



Efforts To Increase Student's Creative Thinking Ability In Unimed Cosmetology Study Program Through Development Of Beauty Nutrition Learning Devices Assisted With E-Magazine Media

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ABSTRACT

This study aims to: (1) develop suitable beauty nutrition learning materials assisted by e-magazine media for easy learning, with a focus on enhancing students' creative thinking abilities in the UNIMED Cosmetology Study Program and facilitating individual learning, (2) assess the effectiveness of the developed beauty nutrition learning materials assisted by e-magazine media. The research follows a developmental approach using the ADDIE model. Data collection involved observation, interviews, and questionnaires. The validity of the materials was tested by two content experts and two media experts. Product trials were conducted with three respondents for a small group trial, five respondents for a medium group trial, and 30 respondents for a large group trial. The results of the research development of beauty nutrition learning materials assisted by e-magazine media, aimed at improving students' creative thinking abilities in the UNIMED Cosmetics Education Study Program, are validated through assessments by material experts, with an average of 85.8% falling into the "good" category. Media experts assessed the product with an average of 95.8%, placing it in the "very good" category. In the trial aspect for product development, a small group trial with six students achieved a percentage of 81.9% in the "good" category. The medium group trial, consisting of 12 students, received an 88.8% rating in the "good" category. The large group trial involving 39 students obtained a 94.6% rating in the "very good" category. It can be concluded that beauty nutrition learning tools assisted by e-magazine learning media are suitable and effective for supporting the teaching and learning process.

Keywords: Learning Devices, Beauty Nutrition, Creative Thinking Ability, e-Magazine;

1. INTRODUCTION

Technology is inseparable from the times, and its progress is prominently evident in information dissemination. Undoubtedly, the advancements in information technology are harnessed by humans to fulfill their needs, particularly in the realm of education [1], [2]. In education, the development of learning is essential, necessitating an understanding of problems and learning needs, particularly in cosmetology education [3], [4]. According to Dick and Carey, the Research and Development (R&D) methods employed are neither purely quantitative nor purely qualitative, and they don't adhere to a mixed-method approach [5].

Even if there is a quantitative or qualitative work procedure in the product trial section, it doesn't categorize research and development as a purely quantitative or qualitative method. Product trials serve the purpose of acquiring data to revise or address weaknesses, ensuring

that the product aligns with specifications according to user needs [6]. Additionally, product testing is employed to gauge positive or negative responses (qualitative testing) and assess the level of effectiveness and efficiency (quantitative testing). When conducted on a large group, the aim is to evaluate whether the product can be mass-produced or utilized by the public, which is a crucial step in aligning learning tools with user needs [7].

Learning tools are needed to be combined in the learning process. Lecturers can design learning tools that will be utilized according to learning needs, especially student's need [8]. No exception beauty nutrition learning in cosmetology education study program Unimed, according to the result of interviews and needs analysis using 3 criteria, such as need criteria aspect, advantages aspect, and the attractive aspect. Instrument with cosmetology lectures and also cosmetology students it is shows that 90% lecturers really need learning tools

that are supported by dynamic learning media and can be used with or without being guided by a lecturer [9], [10]. From the needs analysis result it is known that 87% students really attract learning media in specially pictures, and choose electronic magazine media as a learning media for beauty nutrition because the magazine's language is concise and easy to understand with interesting pictures [11], [12].

According to the research result in Aryani [13] proved that development of learning material is one of the way to design a new learning style. It can increase student critical thinking background and media can be supporting tool to makes the learning more attractive. That's why the researcher intends to carry out this research by developing a beauty nutrition learning tool assisted by e-magazine media to improve the creative thinking skills of cosmetology education study program students. The development of tools includes, Learning design, Assessment Instruments, Teaching Materials, and e-magazine media that can be utilized for learning, also support student learning to improve students' creative thinking processes.

