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Feasibility test application of information systems in the media as a learning in vocational school

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ABSTRACT

This study aims to determine the level of eligibility of the application of staffing information systems as a learning media for automation of staffing governance in the Vocational. This research method uses quantitative research methods. Data collection techniques are done using a questionnaire and analysis of needs using quantitative data analysis. Based on the results of the feasibility test on the application of the staffing information system as a learning media for automation of the governance of staffing above it was concluded that the application of the staffing information system can be categorized as very suitable for use in the learning process in the Vocational School in the Field of Automation and Office Management. Based on the results of the assessment of material experts, validation of media experts, expert practitioners and materials that show the results of the assessment of 89.2% of material experts; 95% assessment of media experts; 90% of expert practitioners, so the application is very feasible to use in the learning process.

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1. INTRODUCTION

The Development of Science and Technology besides influencing in the industrial world also influences the world of education in Indonesia. Technological progress requires a teacher as an educator to always innovate in creating learning media that can support students' understanding in learning subject matter both theory and practice [1-5]. The use of instructional media in addition to aiming to facilitate the delivery of material from teachers to students can also increase the interest and willingness of students in a subject. Therefore the position of learning media in the world of education is needed.

In this case technology has a positive effect not only on social life but also on education. As technological development is becoming increasingly prevalent in educational settings, there is hope for educators to utilize digital tools to support teaching and learning in the classroom [1, 6-9]. With the advancement of technology for a teacher as an educator to innovate in creating learning media that is able to support students' understanding in learning subject matter both theoretically and in practice [10-12].

Virtual learning media is learning that is designed and designed with a website-based staffing information system, making it easier for students to understand the flow of administrative staffing and can implement it in accordance with the business world or the industrial world [12-18]. Teachers are expected to have the ability to improve their professionalism through the development of learning media itself, so that the development carried out can answer the problems of students in the learning process.

2. RESEARCH METHOD

This research uses quantitative research. Quantitative research methods are research methods based on positivism philosophy, used to examine a population or certain data collection using research instruments, quantitative or statistical data analysis, with the aim to test the hypotheses that have been set [19-22].

The research was carried out at the Surakarta Ex-residency Vocational School which included Sragen, Karanganyar, Wonogiri, Sukoharjo, Klaten, Boyolali, and Surakarta. The subjects in this study were students at the Surakarta Ex-Residency Vocational School. While the object of this research is the application of staffing information systems. The testing procedure in this study is the validity test of the media expert, the validity test of the expert practitioner, the validity test of the material expert.

Data collection techniques using questionnaires and questionnaires. The questionnaire is a data collection technique that is done by giving a set of questions or written statements to respondents to answer [23-25].

3. RESULTS AND ANALYSIS

Based on the results of research on the feasibility test of the application of the personnel information system as a learning media for automation of staffing governance in the Vocational Ex-residency Surakarta assessed by material experts, media experts and practitioners, the following results were shown:

3.1. Material expert rating

3.1.1. Content section

There are indicators to measure the contents of the developed learning media, including: 1) The composition of the media flow that is presented in accordance with the needs of stakeholders; 2) The composition of the material is presented in accordance with the objectives of learning; 3) The language used uses good language; 4) The display is presented in an attractive manner; 5) Display has been arranged systematically.

Based on Figure 1 shows that the lowest assessment indicators found in the composition of the material are presented according to learning objectives and the display is presented in an attractive manner at 4.42 or 88.4%, while the highest assessment on the display has been systematically arranged at 4.58 or 91.6%. The assessment of the material experts on the contents of the learning media shows an average value of 4.5 or 90%. With this assessment, it needs to be improved in the less so that it can be better

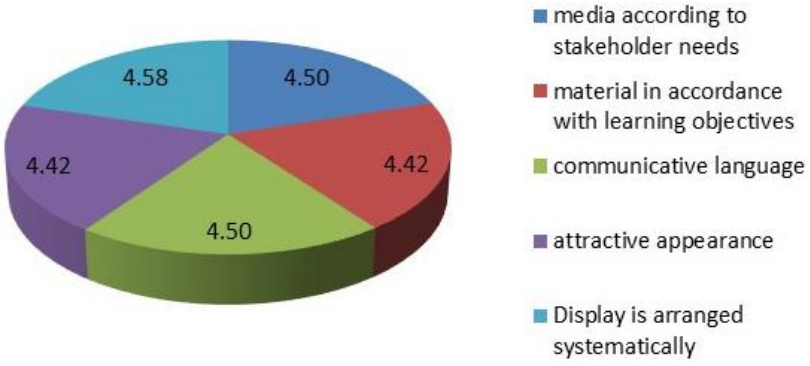

Figure 1. Graph of expert material assessment in the contents section

3.1.2. Learning section

There are indicators to measure learning in developed learning media, including: 1) Learning objectives in the media are clear and easy to understand; 2) Media presentation can motivate; 3) Presentation of the material has strengthened the concept of understanding; 4) Presentation of material easily reinforces the concept of understanding; 5) Presentation of material is easy to understand.

