

## Development of Quizz-Based Applications as Preparation of Students in The World of Work Nursing Assistant & Caregiver Skills Program at Vocational School of Health Surabaya

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### Abstract

Based on the research results, students are active with the learning system outside the classroom and with the project learning system. Related to this, it is necessary to carry out an evaluation to determine the readiness and ability of students to develop their full potential cognitively, affectively and psychomotorically, which emphasizes the ability to think critically, creatively and innovatively, communication and collaboration skills, problem solving skills that are able to connect knowledge of the real world, as well as mastering information technology. Therefore, this research was conducted to determine the extent to which nursing assistant & caregiver students understand their abilities, potential and the efforts made to build personal branding in preparing themselves to enter the competitive world of work as skilled students ready to work as elderly nurses or nurse assistants in hospitals. and Entrepreneurship in the Health sector. The results of research into the development of an evaluation tool based on the Quizizz application to reveal students' personal branding in preparing themselves to enter the world of work obtained an average score of 76.4%, included in the high category based on indicators of authenticity, relevance and consistency. The level of effectiveness of the evaluation tool based on the Quizizz application was obtained based on responses to the use of the application which obtained an average of 72.9%, including in the high category based on indicators of presentation, content design, ease and feasibility of Quizizz.

**Keywords:** Development, Quizizz, Vocational.

### Introduction

In the current digital era, information and communication technology has become an integral part in almost every aspect of life, including education. The application of technology in the teaching and learning process has been proven to increase the efficiency and effectiveness of education. One innovation that has attracted attention is the development of a quiz-based application (quizz) to prepare students to enter the world of work, especially in the Nursing Assistant and Caregiver skills program at the Surabaya Health Vocational School. According to (Botbatasit Junior, 2020) "Evaluating is following students' progress, identifying problems and providing elements to be able to solve problems themselves." Through evaluation using mobile technology applications, students can find out the extent of success they have achieved after carrying out learning or during education. This is obtained through information related to evaluation results that show students' abilities, progress or shortcomings which can be used to motivate learning, guide and develop behavior and even determine choices regarding school or work.

The Nursing Assistant and Caregiver skills program at the Surabaya Health Vocational School aims to equip students with the technical skills needed in the health sector. However, the challenges faced are not only limited to mastering academic material, but also include mental

preparation and practical readiness to enter the world of work. Comprehensive preparation is essential to ensure that graduates have competencies that match the demands of the ever-growing healthcare industry. . This needs to be supported by evaluation tools that are of good quality and practical in use by utilizing technology because evaluation tools are tools that determine value and quality. This research will develop an evaluation tool using the "Quizizz" application. The use of technology as an evaluation tool is seen as being able to minimize deficiencies that might occur in ordinary evaluations because this evaluation tool has several advantages, namely it has a proofreading feature, timer work, and does not require the use of paper. The multiple choice test is used because it is easy to assess scores, fast and has a good level of objectivity for the jury.

The same thing was also expressed by Botbatasit Junior (2020) & González (2019) who conducted research using the Quizizz application for learning assessment, the results prove how promising this tool is for increasing students' grades and their satisfaction in learning learning material. The quiz application provides an interactive and interesting learning method for students. The use of quizzes can increase learning motivation and student involvement in the teaching and learning process. The quiz application allows for real-time assessment of student skills and knowledge. This helps teachers to monitor student progress more effectively and provide timely feedback. Surabaya Health Vocational School realizes that innovation in teaching and evaluation methods is very important to improve the quality of vocational education. By introducing quiz-based applications, it is hoped that there will be a significant increase in the learning process and students' readiness to enter the world of work. Apart from that, this application is also expected to reduce the gap between the theory taught in school and the practice needed in the field.

## Methods

The procedural model chosen was adopted from the ADDIE research and development model. According to Branch (2009: 2) "ADDIE is an acronym for Analyze, Design, Develop, Implement and Evaluate. ADDIE is a product development concept, the ADDIE concept applied here builds performance-based learning." "ADDIE is an abbreviation of analyze, design, develop, implement and evaluate.

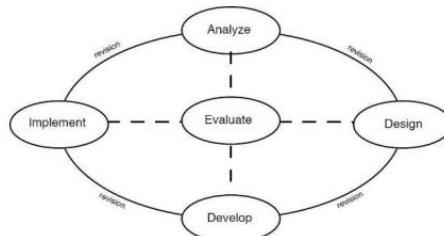


Figure 1. ADDIE Model's

### 1. Analysis Phase

Analysis concerns activities related to work situations and environments so that we can know what products need to be developed (Sugiyono, 2015: 38). The analysis stage also aims to find out and clarify whether the problem is truly a problem and requires efforts to be resolved. This problem has several objectives that are adjusted to the characteristics of students, including: a. Curriculum Analysis, b. Validating Performance Gaps, c. Set goals, d. Analysis of needs and characteristics, e. available resources. At the analysis stage, researchers analyze the Feasibility and Development Requirements such as evaluation tools.