2. THEORETICAL BASIS

2.1 Definition of Creative Thinking Ability

A mental activity experienced by someone when they faced with a situation that must be solved is called by thinking. Essentially, creative thinking also related to the discovery about something. It is about things that produce something new by using something that already exist. A Winarno [14] said that, creative thinking is a thought that create new ideas. a series of processes, including understanding the problem, making guesses and hypotheses about the problem, searching for answers, proposing evidence, and finally reporting the results in called by Creative thinking.

Based on the understanding, the authors conclude that the ability to think creatively is a personality to analyze something based on data and information to creating new idea in understanding something. The Creative thinking's indicator states that creative thinking can be measured directly through several indicators which include fluency, flexibility, authenticity, and detail.

According to this explanation, this can be concluded that the personality to think creatively is so important character and classified as a high-level personality because it applies few aspects such as, cognitive, and metacognitive skill. It can be declare that, student's creative thinking is able to make a unique concept of discovery building a new concept. So based on this explanation the quality of education in Indonesia will be increased. Creative thinking is a person's personality something new, including real work and also ideas, in form of aptitude and non-aptitude characteristics, in new concept or in collaboration with the existing thing its also called by developing something new, and all the concept are relatively different from those that have been existed before.

2.2 Definition of Development

Understanding Development Research According to Brog and Gall the definition of development research as a process to validate and develop existing product or develop new products, development research also be used to finding knowledge or answers the problems being faced [15]. Another opinion a of research and development is an effort to develop a new product to be utilized or used not to test theory. Meanwhile, According to Seals and Richey define research and development as procedures or steps for systematic assessment of the design, it is develop and evaluating of programs, products process that must meet the criteria of validity from expert, practice and effectiveness [16]. Research and development is research that produces an output or product, and tests its effectiveness.

Based on the definition and understanding of development that has been described, this meant development is a process of developing existing potential into something better and useful, meanwhile research and development are the steps to develop a product or improving an existing product became a product that can be held useable.

2.3 Beauty Nutrition Learning Devices

Susilo's states that learning material are a number of materials, tools, medias, instruction and guideline that will facilitating the learning process [17]. Added a statement in Permendikbud No. 65 of 2013 concerning Process Standard for Elementary and Secondary Education stated that the learning tools preparation is a part of the preparation of learning devices [18], [19]. Learning plans are designed as a syllabus and lesson plans that focus on learning content standards. Apart from that, the lessons plan also prepare media and so do learning resource, learning scenarios, and assessment.

Every device that used in the learning process are called by learning devices. Ibrahim state that "the learning tool needed in managing the learning process and teaching it can be in the forms of syllabus, student activity sheets (LKS), lesson plans evaluation instrument or learning achievement tests (THB), also learning media." So, Learning Device can be interpreted as completeness tools that can be used to completing learning [20]. In this study the learning tools used consisted of lesson plans, teaching materials, and e-magazine media for beauty nutrition learning.

2.4 Media E-Magazine

The Association for Education and Communication Technology (AECT), defines the media such a channel that utilized to process many information. The National Education Association (NEA) defines media as many object that can be manipulated, heard, read manipulated or can be discussed along with the instrument and used for these activitie. So medias can be interpreted as a learning tool and provide stimulation for students that the learning process axist because the media is one of the communication component, such as a messenger from the communicator to the communicant,

but communication can not work without the help of mean of conveying messages or tthis called by media. The message to be communicated is the contents of the learning in the curriculum that is poured by the teacher or facilitator or other sources into the communication media. The progress of the International Trade Center (ICT), this proseses is made possible by providing online learning facility by the internet and electronic media. In this study, such as using electronic magazine.

3. METODOLOGY

3.1 Research Locations

This research was conducted at the Cosmetology Education Study Program, Faculty of Engineering, Medan State University, in even semester students of the 2022/2023 academic year.