Based on Figure 2 shows that the lowest valuation indicator is in the presentation of material easily reinforces the concept of understanding of 4.25 or 85%, while the highest assessment in the presentation of material is easily understood at 4.58 or 91.6%. The assessment of the material experts in the learning section of the learning media showed an average value of 4.42 or 88.4%. With this assessment, it is necessary to improve on the less so that it can be better on the material side.

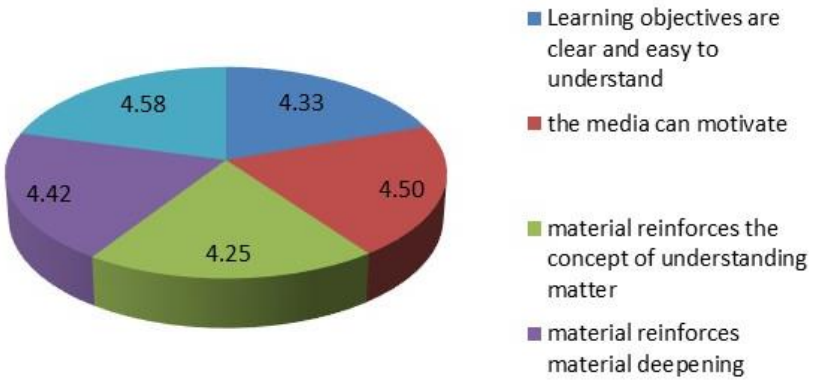

Figure 2. Graph of expert material assessment in the learning section

3.2. Media expert rating

3.2.1. Integration section

There are indicators to measure the integration of developed learning media, including: 1) Maintainable Programs; 2) Usebility Program; 3) the Contability Program; 4) Reusable Program.

Based on Figure 3 shows that the assessment indicators reach a maximum or perfect value of all of the various elements by 5 or 100%, including: The program has been maintainable, the program has been usability, the program has been in compatibility, the program has been reusable. The assessment of media experts on the integration of learning media shows an average value of 5 or 100%.

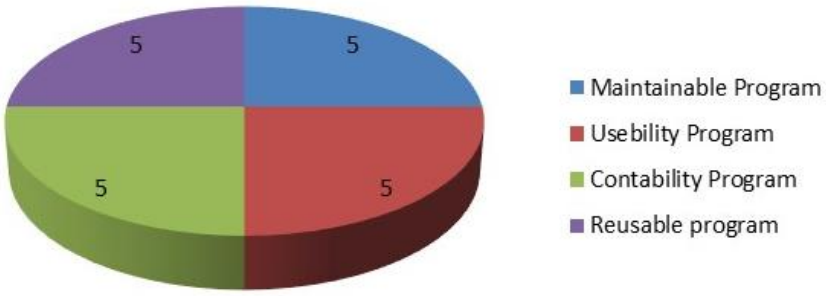

Figure 3. Graphs of media expert ratings in the integration section

3.2.2. Balance section

There are indicators to measure the balance in the learning media developed, including: 1) Appropriateness of layout placement; 2) Accuracy in the use of fonts; 3) Presentation of the material has strengthened the concept of understanding; 4) Accuracy in the use of font sizes.

Based on Figure 4 shows that the assessment indicators reach a maximum or perfect value of all elements of 5 or 100%, including: Placement of the layout is appropriate; 2) Accuracy in the use of fonts is appropriate; 3) Presentation of the material has reinforced the concept of understanding is appropriate; 4) Accuracy in the use of font sizes is appropriate. The assessment of media experts on the balance of learning media shows an average value of 5 or 100%.

