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“Optimizing Innovation in Knowledge, Education and Design”

EXTENDED ABSTRACT



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35.	Digital Mathematics Exercise Tool (DiMatExT) <i>Norazlina Ahmad, Norhafiza Ahmad & Mohd Khairil Nazmi Md Nayan</i>	179-184
36.	LINGOACTIVE 1.0: Integrating the Italian Language and Exercise in A Fun Game <i>Suhardi bin Kram, Piermauro Catarinella, Wan Firdaus bin Wan Chik, Cyndra Robert Budull, Noreriani binti Sabturani, Adjullea James & Theresa Ahing</i>	185-189
37.	Proscience Workshop <i>Diana Indim, Siti Sarayati Hj Abdul Mawah, Shirley Arvilla Andrew & Farnidah Jasnie</i>	190-194
38.	Easy Way to Write a Clear Research Problem Statement Using IRCA Model: Ideally, Reality, Consequences and Aim <i>Haidy Henry Dusim, Tony Paridi Bagang, Jain Yassin, Lo Chor Wai & Alexius Korom</i>	195-202
39.	Kamus Saku Dialek Suku Kaum Jakun Lenga: Daripada Data Mentah ke Penerbitan Kamus <i>Mohamad Suhaizi Suhaimi, Muhammad Nazirul Mohd Noor, Aminuddin Saimon, Azean Idruwani Idrus & Nurul Jamilah Rosly</i>	203-207
40.	From Certificates to Comprehensive Records: Innovating with UiTM Kedah Student Activity Transcripts (UiTMKDH SAT) <i>Muhammad Hanif Othman, Mohd Nazir Rabun & Mohd Hamidi Adha Mohd Amin</i>	208-215
41.	MFRS 140 Investment Property Learning Through Gamification – “PROPQUEST GAME APP” <i>Dr. Masetah Ahmad Tarmizi, Noor Saatila Mohd Isa, Norliana Omar, Dr. Mohd Taufik Mohd Suffian & Mohd Zulfikri Abd Rashid</i>	216-221
42.	E-Inventori Bahan Panduan Pengurusan Rekod UiTM <i>Ahmad Azman Bin Mohamad Ramli, Noor Faraliza Binti Samsudin, Norhidayu Binti Md Yatim, Mohd Naim Bin Mohd Nasfi, Intan Nurbaizura Binti Zainuddin, Izzatil Husna Binti Arshad & Kasmarini Binti Baharuddin</i>	222-226
43.	Sustainable Supply Chain Management Disclosure Index (SSCMDI): Towards Achieving Sustainable Development Goals (SDGS) <i>Nur Zharifah Che Adenan, Prof Dr. Roshima Said, Prof Dr. Corina Joseph, Leily Adja Radjeman, Dr. Shafilla Subri & Syahrini Shawalludin</i>	227-230

CATEGORY: ASP ACADEMIC INVENTOR

1.	REED: 3D Printed Wearable Device to Manage Anxiety Through Melodic Mindfulness <i>Hana Hapiz, Nooraziah Ahmad, Yuhanis Ibrahim, Azlin Sharina Abdul Latef, Ainul Wahida Radzuan & Mohd Zaimmudin Mohd Zain</i>	231-236
2.	Bank Design: Collection of Student Artworks <i>Dr. Nani Hartina Ahmad, Nur Fatiyah Roslan, Nurin Elani Makrai, Azhar A Aziz & Zainab Anuar</i>	237-242

Assalamualaikum warahmatullahi wabarakatuh,



First and foremost, I would like to express my gratitude to the organizing committee of i-Spike 2023 for their tremendous efforts in bringing this online competition a reality. I must extend my congratulations to the committee for successfully delivering on their promise to make i-Spike 2023 a meaningful event for academics worldwide.

The theme for this event, 'Optimizing Innovation in Knowledge, Education, and Design,' is both timely and highly relevant in today's world, especially at the tertiary level. Innovation plays a central role in our daily lives, offering new solutions for products, processes, and services. By adopting a strategic approach to 'Optimizing Innovation in Knowledge, Education, and Design,' we have the potential to enhance support for learners and educators, while also expanding opportunities for learner engagement, interactivity, and access to education.

I am awed by the magnitude and multitude of participants in this competition. I am also confident that all the innovations presented have provided valuable insights into the significance of innovative and advanced teaching materials in promoting sustainable development for the betterment of teaching and learning. Hopefully, this will mark the beginning of a long series of i-Spike events in the future.

It is also my hope that you find i-Spike 2023 to be an excellent platform for learning, sharing, and collaboration. Once again, I want to thank all the committee members of i-Spike 2023 for their hard work in making this event a reality. I would also like to extend my congratulations to all the winners, and I hope that each of you will successfully achieve your intended goals through your participation in this competition.