3.2 Development Model

This method research is using research and development (Research and Development) of the ADDIE development design models. The ADDIE model development stage consists of five steps/ including (1)Analysis, (2)Design, (3)Development or Production, (4)Implementation, and (5)Evaluations.

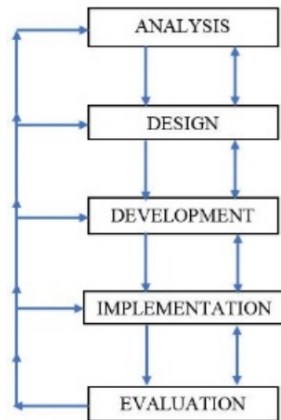


Figure 1. ADDIE development model’s stage diagram

The ADDIE ‘s developing stages tools stages of this following stages:

1. Analysis
 - a. Problem Learning Analysis
 - b. Student character analysis
 - c. Device requirements analysis
2. Design
 - a. Develop learning tools
 - b. Organize a group of students who are involved
 - c. Make a flow of writing teaching materials, and e-magazine

3. Development or Production
 - a. Designing RPS, teaching materials
 - b. Writing e-magazine scripts
 - c. Production of photos and videos of work steps/tutorials
 - d. Photo and video editing
 - e. E-magazine Layout
 - f. Finishing E-books and videos
4. The Implementation
 - a. One to One Trial
 - b. Small Group Trial
 - c. Field Trials
5. Evaluation
 - a. Expert reviews
 - b. Product Revision

3.3 Data Collection Techniques

This collected by data the need for e-magazine media-assisted learning devices in beauty nutrition lectures in qualitative form. And the Qualitative data are collected using questionnaires and documentation ways.

4. RESULTS AND DISCUSSION

4.1 Development Stage

After that conduct trials on students the 2022 cosmetology education, small group tests of 6 people, then analyze the deficiencies in the media then carry out product revisions, then carry out medium group test on 12 students of 2022 year cosmetology education, followed by analyzing deficiencies in the media based on the questionnaire values filled in, then conducting large group trials on 39 students 2022 year cosmetology education and conducting product revisions and product results so after revising, then disseminated.

4.2 Planning Stage

The researcher first collects materials that are in accordance with skin beauty nutrition then designs media according to the needs of students and lecturers, then these media products are validated by 2 material and 2 media experts so that they will produce media products that are suitable for learning process. And the result such as

a. Material Expert Review

According to the results of the material feasibility test analysis on the beauty nutrition e-magazine media which has been validated by the material experts, it shows that in the content feasibility aspect, the two material experts provide an assessment with averages percentage score of 88%. Furthermore, in the presentation aspect, the two material experts provide an assessment with an averages percentage score of 80%.

Furthermore, in the linguistic aspect, the two material experts provide an assessment with an averages percentage score of 90%. The followings is presented in the form of a bar chart in figure 2.

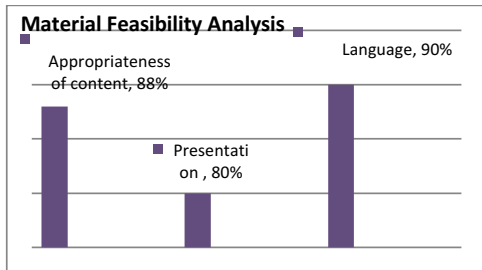


Figure 2 Material Feasibility Diagram

b. Media Expert Review

According to the results of the media feasibility test analysis on beauty nutrition e-magazine media which has been validated by media experts, it shows that in terms of content feasibility, the two media experts provide an assessment with an average percentage score of 92%. Furthermore, in aspect of presentation, two media experts provide an assessment with an average percentage score of 97.5% . Furthermore, on the benefit aspects, the two media experts gave an assessment with an average percentage score of 100%. The figure 3 is presented in form of a bar chart, such as:

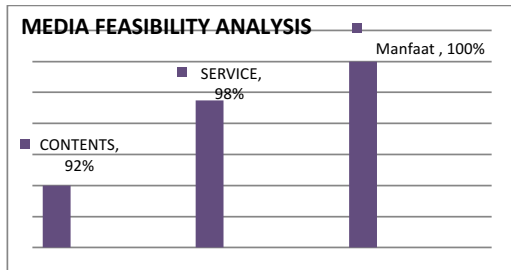


Figure 3 Media Feasibility Diagram

4.3 Development of starting Product

4.3.1 Cover

Cover is a bigining of e-magazine that informed the content of e-magazine to students.



