

Use Of The UTAUT 2 Model to Find Out Acceptance of Multimodality Learning Media Web-Based Elementary School Teachers in West Java

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Abstract

Interest in web-based multimodality learning media has increased rapidly in recent years. Multimodality learning media combines various elements such as text, images, audio, video, animation, and interactivity to create rich and interesting learning experiences. This study aims to describe the success and acceptability of web-based multimodality learning media among students. This study uses a qualitative approach involving students from various levels of education. Data was collected through observation, interviews and surveys. The results showed that web-based multimodality learning media was highly accepted by students. They expressed high satisfaction with interactive multimodality learning experiences and greater involvement in the learning process. Learners appreciate the accessibility of web-based learning media that allows flexible and independent learning. They also reported that the use of various media elements such as images, videos, and audio helps reinforce understanding and maintain interest in learning. Students also like interactive features that allow them to be actively involved in the learning process, such as quizzes, interactive exercises, and online discussions. However, this study also identified several challenges that need to be addressed. Some students experience problems accessing a stable and limited internet, while others have limitations in technology skills. In addition, the attention that is divided between learning media and online distractions is also a challenge faced by students. Referring to the results of this study, it is suggested that educational institutions continue to encourage the use of web-based multimodality learning media. Efforts need to be made to improve internet accessibility and provide technology skills training to students. In addition, it is important to design learning media that are interesting, interactive, and easy to use to maintain students' interest and involvement in the learning process.

Keywords: UTAUT2; Instructional Media; Multimodality

INTRODUCTION

Education is one of the key factors in the formation of the future generation competent and competitive future. According to Adis (2002:25) the digital era is a period when information is easily and quickly obtained and disseminated using digital technology. Meanwhile, digital technology is a technology that using a computerized system connected to the internet. In the era of digital technology which continues to grow, the use of web-based multimodality learning media has become one of the increasingly popular approaches in the learning process in elementary school. Multimodality learning media integrates various types of media such as text, images, audio, video, animation, and interactivity to create more interesting and effective learning experiences. In West Java, as one of the largest provinces in Indonesia by population significant student, the acceptability of web-based multimodality

learning media by elementary school teachers becomes very relevant. Elementary school teachers in West Java need to face challenges to ensure an effective and learning experience keep abreast of ever-changing technological developments. Therefore, research on acceptance of web-based multimodality learning media by elementary school teachers in West Java is important to evaluate the effectiveness and impact of its use in the context of local education. The use of multimodality is not only used during the learning process takes place but can also be used as tools in assessment, such as variety the following assessment is presented by Abidin Yunus (2016) assessment of learning skills 21st century namely the assessment of thinking skills, both critical thinking, creative, solving problems, as well as metacognition; performance skills assessment; knowledge assessment; and assessment of attitudes, behavior, and character. Multimodal learning is essentially a process, method, deed to make students and teachers learn by utilizing various text sources as learning media Firmansyah (2019). In the utilization of various sources In this way teachers and students gain knowledge about the wider world. This research aims to investigate the acceptability of elementary school teachers in West Java web-based multimodality learning media. In this research, will be identified factors that influence teacher acceptance of learning media multimodality, the challenges faced in implementing the media, as well as the benefits obtained by teachers and students from its use. With better understanding of the acceptability of multimodality learning mediaweb-based by elementary school teachers in West Java, it is hoped that this research can provide valuable insights for the development of more effective education and innovation at the elementary school level.

This study aims to explore the acceptability of elementary school teachers in West Java towards web-based multimodality learning media. This research using a qualitative approach involving elementary school teachers as participant. Data was collected through a questionnaire given to the teachers have used web-based multimodality learning media in the process their teaching. The results showed that most of the school teachers elementary schools in West Java have a positive view of learning media web-based multimodality. Teachers recognize that learning media multimodality provides a more interesting and interactive learning experience for student. They found that the combination of various media elements such as text, images, audio, and video can help students understand and remember information better Good. In addition, interactive features in the learning media are also considered effective in increasing student participation and involvement in the learning process.