Professor Dr. Roshima Haji Said
RECTOR
UiTM KEDAH BRANCH



WELCOME MESSAGE (i-SPIKE 2023 CHAIR)



We are looking forward to welcoming you to the 3rd International Exhibition & Symposium on Productivity, Innovation, Knowledge, and Education 2023 (i-SPIKE 2023). Your presence here is a clear, crystal-clear testimony to the importance you place on the research and innovation arena. The theme of this year's Innovation is "*Optimizing Innovation in Knowledge, Education, & Design*". We believe that the presentations by the distinguished innovators will contribute immensely to a deeper understanding of the current issues in relation to the theme.

i-SPIKE 2023 offers a platform for nurturing the next generation of innovators and fostering cutting-edge innovations at the crossroads of collaboration, creativity, and enthusiasm. We enthusiastically welcome junior and young inventors from schools and universities, as well as local and foreign academicians and industry professionals, to showcase their innovative products and engage in knowledge sharing. All submissions have been rigorously evaluated by expert juries comprising professionals from both industry and academia.

On behalf of the conference organisers, I would like to extend our sincere thanks for your participation, and we hope you enjoy the event. A special note of appreciation goes out to all the committee members of i-SPIKE 2023; your dedication and hard work are greatly appreciated.

Dr. Junaida Ismail

Chair

3rd International Exhibition & Symposium Productivity, Innovation, Knowledge, and Education 2023 (i-SPIKE 2023)

BANK DESIGN: COLLECTION OF STUDENT ARTWORKS

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ABSTRACT

In making creative works, students need to have artistic thinking in producing their artwork. Therefore, the purpose of this study is to assist students in developing their ideas in order to create a great work of art with high aesthetic value. Since most students lack the initiative to think creatively while creating their works of art, they are hardly creative in producing good work. This research relates to ideation of bank design to compile the previous student projects to serve as a guide for inspiring students to create new designs. The purpose of this study was to determine the issues and skills that students faced when coming up with ideas for a piece of work. This study was conducted using qualitative methods to identify the challenges and competencies of students in developing ideas for a work. A conceptual framework was developed at the conclusion of this study to support students come out with new ideas.

Keywords: Design Storage, Design Studies, Conceptual Framework, Creative Thinking

INTRODUCTION, PROBLEM STATEMENT AND OBJECTIVES

To understand creative thinking in producing creative artwork the first their should be the think what is the idea that they want to produce in the artwork. This study is going to deepen the understanding of how to develop ideas in creative thinking among students in art. It is an understatement to say that the arts learning process requires a specific level of creative thinking. One's level of creativity is undoubtedly crucial in developing ideas to complete the assigned artwork tasks. Some scholars believe creativity is a spontaneous, expressive activity that occurs in every person. It is a sort of innate capacity that enables people to access and express their unique personalities and cultural viewpoints. Despite the claim that divine heritage accounts for human creativity (Lau, 2016).

Creativity generates ideas, while the idea is the prominent component in innovation, which is the essence of producing quality works of art and design. The idea alone certainly does not assure innovation in a project. Therefore, a set of systematic processes to manage the ideas produces is essential. Though having creative and innovative ideas is significant in generating ideas and producing an art piece, it is more important for the learners to be able to systematically manage their ideas (Boeddrich, 2014).

Currently, there is a lack of a conceptual design and design studies framework leveraging design thinking and systems thinking that take human-centeredness, understanding, and acting of various students systemically into consideration when they develop the idea for making the project.

To make it easier for them to produce a product design, art object, or painting, every student who studies this creative art should possess this creative thinking. After careful review, they take some time to reflect and come up with ideas for their design. Therefore, the purpose of this study is to aid students in creating ideas quickly after retrieving them from the design bank's storage. The purpose of the created bank design is to make it simpler for students to view examples of previously stored artwork to inspire them to create the most recent designs as suggested by their lecturers.

Before looking at the creative works processes, it is vital to understand that art is a vision of an artist inspired by self where an artist looks within to find inspiration. It is based on intuition or gut feelings. Therefore, art is an introvert. As a result, when presented, its interpretation might be different for individuals (Kampylis, P. & Berki, E. ,2014), which shows that arts are an individual's interpretation. Therefore, the application of the quantitative method is perfect. He also added that creative thinking and critical thinking can be both parts of Design Thinking, whilst art thinking is a way of thinking that can be adopted to be better designers. It helps in keeping your mind open to ideas.

