# With the New Technology in Hands and New Audiences in Minds: A Review of Creative Adaptation Process Model

Irfan Rifai<sup>1\*</sup>, Maria Tamarina Prawati<sup>1</sup>, Criscentia Jessica Setiadi<sup>1</sup>, Hagung Kuntjara Sambada Wijasa<sup>2</sup>, Adilla Amelia<sup>3</sup>, Ali Hamad Albalhareth<sup>4</sup>

<sup>1</sup>English department, Faculty of Humanities, Bina Nusantara University, Jakarta, Indonesia, 11480

<sup>2</sup>Creative Advertising Program, Visual Communication Design Department, School of Design, Bina Nusantara University, Jakarta, Indonesia, 11480

<sup>3</sup>Film department, School of Design, Bina Nusantara University, Jakarta, Indonesia, 11480

**Abstract.** Storytellers such as writers, artists, and film makers need to carefully devise a plan, undergo a lengthy process, supply workforce, and determine relevant technology required in producing creative work. The adaptation of a creative work to a different mode poses challenges to these creative hands and minds. One obvious challenge is for adapters to find the equivalents for signs that might be unique between modes. Coming from different fields and expertise, the authors met regularly to compare and discuss the creative processes within our fields when adapting creative fictions into different forms (film, comic, and audiobook). We followed the "expert interview" research method protocol, where the two of us interviewed the experts of intersected fields to gather qualitative data. The discussion and interviews resulted in a model called creative adaptation process. With the projection of it being implemented in at university level, we examined the model by using sociocultural perspectives. The examination shows that the model makes it possible for university students to collaborate with other students of different disciplines in producing creative work and use relevant tool and technology to support their work in transforming from one mode to another. To review the adaptability of the model along with its implementation in different contexts and disciplines, extended reviews of the model from external parties is required.

# 1 Introduction

In a widely watched TED video entitled "Does school kill creativity?" (2006), Ken Robinson critiques the standardization of students' competence and curriculum at schools of global scale. He underlined that "creativity is as important as literacy" and that it may affect students' lives far beyond what standardized test can do. Ken Robinson was not the first and is obviously not alone in wanting creativity to be at the heart of educational curriculum and practices. taxonomy, a worldwide taxonomy of educational objectives often used as measures for learning achievement, had its order of thinking skills revised in 2001 and placed "creation" on top of the pyramid, identifying it as the most complex thinking process because it requires students to generate (hypothesize) and plan (design) before they produce (construct) (ISU, n.d).

In the guidebook of *Merdeka Belajar - Kampus Merdeka* (MBKM, 2020), creativity is stated as one of the soft skills that Indonesia's university students must have in their "in - field" or enrichment experiences. In the non- academic context, the world Economy forum

has always placed "creativity" as a required job skill on their "list of future skills" of 2010, 2015, 2020, and 2025 consecutively (Whiting, 2020). The five yearly list has been deducted from interviews with senior executives of organizations all around the world.

As both practitioners and academicians in the multidisciplinary fields of language, visual arts, and film, we believe that creativity is a vital component for innovation and problem solving, thus will be a skill in demand for many years to come. Within our fields, creativity materializes in the forms of stories that we tell in different modes. Distinctively human being's, stories and storytelling activity has evolved in its means and end products from time to time. Begun with cave panting performed by our ancestors thousands of years ago, stories have been produced and reproduced in various, attractive ways incorporating advanced minds, tools, and technologies. In the modern time, beginning with the adaptation of literary classics, the adaptation projects began to get noticed (Enycylopedia.com, 2018). Adaptation, defined as "an altered or amended version of a text, musical composition, etc., for example, one adapted for filming, broadcasting, or production on the stage from a novel or similar literary source" (OED, 2022), has been around for decades and now seems that

<sup>&</sup>lt;sup>4</sup>Special Education Department, Najran university, Najran, Saudi Arabia

<sup>\*</sup> Corresponding Author: irifai@binus.edu

they are everywhere for people to enjoy. Movies adopted from literary works, works of classics turned into picture books or comics, printed books that are published together with their audiobook versions, or quite recently, is the smashing box office of Marvel's comic adaptation into movies that have enjoyed global commercial success.

The process of adaptation from one mode to another remains a point of debates among adaptation studies scholars, especially to the questions of "interpretation, rewriting, refunctioning" (Carmell & Whelehan, 2014) of the original work. Despite a number of studies that have explored the model and the implementation of creative processes in the design and education fields (Wallas, 1926; Mumford, et al., 1991; Basadur, 2004; Young, 2015; ), little has been written about the model of the creative adaptation process. Thus, with our research, we aimed to explore the aspects of creative processes in the production of stories in film, design, and English, the creative routes that adapters take in producing an adaptation work, and the technology needed in adapting a work, as well as how the technology influence the process and the outcome.