Figure 4 E-magazine covers

4.3.2 Display of Learning Achievements

This display contains the learning outcomes to be achieved from this learning media. The learning outcomes contained in this media are based on a predetermined RPS.

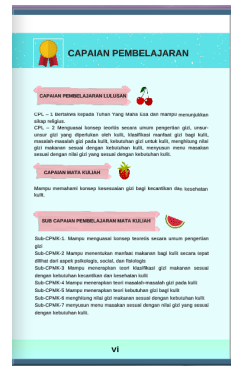


Figure 5 Display of learning achievements

4.3.4 Material Display and evaluation

This view contains material contained in this e-magazine. The material discussed is in accordance with the learning outcomes contained in Learning desainfor Beauty Skin Nutrition. At the end of the material, evaluation questions are included in the form of 5 essays, the aim is to evaluate student knowledge after studying the material contained in the media. Evaluation is made in the form of google form.



Figure 6 Display of Material & Evaluation

4.3.5 Video Display

This view contains a video that discusses related material, this video is included in the learning material.



Figure 7 Display Video

4.6 Results of Field trials

The results of a small group trial at 2022 cosmetology students, Medan State University, totaling 6 (six) people, stated that the e-magazine media for skin beauty nutrition in terms of content feasibility and media appearance feasibility was assessed at 81.9%. The results of the trial for the medium group at Stambuk 2022 cosmetology, Medan State University, totaling 12 (twelve) people, stated that the e-magazine media for skin beauty nutrition in terms of content feasibility and media appearance feasibility was assessed at 88.8% in "Good" category. The results of the large group trial at Stambuk 2022 cosmetology, Medan State University, totaling 39 (thirty nine) people, stated that the e-magazine media for skin beauty nutrition in terms of content eligibility and media display eligibility aspects was in excellent category". The following is presented in the form of a bar chart, such as figure 8.

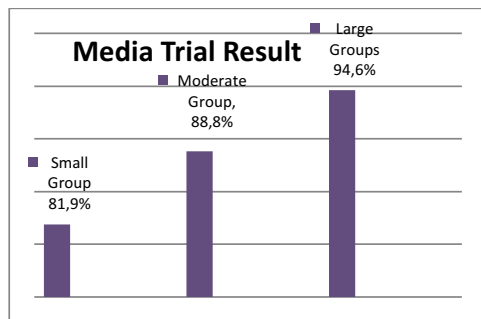


Figure 8 Media Trial Diagram

5. CONCLUSION

Development of learning tools assisted by e-magazine media in learning skin beauty nutrition has gone through due diligence by 2 materials expert and 2 medias expert, during material validation a score of 85.8% and at the media validation obtained a score of 95.8% in the category "Excellent". The feasibility of e-magazine media-assisted learning tools for learning beauty nutrition has been tested in three stages.

The small group trial obtained a score of 81.9% in, the medium group trial obtained a score of 88.8%, the last stage of the large group trial obtained a score of 94.6% in. Based on assessment result of all stages that have been carried out for the development of e-magazine media-assisted learning tools for beauty nutrition learning, it has average score of 90%. From the results of the assessment obtained, it can be concluded that the beauty nutrition e-magazine media is declared "Appropriate" for utilized in the learning and teaching process for students of student 2022 Cosmetology Education, Medan State University and can improve the creative thinking skills of cosmetology education study program students in learning nutrition beauty.

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