The objective of this study is to develop a conceptual framework based on the literature review for creating ideas for design storage as a bank design for the collection of student artwork selections for the implementation of the design selected. The research uses the conceptual framework to help the student come out with their ideas to propose a new designin creating the product or any artwork. From this, it can bring several benefits to the community it serves.

IDEA DEVELOPMENT PROCESS (METHODOLOGY)

The idea development process for making the bank design study is from collecting the previous artwork as a guideline for starting to come out with the idea to design something project. This process has widely absorbed the advantages of various specific teaching methods and creatively applied them to think of the modern method of teaching processes so as to meet the requirements of passing on knowledge to students, developing intelligence, inspiring creativity, promoting the overall development of student's personality and adapting to the demands of modern quality education. It helps in keeping your mind open to ideas.

Idea generation refers to the process of creating, developing, and communicating ideas that are abstract, concrete, or visual (Jonson, 2005). Idea generation is undoubtedly important especially among learners of Arts and Design as it can be used to refine ideas in ways that may be more useful (Hartin & Abourizk, 2022). There are a few stages in the process of idea generation.

This study also to create an art bank containing an interesting collection of artworks, pictures, and historic This bank design takes the form of an automated generated catalog that will be periodically rotated to facilitate the process of selecting pieces for the display of previous artwork.

The goal of this study is to give an introduction (Figure 1) by Phase 1 until Phase 4, to a broad start to identifying the problem, Phase 2 starts to create the idea development process, and Phase 3 refers to collections of previous artworks to get the ideas and for the last Phase, 4 is to create the new ideas for their produce the artwork.

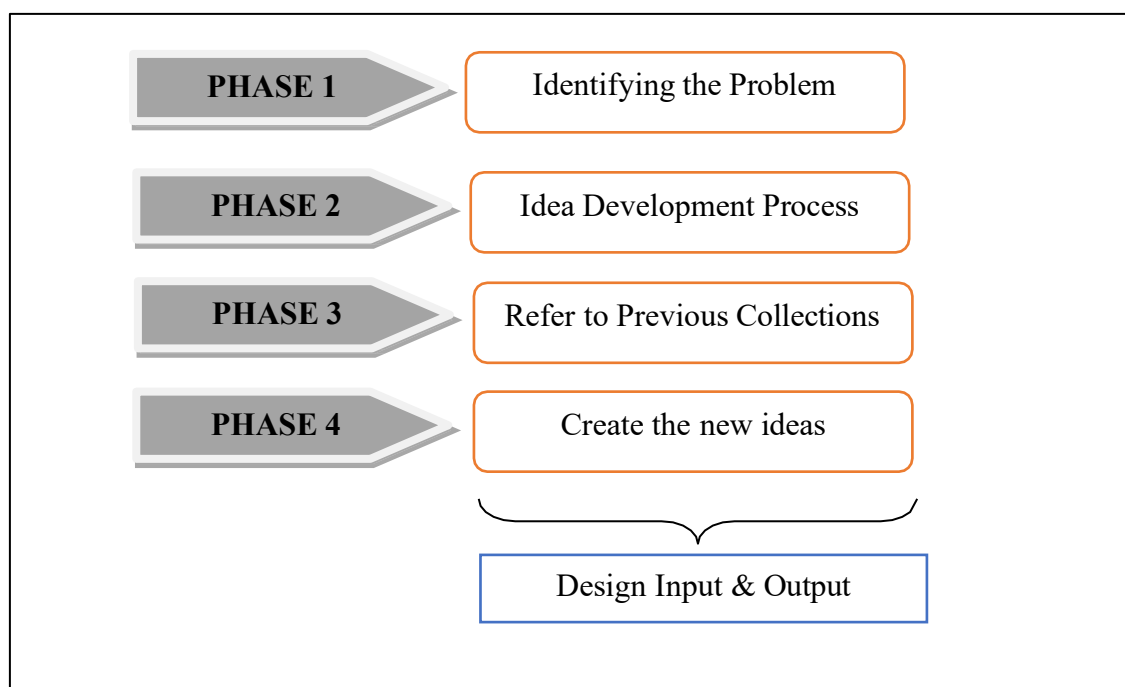


Figure 1. Flowchart the research design process of this study

This study explains the methodology used to complete the study and emphasized research design and interview. This is followed by an interview-study nature with a student who explained the crucial aspects of how the student got the idea for making the artwork. The research methodology involved in four stages:

Student Requirement- understand the student requirement need of making the idea development to produce their artwork process. The component of the interview included the participant profile, product design or artwork, design usability, product feature opinion, and suggestion.

Design Stage- Idea development through previous collection artwork from bank design storage.

Design Input- The idea from students can be to create their product or artwork.