However, several challenges were also identified by teachers. One of the main challenges is the limitation of internet access that can affect the quality and consistency use of

web-based multimodality learning media. In addition, several teachers also face difficulties in learning and implementing technology in everyday learning. Based on these findings, it is suggested that the government and educational institutions provide adequate support in terms of technology infrastructure and training to elementary school teachers. This will help increase acceptability and use of web-based multimodality learning media in West Java. Besides that, development of learning media content in accordance with the curriculum and needs also need to be considered to maximize the benefits of learning media web-based multimodality in the learning process in elementary schools.

METHOD

This study uses a qualitative approach to explore understanding in depth about the acceptability of web-based multimodality learning media by elementary school teacher in West Java. The qualitative approach allows the researcher to exploring the views, perceptions, and experiences of teachers in depth, as well identify the factors that influence their acceptance of the media multimodality learning. The participants in this study were school teachers who actively teach in various regions in West Java. The purposive sample will used to select teachers who have experience using the media web-based multimodality learning in their teaching. Then when seen from the point of view of the method or technique of data collection, the data collection technique can be done by way of interviews (interviews), questionnaires (questionnaire), observation (observation), and a combination of the three Sugiyono (2017:137). Data collection technique used in research is to use a questionnaire.

According to Sugiyono (2017: 142) a questionnaire or questionnaire is a technique Data collection is done by giving a set of questions or written statement to the respondent to be answered. The types of questions in the questionnaire are divided into two, namely: open and closed. Open questions are questions that are expect the respondent to write down the answer in the form of a description of something matter. Conversely, closed questions are questions that expect an answer brief or expect the respondent to choose one alternative answer from every available question. Every questionnaire that expects Answers in the form of nominal, ordinal, interval, and ratio data are questions closed Sugiyono (2017:143).

The questionnaire or questionnaire used in this study is a type of questionnaire or a closed questionnaire, because the respondent only needs to give one mark answer that is considered correct. The research instrument is a tool used by someone who conducts a study to measure a phenomenon that has been happen. The data collection instrument in this study

used a questionnaire, namely a list of statements compiled in writing with the aim of obtaining data in the form of the answers of the respondents. The Likert scale is used to measure attitudes, Opinions and perceptions of a person or group of people about social phenomena. Scale the likert used in this study is a minimum score of 1 and a maximum score of 4, because it will be known with certainty whether the respondent's answer tends to agree or disagree answers. So that the results of the respondents' answers expected to be more relevant, Sugiyono (2014:58).

Table 1. Likert scale score

No	Answer	Score
1	Very Disagree	1
2	Disagree	2
3	Agree	3
4	Very Agree	4
5	Very much Agree	5

Source: Sugiyono (2014:58)

By using this qualitative method, this research is expected to be able to provide a deep understanding of the acceptability of learning media web-based multimodality by elementary school teachers in West Java, as well as providing valuable insights for the development of more effective and innovative education in elementary school level. This study uses SmartPLS, which is used for explains whether there is a relationship between latent variables (predictions). pls is a powerful analysis method because it does not assume current data with a certain scale measurement, the number of samples is small Ghozali (2011).

RESULTS AND DISCUSSION

Measurement Models

The first outer model test to be carried out is to look at the AVE value. Results data analysis also shows that all constructs have partially complied with the rule of thumb AVE is 0.5. The results of the AVE test can be seen in Table 2 below.

Table 2. Convergent Validity Test Results with AVE

Construct	Average variance extracted (AVE)
BI	0,56
EE	0,54
FC	0,58
HM	0,63
IUH	0,61
PE	0,61
PLO	0,65
SI	0,58

Furthermore, convergent validity is seen from the magnitude of the loading factor, which is above 0.70. The results of data processing for loading factor can be seen in Table 3. Test results The loading factor for each construct through the SmartPLS software is shown in detail Overall there are 33 item descriptors that are declared valid.