This study was limited to the analysis of the existing models in the multidisciplinary creative fields that are synthesized as a new creative adaptation. Since this study involves experts from different fields and expertise, the outcome of this study, we claim, is applicable to support undergraduate students in collaborating with other students of different disciplines.

# 1.1 Objectives

The ultimate objective of the study is to find a model of creative adaptation process with a view of implementing for college students at university level. To achieve that, we compare the creative processes developed by three experts from Film, design, and English, and synthesize them to create a new model. It is also expected that the model would suit the collaborative projects in the extant context, especially those of project-based.

# 2 Literature Review

Defining creative process has often been intricately connected with a sequence of thoughts and actions that comprise the production of work that is original and valuable (Lubart, 2018). The process is connected to 7Cs hub consisting of creators, creating, collaboration, context, creations, consumption, and curricula. The hub proofs creative process as a branch of a tree with extensive "nodal points". Each node contributes significantly to the development of the work and supports the creator to gain a comprehensive view of the entire structure (Toulouse, 2021, p. 20). Beyond simple "dreaming" the creative process consists of structures and stages which have been differently portrayed from one study to another. The basic model is proposed by Graham Wallas as preparation, incubation, illumination, and verification.

The preparation stage might require exploration and definition as the conscious phase. Educational experiences are needed to work on a problem at this stage. Meanwhile, incubation is rather in the unconscious layer involving associative thinking. In the further stage, illumination is recognized by a feeling of knowing which is followed by refining, developing, and formalizing ideas in the verification stage. In the next evolution of the creative process, the four-stage model is incorporated into the componential model of creativity (Amabile, 1996). The new creative process is now initiated from a problem or task identification and followed by preparation, response generation, and response validation/communication. The process is started from a problem or task identification including the task that the individual seeks to accomplish.

Problem as the initial stage of the creative process is put forward by Mumford, et. al. (1991). evolution of the four-stage model considers a dynamic blend of processes. The process is considered personal and different from one individual to another. The stages begin with a seed incident that interests or provokes an author which is followed by navigating between different spheres of experience. In other words, a new conception beyond the our-stage model shall include subprocesses. Basadur's model also highlight the problem-solving stage as the prominent one. The stages are called "the four stages of the creative process". The model is portrayed in four quadrants. The first two quadrants are generation and conceptualization. Both represent problem findings.

The third and fourth quadrant represent problem-solving and solution implementation.

In our literature review, we selected four extensively cited model by Basadur (2004, Figure 1), Wallas (1926, Figure 2), Young (2015, Figure 3), and Mumford, at al.(1991, Figure 4) as the anchors to fulfil the quest in this study.

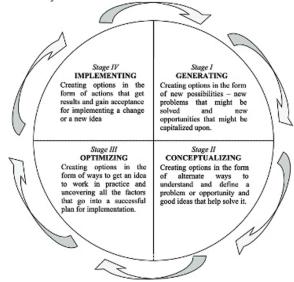


Fig. 1. Basadur's Creative Process (2004).

Fig. 2. Wallas's Adaptation Process (1926)

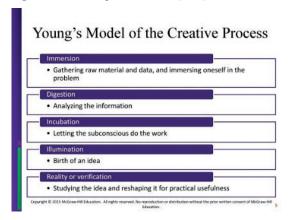


Fig. 3. Young's Adaptation Process (2015)

Problem construction → Information Encoding (and retrieval) → Category search (specifying relevant information schemas) → Specification of best fitting categories → combination and reorganization of category information to find new solutions → idea evaluation → implementation of ideas → monitoring.

Fig. 4. Mumford, et. Al. Adaptation Process (1991)

Dealing with adaptation is to think of them as palimpsestous works by their adapted texts (Ermarth, 2001: 47). Calling a work an adaptation means openly announcing the relationship with another work. The correlation between the adapted work with the original create comparative studies (Cardwell, 2002, p. 9). Simplicity of the word "adaptation" itself has been confronted with several complex terminologies. Indeed, defining adaptation can be seen from several perspectives, which are product and process. Adaptation as product has been synonymously referred to as translation and transposition. The process might inquire faithfulness and equivalence between the source and the targeted product.

# 3 Methods

To generate the experts' views on the most suitable creative adaptation model to use in our context, we held interviews with our experts' colleagues coming from English, Visual Communication Design, and Film disciplines. We borrow Bogner's definition of experts as "people who possess special knowledge of a social phenomenon" (2009) and implement the expert interview's system of data collection.

