generation's long-term understanding on the importance of being consistent towards creating a more sustainable environment.

RESEARCH BACKGROUND

The multitude of solid waste production is becoming a global exigent problem that requires alternative waste management system that is not harmful to the environment (Omran, 2008). Malaysia has been in the forefront towards efforts in better waste management as solid waste landfill has damaging effects on the environment and living beings. Moreover, poor waste management has caused massive destruction to the environment and pollution especially in highly populated urban areas (Aziz, 2010). This is apparent in the poor urban areas where solid waste management is substandard which inopportunely caused pollution and the spread of contagious diseases (Towns, 2014). Hence, compelling and enduring measures are crucial in instilling the importance of environmental awareness in the society.

In an earlier finding, Malaysia was reportedly producing waste more than 15, 000 tonnes per day (Yakob, 2012) by 2020, but an earlier estimate by CAP (2010) mentioned that it will reach 30, 000 tonnes per day. Malaysia has always been working in the forefront towards developing more sustainable waste management but many of its efforts are futile when the society do not play proactive roles with the government's efforts. The upsurge in waste volume may escalate and become insurmountable with landfill scarcity and the increase in population (Manaf, 2009). Although Malaysians are becoming more aware on environmental issues and possess a higher level of awareness on the benefits of the 3Rs in environment campaigns, their superficial attitude in good environmental practices is still work in progress (Budhiarta, 2012). Furthermore, the society lacks substantiated intrinsic understanding on the urgency of the environmental issue although they are aware of increasing pollutions that are visible around them (Ichor, 2014). In essence, pre-emptive measures are crucial so that the society could contribute their efforts more meaningfully towards developing a sustainable environment.

Notably, the 3Rs in the environmental awareness campaigns are key in diverting solid wastes from landfills and its proliferation in the environment. Efforts must be made to encourage the society at large to take pro-active stance in keeping a sustainable environment. It has been asserted by Ekung & Odesola (2018) the significance of applied experience in reinforcing learning. Therefore, education at the primary school level is seen as a principal effort to set the appropriate foundation towards developing a sustainable environment.

RESEARCH OBJECTIVES

This study aims to identify the VAE teachers' perceptions on the usability of the Junk Art and Craft Module as a supplementary tool to scaffold and enhance recycling awareness among Primary School Students in Visual Art Education as a teaching aid.

METHODOLOGY

The present research utilizes the Design and Develop method as suggested by Richey and Klein (2007) focusing on the processes of developing the supplementary tool known as the 'Junk Art and Craft Module' which is appropriate in the teaching of Visual Arts Education at upper primary school level. The research design in Phase 3: Implementation and Evaluation meant to explore the VAE teacher's perceptions on the usability of the module and document analysis on the artwork collection produced by the students throughout the lesson. There are four upcycling art projects included in the module namely; candle holder, pin holder from leftover cupcakes paper cups, candy bottle from used plastic bottles, used pulp egg tray for wall decoration panel.

Table 1. Research Matrix for Qualitative Approach

Respondent (N)	Sampling Technique	Instrument
1 Expert Teacher in Visual Art Education (VAE) field	Purposive	Semi-structured Interview
32 Standard Five (5) Primary students		Document Analysis (Collection of Students' artwork)

(Source: Author, 2021)

FINDINGS

Semi-Structured Interview

The Opinions and Feedback from the Teacher about the Usability of the DIY Junk Art Module.

The findings discussed in this section is based on the analysis of data collection through the interview session with the teacher who implemented the Junk Art and Craft supplementary module in the VAE classroom at a Primary School in the Klang Valley. The respondent was chosen using purposive sampling to test the usability of the Junk Art and Craft Module. The teacher provided her feedback and recommendations on the usability of the Junk Art and Craft Module and contended that it is an effective supplementary tool in the pedagogical approach to be exploited in the

classroom. The details of the VAE teacher's answers are described and explained in the following paragraphs.

Simple Instructions

According to the respondent, the students could immediately comprehend the content of the module during delivery of the lesson. It was also described that the students could use the module independently as suggested in the following response. Nevertheless, further observation which will be discussed later disclosed that some students may need some facilitation from the teacher for clarification regarding the steps to be taken during the activities.