Design Output- Selected design was developed for full-scale design product and artwork finished.

SIMILAR PRODUCTS (IDEA/MODEL)

This conceptual framework is for identifying the design studies among students who come out with new ideas when they used the collection from bank design is important to identify the design creativity and idea selections in producing the final artwork or products. The study showed that bank design possessed storage of collection from previous artworks due to the difference between each motif and pattern design created. This can be seen from the analysis of interviews with students to create the idea motives, design, decorative style, and function. Various methods of learning should be used to advance. E-learning, as defined by Ali, S., Uppal, M. A., and Gulliver (2018), refers to the use of electronic systems and applications during the learning process. Because of this, one learning activity other than e-learning is the creation of a design bank. The study also debates that bank design storage for collections from previous artwork will help the student get the ideas resulting from its visual exquisiteness coupled with the symbolic meaning behind it. However, there is a need for the use of a conceptual framework. The conceptual framework aims to aid the student in further identifying the study objectives in addition to instructing work method that eases and gathers information for the study as depicted in the conceptual framework figure below;

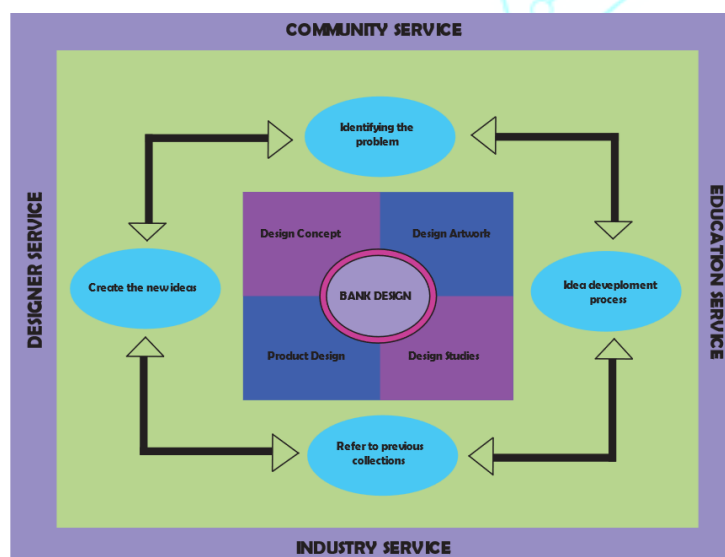


Figure 2. Conceptual Framework idea for bank design development the process

This conceptual framework (Figure 2) was created to assist students in developing thoughtful and original ideas for their artwork. Additionally, it supports students to learn more and to think critically and creatively. Students can benefit related parties, including professionals, businesses, designers, and the education sector if they can improve the results of their work.

NOVELTY OF THE PRODUCT (IDEA/MODEL)

The present study contributes to our understanding of the processes that guide the students and the development of identifying the bank design collections' previous artwork is important to preserving other collections and to helping the student come out with new ideas.

BENEFIT OF THE PRODUCT (IDEA/MODEL)

This conceptual framework provided content by which to explore the inclusion of the idea development student before they proceed to the final artwork base on the aesthetic value of the design concept of the final product. From their evaluation of bank design issues in the design process, developed a conceptual framework to assist the student or designer in making design studies to responsible decisions with respect to design and development.

COMMERCIALIZATION POTENTIAL

The project is expected to assist students and designers in identifying design studies characteristics based on the conceptual framework while facilitating the adoption of bank design collection in the future. Thus, it is vital to educate the practitioners that it is effective to design new product returns and recovery management as a unique form of competitive advantage. More specifically, the new designer's knowledge of how to manage and develop the ideas according to new styles but still in line with the original concept. It seeks to better the understanding of various design combinations aspects considered necessary for the ongoing process of actual designing.

The dynamic nature of the design process will be discussed in order to better understand how these aspects impact a designer's ability to act effectively in design. This makes possible the collaborative development of a design situation and its solution between the user and designer to participate in this process through negotiation and mutual understanding of the identity and aesthetic value of local craft (N.Ebenreuter, 2007).

CONCLUSION

The results show to highlight good design ideas can be better when they use the bank design as a guide for their collection the ideas for making the product. However, more studies that are diverse are necessary to commercialize this bank design for future research. Many students are going through a time of extinction of the idea; however, we could make a difference by allowing our designer to teach and learn the knowledge to create a design looking good better. The next stage of further research is a question of how to create the e- digital of bank design character of the design pattern and identity will be to produce a new idea of creative thinking.

For this study, we were to highlight the importance of this research to the local and new designers to create something new artwork using the bank design base on the original concept to maintain the uniqueness of product identity.

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