The following experts handpicked due to their experience and formal expertise fit the criteria. The first expert is Hagung Kuntjara SW, an experienced academician and practitioner in the field of visual design. He has been teaching, researching, and producing works of arts such as comics and other artistry projects. Professionally, as an academician, he has been the chair of Visual Design Communication of Binus university since 2011 (11 years). As an artist, Many of his creative works have been in many art exhibitions in Jakarta and many other provinces in Indonesia. One of his notable works is called *Petruk* Ecology, work of arts that was inspired by the local Javanese puppet shows.

The second expert is Adilla Amelia, a film maker and an academician. She graduated from a film school in the New York Film academy, United States, where she studied the theoretical, as well as the practical things about film making. After the getting her MFA degree from New York academy, Adilla pursued a career in film Industry for a few years in Los Angeles, California before returning to Indonesia. She has been a researcher, a film maker, and a teaching faculty at Binus film department.

The third expert is Criscentia Jessica Setiadi, the deputy head of the English department at Bina Nusantara university. Jessica graduated from Westminster university, London, where she extensively studied English literature. Returning home, she teaches and does research about English poetry, proses, drama and other literary forms and expressions. Her research includes the discussion of photography as archive which highlights creation and recreation (Setiadi, 2017). In addition to teaching and researching, she has also been a prolific poet. She mostly writes in English.

# 4 Data collection

#### 4.1. Experts' Interviews

To collect the data of their expertise, we interviewed three experts in the fileds of Design, Film, and English with seven questions. The questions range from their personal experience, academic background, the works they created, their creative process, and their preferred creative process models. Since we asked open-ended questions, the three experts were free to explore their answers. We also had the opportunity to elaborate some of their answers after the first interview session.

Based on their answers on the preferred model, we developed a model that was synthesized from creative process model of Young (2015) and the creative problem solving by Mumford (1991). The development

involved extensive literature review of the available creative models and group discussion.

The next stage of research was to evaluate the synthesized model. The evaluation of the model was made by the three experts and additional external reviewer from Saudi Arabia, Dr. Ali Hamad Albalhareth. Dr Ali, has his doctoral degree in special education. He has been teaching preservice teachers at Najran university. His research has been about the development of models of learning for visually impaired students.

#### 4.2. Rubric to evaluate the model

To assess the creative adaptation model by using the rubric that we composed from general sociocultural perspectives and the sociocultural theory of creativity perspectives of Glaveanu (2020). Generally, sociocultural theory that was made popular by Vygotsky (1987) has three important components, which emphasize on social interaction, the role of language as essential tool and that learning should occur within the Zone of Proximal Development.

Furthermore, Glaveanu's main components of sociocultural theory of creativity include differences of perspective, the opportunities to exchange positions and perspectives between individuals, which will result in change of perspectives and the combinations of ideas that result in novel perspectives in creating work. The four reviewers used the rubric (table 1) containing items which measure suitability of the model to:

- a. Provide opportunity for social interaction
- b. Provides a chain of communication
- c. Represent learning goald. Mentions technology as supporting tool
- e. Provides opportunities to have different perspectives
- Provides a challenge that goes beyond what students can already perform.

Table 1. Sociocultural Rubric on Creative Adaptation Model

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# 5 Results and Discussion

# 5.1. Model preferred by each expert

In the beginning of this study, the experts are introduced to four creative process models. Some of the experts are quite familiar with the models, indeed the models are reintroduced to calibrate the conception of creative process. The four models introduced are the four stages of creativity by Wallas (1926), Mumford, et.al (1991), Basadur (2004) and Young (2015). As previously elaborated, Wallas (1926) and Basadur (2004) uncover four stages of the creative process represented in four quadrants. Meanwhile Mumford, et al (1991) and Young put problem (2015)forward the of construction/immersion in the first stage of the creative process. As an academician and practitioner, the first expert anchors his creative process on external requests. The foundation of his first stage is seeking the connected pattern among problems which is highlighted by Mumford, et al (1991).

"The basic idea of Mumford's creative process is quite similar. Therefore, the most suitable creative process model is Young's (2015) sharpened by Mumford's (1991)." (Expert 1)

He finds the model by Mumford, et al (1991) is relevant to the creative process that he went through yet with a chance for negotiation to embed the creative process by Young (2015). Negotiation Both models support his adaptation process without being trapped in plagiarism, especially by being fully involved in information encoding/digestion along with its subprocess.

From the other two experts, they prefer Young's Model of the Creative Process as the most sensible model. With a glimpse of experiences with adaptation, she finds creative process shall start from what intrigues the creator in personal and/or emotional level.