Table 3. Convergent Validity Test Results with Outer Loadings

Construct	Item	Outer loadings
Behavior Intention	BI21	0.699
Behavior Intention	BI22	0.802
Behavior Intention	BI23	0.662
Behavior Intention	BI24	0.805
Behavior Intention	BI25	0.771
Effort Expectance	EE10	0.598
Effort Expectance	EE6	0.718
Effort Expectance	EE7	0.886
Effort Expectance	EE8	0.803
Effort Expectance	EE9	0.582
Facilitating Condition	FC16	0.802
Facilitating Condition	FC17	0.620
Facilitating Condition	FC18	0.831
Facilitating Condition	FC19	0.778
Facilitating Condition	FC20	0.827
Hedonic Motivation	HM36	0.806
Hedonic Motivation	HM37	0.866
Hedonic Motivation	HM38	0.870
Hedonic Motivation	HM39	0.862
Hedonic Motivation	HM40	0.894
ICT Usage Habits	ICT26	0.742
ICT Usage Habits	ICT27	0.849
ICT Usage Habits	ICT28	0.858
ICT Usage Habits	ICT29	0.811
ICT Usage Habits	ICT30	0.788
Performance Expectancy	PE1	0.903
Performance Expectancy	PE2	0.873
Performance Expectancy	PE3	0.884
Performance Expectancy	PE4	0.891
Performance Expectancy	PE5	0.887
Perceived Learning Opportunities	PLO31	0.505
Perceived Learning Opportunities	PLO32	0.903
Perceived Learning Opportunities	PLO33	0.892
Perceived Learning Opportunities	PLO34	0.884
Perceived Learning Opportunities	PLO35	0.889
Social Influences	SI11	0.529
Social Influences	SI12	0.863
Social Influences	SI13	0.883
Social Influences	SI14	0.884
Social Influences	SI15	0.710

The next step is to carry out the discriminant validity test seen from the value of the square root of AVE. Discriminant validity is carried out to ensure that each concept of each

latent model is different from other variables. Validity testing is done to find out how precise a measuring instrument is perform the measurement function Ghozali (2016). This value for each variable must be greater than the correlation between variables in models. Checking is done by comparing the correlation value in terms of diagonal. Referring to the results in Table 4, Performance Expectancy, Perceived Learning Opportunities and Behavioral Intentions have good discriminant validity values. The results of the discriman validity test are presented in table 4.

Table 4. Discriminant Validity Test Results

Construct	BI	EE	FC	HM	IUH	PE	PLO	SI
BI								
EE	0,52							
FC	0,60	0,50						
HM	0,55	0,38	0,38					
IUH	0,55	0,49	0,50	0,51				
PE	0,64	0,45	0,45	0,64	0,54			
PLO	0,46	0,51	0,42	0,53	0,49	0,770		
SI	0,63	0,61	0,65	0,42	0,57	0,579	0,539	

Next is the reliability test. In this study, the reliability test done is to use composite reliability with the rule of thumb 0.7. Referring to the results of the reliability test, it can be concluded that all constructs has good reliability because it fulfills the rule of thumb 0.7. Composite test results reliability is presented in table 5.

Table 5. Reliability Test Results

Construct	Composite reliability (rho_a)
Behavior Intention	0.831
Effort Expectance	0.807
Facilitating Condition	0.791
Hedonic Motivation	0.921
ICT Usage Habits	0.895
Performance Expectancy	0.903
Perceived Learning Opportunities	0.926
Social Influences	0.799

Structural Models

The first step is to test the structural model with the multicollinearity test which is done through the value of VIF (Variance Inflation Factor). The higher the VIF value, the stronger the collinearity between the exogenous variables. The VIF value recommended by Ghozali & Latan (2015, p. 77) is below 5.00. Test results multicollinearity can be seen below.

Table 6 Multicollinearity Test Results

Construct	VIF
Effort Expectance -> Behavior Intention	2.687
Facilitating Condition -> Behavior Intention	2.929
Hedonic Motivation -> Behavior Intention	3.548
ICT Usage Habits -> Behavior Intention	2.990
Perceived Learning Opportunities -> Behavior Intention	3.972
Performance Expectancy -> Behavior Intention	3.134
Social Influences -> Behavior Intention	3.842

The VIF value for all variables is below 5, so it can be concluded that the relationship between exogenous variables is very high, so there is multicollinearity. According to Ghozali & Latan (2015, 73), the magnitude of the percentage variance is explained by looking at the R-square value of each endogenous variable. Variables that receive arrows or explained by other variables in this study is behavior intention.