### 2. Design Stage

A work plan for a product that can be produced with several stages in development. Steps: a. Determine a team consisting of learning design experts, learning material experts and

respondents who support learning material data as well as respondents who support the development of research data. b. Prepare n Schedule c. Making Concept Maps.

### 3. Development Phase

Development is the activity of making and testing products(Sugiyono, 2015:38). This development stage is the stage where researchers develop an evaluation tool based on the Quizizz application with authentic, relevant and consistent Personal Branding Formation Material. Development or development in the ADDIE model where products are developed based on suggestions given or validated by experts. After the product is revised according to the validation expert's advice, it is then continued with formative evaluation. If there are revisions, they can be revised first and then continue with testing on students.

### 4. Implementation Stage

At this stage, 90 students were tested to determine the feasibility of the quizz application.

### 5. Evaluation Stage

Research instruments are various measuring tools such as tests, questionnaires, interview guides, and observation guides that researchers use to collect data in a study.(Sugiyono, 2015: 156).Percentage Descriptive Data Analysis For this research approach, a quantitative descriptive research approach is used, as stated(Sugiyono 2017: 8)that quantitative descriptive research methods are defined as research methods that are based on the philosophy of positivism, used to research specific populations. samples, data collection using research instruments, quantitative/statistical data analysis, with the aim of proposing a predetermined hypothesis. The calculation steps are:

- a. Find the largest and smallest scores
- b. Determine the range value (R)

$$R = \text{max score} - \text{min score}$$

- c. Determine the number of classes (K)
- d. Determine the number of classes (K)

Determining the length of the interval class (i)

$$k = 1 + 3.3 \log n$$

Determining the length of the interval class (i)

$$P = \frac{\text{rentang skor}}{\text{banyak nyakelas}} = \frac{R}{K}$$

(Sugiyono, 2017, hlm 36)

## Research Results and Discussion

### 1. Analysis Phase

Analysis concerns activities related to work situations and environments so that we can know what products need to be developed (Sugiyono, 2015: 38). The analysis stage also aims to find out and clarify whether the problem is truly a problem and requires efforts to be resolved. At this stage, analysis is carried out by observing the report card results and assessments from the BK to find out about the condition of students' readiness to work.

### 2. Design Stage

At this stage there were (50) questions with material on the formation of authentic, relevant and consistent personal branding with five levels (5,4,3,2,1). In the design of this application there are logos, questions, attractive designs so that students feel happy answering each question.



Figure 2. Design

### 3. Development

Test the validity again with SPSS 25 through the Pearson Product Moment Correlation test and test the criteria in the validity test, namely if the Sig value is  $<0.005$  then the data is valid. Meanwhile, the reliability test was carried out using the SPSS 25 application via the Cronbach's Alpha test. The test criteria in the reliability test are said to be reliable if the Alpha coefficient is  $> 0.80$ .

### 4. Implementation Stage

The instrument was declared valid. Then it was implemented by involving 90 Beauty Education Students.

Table 1. Category

Percentage	Category
76%-100%	tall
56%-75%	tall
$<50\%$	low

Results of Personal Branding Questionnaire for Beauty Students Using the Quizizz Application in Preparation for Entering the World of Work.

Table 2. Results of Student Personal Branding Questionnaire

No	Indicator	Results	Criteria
1	Authenticity	72.8%	High enough
2	Relevant	80.5%	tall
3	Consistent	82.9%	tall
Average. Average		78.73%	High enough

### 5. Evaluation Stage

Evaluation is the activity of assessing whether each step of the activity and product that has been made is in accordance with specifications or not (Sugiyono, 2015:38). To find out the effectiveness of the Quizizz application-based evaluation tool also:

Table 3. Percentage descriptive criteria

Percentage	category
85%-100%	tall
50%-65%	High enough
$< 50\%$	low

### **Conclusion and Recommendations**

Based on the results of the research, it concluded that the results of nursing assistant & caregiver students, in preparation for the world of work, were 78.73% in a fairly high category with indicators of authenticity, relevance and consistency. The feasibility and practicality of this Quizizz application-based evaluation tool was obtained through a validity test carried out using the SPSS 25 application through the Pearson Product Moment Correlation test. It was declared valid. The level of effectiveness of the application-based Quizizz evaluation tool was obtained based on responses to application usage, an average of 78.7% was included in the quite high category based on indicators of presentation, content design, ease and feasibility of Quizizz.

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