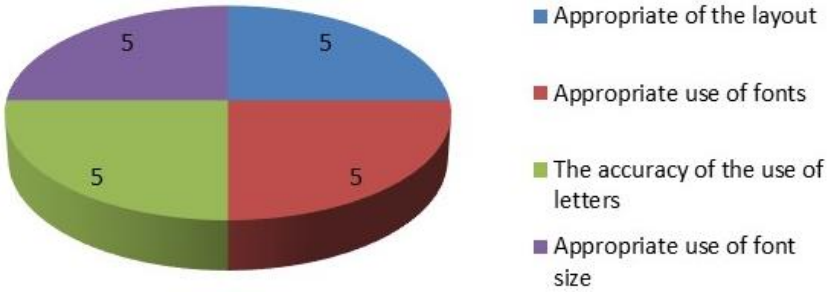

Figure 4. Graph of media expert rating in the balance section

3.2.3. Color section

There are indicators to measure the balance in the learning media developed, including: 1) Suitability of the Background, 2) Accuracy of the color of the writing.

Based on Figure 5 shows that the lowest rating indicator there is the accuracy of the writing color by 4 or 80%, while the highest assessment on the suitability of the background of 5 or 100%. The assessment of the media experts on the color in the learning media shows an average value of 4.5 or 90%. With this assessment, it needs to be improved in the less so that it can be better and perfect.

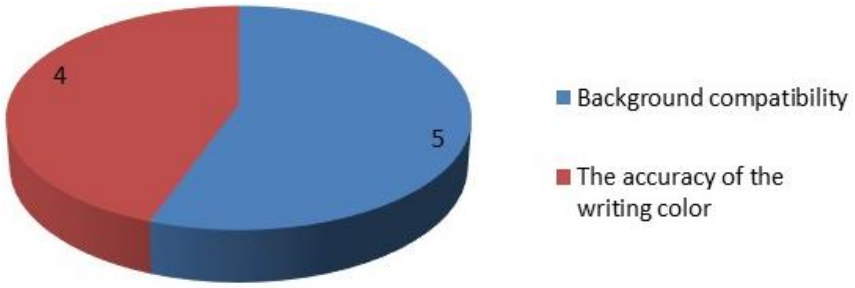

Figure 5. Graphs of media expert ratings in the color section

3.3. Interactiveity section

There are indicators to measure the balance in the learning media developed, including: 1) Accuracy of media content, 2) Accuracy of media supporters, 3) Products are not boring, 4) Products encourage feedback, 4) Appropriateness of media content with learning objectives.

Based on Figure 6 shows that the lowest assessment indicators there are products pushing feedback by 4 or 80%, while the highest assessment on the accuracy of media content, the accuracy of media supporters, the product is not boring, the suitability of media content with learning objectives is 5 or 100%. Evaluation from media experts on the interactivity media of learning media shows an average value of 4.5 or 90%. With this assessment, it needs to be improved in the less so that it can be better and perfect.

Learning innovation is very much needed in creating a learning atmosphere. Learning innovations are also used as learning media to create a pleasant learning atmosphere and the material received by students can be well received. Along with the always development of Information and Communication Technology and curriculum development in the world of education, the teacher is required to always use learning media in the teaching and learning process.

The use of staffing information system applications as a learning tool for automating staffing governance is used as a way to deliver the material presented, not only in theory but also learning media can be used as a way to improve the ability to practice in the subject matter of automation of governance.

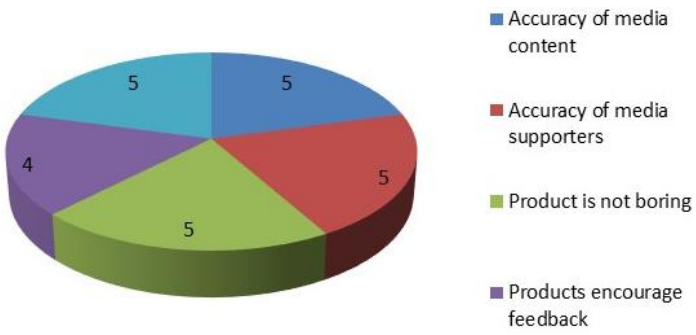

Figure 6. Graph of media expert rating in the interactive section

4. CONCLUSION

Based on the results of the feasibility test on the application of the staffing information system as a learning media for automation of the governance of staffing above it was concluded that the application of the staffing information system can be categorized as very suitable for use in the learning process in the Vocational School in the Field of Automation and Office Management. Based on the results of the assessment of material experts, validation of media experts, expert practitioners and materials that show the results of the assessment of 89.2% of material experts and 95% assessment of media experts. Judging from the percentage of the assessment, the application of the personnel information system as a learning media of automation of governance governance is included in the very feasible category, so that the personnel information system application is very feasible to be implemented for learning media on the subject of automation of governance governance in the Vocational School Field Automation and Office Management Ex-Residency of Surakarta. Based on technological advances that are very rapid, that the way to increase needs in the world of work or the industrial world is the application of technology.

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