"arrrr…Ok, for me the DIY Junk Art and Craft Module are (is) easy to use because (fillers) ... (it) begin(s) with step by step (instructions), the steps were (are) very simple and easy to follow ... so the students, if we give it for themselves (to them), they can follow (the steps)."

b) Effective Pedagogical Approach

The teacher further affirmed that the visuals provided in the instructional video are helpful and eases the comprehension of the students. The step-by-step instruction along with the manual book provides clarity on the process which reinforces students' understanding in the product making, too. Although the manual could be easily followed, the instructional video which complemented the module reinforces understanding thus, making the instructions much clearer and easily understood. It was asserted by the respondent that "the picture in the module is not moving" but the "moving ... video" improves understanding.

"(Fillers) ... for me, in the module you made - it is shows step by step. Then the examples of the materials used, and there is a description of how to make the product by using this manual book, (fillers) (the) teacher can point first the steps of how to do, but the picture in the module is not moving and when it is reinforced with the existing video, so students are (could) better understand and (the steps become) more obvious."

Easy and Simple Method of Learning

The respondent provided a constructive response on the implementation of the Art and Craft Module to be used as a supplementary classroom tool. The students are reportedly satisfied with the module as it provided meaningful experience through an easy to learn and simple method. The respondent had repeatedly emphasised that the set contains comprehensible video instructions and a manual with easy-to-follow guidelines that help students to produce art and craft using upcycle materials.

"Oh….Yes! Easy, very easy and easy to understand how to create art and craft through this module - besides having an interesting video, easy to follow. Other than that, it is also have (has) a manual book, so easy for students to follow."

The opinion of the Teacher on the suitability of tools and materials that are used in the DIY Junk Art and Craft lesson in class.

Through the interview, the respondent had asserted that the usage of tools and materials during the implementation session are suitable and gained the students' interests. The suggested items to be used in the upcycling craft projects are household items which are safe for primary level. Moreover, the use of other art making items such as colours make the activity more interesting for students. According to the respondent:

"For me…..The tools and materials they use are tools and student-friendly materials, because every day, easy to find…. students are using the tools and materials and they can be linked to the recycling material, and it is very suitable ... one more thing, the materials are all good and appropriate (fillers) because, using water and acrylic colours -. in this

school, students rarely use acrylic colours, so they are more interested in using the colour, they also seem interested to make the product

(fillers). I think it's a very good one - another one, (fillers) the material used is not harmful and it's safe to use for primary school students. I think it's really good - from my observation students can do (the activity)

when we are looking at the end of their product."

The opinion of the Teacher on the strengths and advantages of the DIY Junk Art and Craft Module.

The respondent acknowledged that the DIY Junk Art and Craft Module is an innovative technique of transforming household waste into an artwork decoration masterpiece. It also provides insights to students to think creatively and innovatively in creating upcycle arts and crafts. Due to ease in understanding and following the manual with the video, the module eases the craft making suitable for primary students and they could perform the project independently. Importantly, even if the students perceived their craft work to be unappealing, the most important value that the module provided is that students can make art. The respondent had supported this with the assertion that "students can produce products even though not pretty". The respondent had professed that:

"Ok, (fillers) this module, to me, (fillers) are very good. It's strength because it taught a lot of recycled materials that (are available) (fillers), around the student, so students can easily find it, (fillers) when he or she was looking for, he looked at the module, it was easy for them to follow those steps by steps. The module I saw was very good…very interesting and which is important - P and P (teaching and learning) relates normal for primary school students, but at least, they understands and knows how to make the craft. I think the module is very good and appropriate understands and knows how to make the craft. I think the module is very good and appropriate to the student (fillers) meaning, this module is very suitable and relevant for use in primary school and I think the objective is achieved (when) the students can produce products even though not pretty."

The respondent also provided additional suggestion to improve the module. Among the suggestions are to include more fun craft making that are suitable for elementary level and to make the written manual less wordy as recommended in the response provided.

"(Fillers) for me, for additional suggestion to improve the module, I think, make it more cheeky (amusing) that can attract elementary school kids. (Fillers) One more, avoid using long sentences and hard for students

to understand - make it in short and simple sentences."

Teacher's views and opinions on making DIY Art and Craft using recycled materials to enhance awareness among primary school students.