"Ideas can come from anywhere, but mostly filmmakers react to what intrigues them in a personal or emotional level. Often, we are accustomed to stories that are closely related to our daily lives or events that have crossed path with our lives." (Expert 2)

On different emphasis, the third expert consider Young's model as the apt model of creative process. She mentions, "I think the closest creative model is Young's model for the incubation stage allows the subconscious to take over."

# 5.2. Synthesis of the experts' preferred model as creative adaptation model

Over the four creative process models introduced to the experts, all three agreed that Young's Model of the Creative Process is what closely related to their experience in producing works. The third expert highlighted the third stage, Incubation – letting the subconscious do the work, as the key substance in creating. The first expert added the length of Mumford's model as enrichment to the process, stating that evaluation and monitoring are inevitable when external parties are involved. The negotiation makes its way through the creative process as demands play their role. In the light of classroom creative adaptation teaching, this leads us to propose a framework:

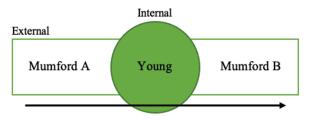


Fig. 5. Creative Adaptation Model

From the figure 5 above, Mumford's model is divided into two parts (A and B) and labelled as "external"; while Young's model is the heart of creative process thus is labelled "internal". The division of Mumford's model is made to reflect the instruction and evaluation process in classroom environment given by instructors. In the linearity of the process, the "internal" is put in between as the students work on the demands, requests, and data after being instructed (Mumford A) and before being evaluated (Mumford B).

The first part of Mumford's model, Mumford A, consists of problem construction, information encoding, category search, specification of categories, reorganisation of combination. and category information to find innovative solutions. This acts as set of instructions which will lead the students into the next step. Based on the experts' view, the creative process model of Young (2015) is used for the internal process where the students start working on the instructions given. Young's model consists of immersion, digestion, incubation, illumination, reality, or verification. Onto reaching the last stage of Young, the transition is then made to the last step, Mumford B, where the idea is evaluated, implemented, and monitored.

#### 5.3. Evaluation of the Proposed Model

There were 6 criteria on the rubric that we asked the three experts and reviewers to use in reviewing. The criteria are: (1) the model provides an opportunity social interaction, (2) The model provides a Chain of communication, (3) The model is Learning Oriented, (4) It explicitly mentions the technology as a supporting tool, (5) the model provides opportunities to have differences of perspective, (6) The model provides a challenge that goes beyond what students can already perform.

The reviews by the three experts and external reviewer show that the model provides opportunities for social interaction and chain of communication, and open to differences and perspectives. These three criteria of the model have strong approval from the experts and the reviewer.

The involvement of technology and the challenging tasks criteria have also received favourable approval with notes on its future implementation. One expert mentioned that technology is an unavoidable factor. This highlights the need to breakdown the model into details for future implementation. For example, the technology use can be explicitly elaborated in the blueprint, including the roles of mentors and students in introducing, using, and evaluating the use of technology in the process.

The experts suggested that special attention also needs to be given on human resources factor (mentors) when it comes to providing challenges to students (criteria 6) and to ensure that learning takes place (criteria 3). Thus, it is important to provide decent trainings for faculty members who will be involved as mentors for students working on the adaptation project.

# 6 Conclusion

A good qualitative interview of experts in their field, according to Bogner, et. al. (2009) is a much more effective way of getting feedback rather than interviewing the non-experts. This kind of interview will result in a direct, to - the- point feedback from experts who have vast knowledge and years of experience behind them. For this reason, we opted to incorporate their methodology of data collection to study the creative process model and invent a creative adaptation model.

We interviewed the three selected experts by asking seven questions that exposed their personal work, professional and academic credentials. They also shared their personal creative process in detail to match with current four top creative process models by Young, Mumford, Basadur, and Wallas. We synthesized the experts' preferred models with the four models to result in "creative adaptation process" model. The new model identifies the need to incorporate problem identification and construct in the beginning of the process (Mumford A) before moving forward with the process that occurred internally within each adapter (Young's Model). Evaluation and monitoring are two other activities from Mumford, et.al that we integrated in the model after the internal creative process. The inclusion

of peer evaluation and monitoring will support the quality of an adaptation work.

The model was then reviewed by the experts and one external reviewer based on a rubric that we adopted from sociocultural theory. The reviews show that the model provides opportunities for social interaction and chain communication, as well as space for different opinion and perspectives. These three criteria have strong approval from the experts and the reviewer. The involvement of technology and the challenging tasks criteria have also received favourable approval with notes on its future implementation.

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