The respondent proposed some enhancement for the module that the researchers might consider to further strengthen students' awareness on the urgency to develop sustainable habits to save the environment. Although the craft making process may be interesting to the students in group efforts within the classroom, instilling the values of caring for the environment has to be made a personal conscious effort and needs to be developed gradually beyond the classroom setting. The respondent is of the opinion that caring for the environment should be all inclusive and needs to be taught in other subjects to create the urgency in the realisation of such efforts.

"(Fillers). Oh…yes! Because it can be associated with another subject. (Fillers) for example, by doing this art, from waste material, (fillers) can increase environmental awareness - at the same time students are more aware of environmental and recycled awareness as well as about the recycled materials (fillers), because usually, students are less concerned about environmental hygiene (fillers), with this module, can help and awaken (alert) them more. Usually, after they take a drink or eat, they throw away, (fillers), they do not know waste materials can make art and craft. Maybe by looking at this modules and learning, they are more aware. Overall, I think (fillers) very good and should be implement in school."

Document Analysis

The observation made during the VAE lesson revealed that the students were able to comprehend the tasks given to them upon listening to the teacher's explanation (Figure 1). Importantly, they are aware that items used are related to the 3Rs in the environment campaign awareness. The shape, form, and technique used in producing DIY Junk Art and Craft is clearly stated in Module as supplementary classroom tool.

Figure 1. Teacher Explaining the Art Activities by using the Text Module and Deliver the Demonstration with the Help of Video Tutorial.

(Source: Author, 2021)

It is interesting to observe that the male students had visibly demonstrated more creativity in the candle holder making activity than the female students. The overall process of making the candle holder from the students was very good and the art teacher was satisfied with the final product.

Figure 2. Teacher Facilitate the Students during the Candle Holder Making Process

(Source: Author, 2021)

Figure 3. Each Student Managed to Produce a Good Pin Holder in the form of a Cupcake.

(Source: Author, 2021)

It was satisfactory to identify that all the students can understand the process in the making of the cupcake shaped pin holder and was able to create one easily as shown in the manual (Figure 3). As mentioned earlier, some students still require the teacher's facilitation in understanding certain steps and items for this second activity. However, the craft making is relatively easy to produce. The teacher reportedly was satisfied with the students' performance in this second activity.

Figure 4. The Making of Candy Storage, Students Draw Cartoon Emoji on the Plastic Bottle

(Source: Author, 2021)

Figure 5. The Candy Monster Storage made by One of the Students

(Source: Author, 2021)

All the students were able to complete the candy storage activity successfully (Figure 5). They were very excited in making this as it is their first-time making art using the up-cycling technique. Students drew the designs based on their own creativity.

In the wall decoration panel activity, all of the students demonstrated their abilities in completing the task (Figure 7). It was clear through the observation that students were ecstatic to see their final product.

Figure 6. Student Cutting the Eggshell Pulp Tray into a Small Piece and Paint it

(Source: Author, 2021)

Figure 7. Students Setting the Proportion of the Flowers from the Eggshell Pulp Tray as Wall Decoration Panels

(Source: Author, 2021)

CONCLUSION

This study was conducted to enhance awareness among students about the uses of recyclable materials especially at primary school level for the VAE subject while encouraging creativity and innovation in making arts and crafts through upcycling. Ridzuan, Abd Rahman, Hussin, and Awang (2017) had contended that it is fundamental to make recycling a perpetual practice to ease landfills mounting, carbon footprint, and reduce energy waste. The Junk Art Module can be effectively used as a supplementary tool in the VAE classroom. Aside from treating it as a classroom art product, the students may be able to further improve their craft making skills and find the opportunity to sell their crafts. The study by Keshminder (2018) suggested that Malaysia has already been executing admirable environmental policies to promote eco-innovation and this is transcended in the inclusion of using upcycle and reusable materials for art and craft making in the Primary 5 standard curriculum (CDC, MOE, 2019). Further search efforts can be

made through various methods including the internet in various platforms such as Instagram and YouTube for more creative and innovative ideas with upcycling. Gradually, by encouraging students to realise the advantages of upcycling, they would be more aware of their surrounding while improving their creative and critical thinking skills by seeing the potentials of re-creating through upcycling for multi-purpose use (Tung, 2012). On a more significant note, Bridgens et. al. (2018) asserted that upcycling re-connects people with the materials and environment through the creations of art. The authors believed that "creative upcycling allows the future lives of objects to be contingent on context and culture".

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