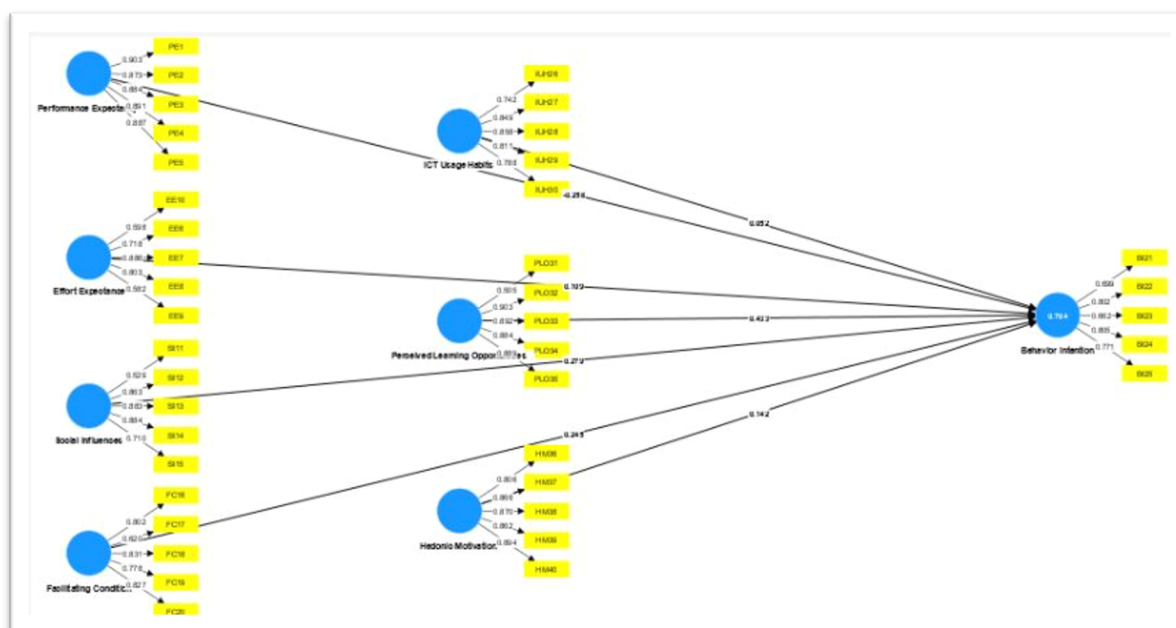


Figure 1. Model Conformity Test

Referring to the results of the model suitability test in Figure 2, it can be stated that model suitability testing is done by looking at R-Squares as a strength predictions from the structural model are in accordance with those proposed by Ghozali (2015,78). The following is the R-square value obtained after the results of data processing with assistance the smartPLS program is 0.784 for the behavioral intention construct. This is interpreted that 80% of behavior intention can be explained by the construct Performance Expectancy, Effort Expectance, Social Influences, Facilitating Conditions, ICT Usage Habits (IUH), Perceived Learning Opportunities, Hedonic Motivation. While the remaining 20% is explained by constructs or

other latent variables. Hypothesis testing is done to show the relationship between latent variables researched. Hypothesis testing in the PLS-SEM method is done by looking the path coefficient.

Table 7 Path Coefficient

Track	Hypotesis	Coefficient Track	Result
Effort Expectance → Behavior Intention	The level of ease of using a system has a positive effect on teacher loyalty using web-based multimodality learning media	0,109	Supported
Facilitating Condition → Behavior Intention	Trust in existing infrastructure supports the use of technology and has a positive effect on teacher loyalty using web-based multimodality learning media	0,245	Supported
Hedonic Motivation → Behavior Intention	Motivation for pleasure has a positive effect on teacher loyalty using web-based multimodality learning media	0,142	No Supported
ICT Usage Habits (IUH) → Behavior Intention	The habit of using ICT has a positive effect on teacher loyalty using web-based multimodality learning media	0,052	Supported
Perceived Learning Opportunities → Behavior Intention	Learning opportunities have a positive effect on teacher loyalty using web-based multimodality learning media	0,433	Supported
Performance Expectancy → Behavior Intention	The level of trust in using the system has no positive effect on teacher loyalty using web-based multimodality learning media	-0,258	Supported
Social Influences → Behavior Intention	Social influence has a positive effect on teacher loyalty using web-based multimodality learning media	0,279	Supported

In Table 6 it can be seen that the Perceived Learning Opportunities construct is construct with the largest path coefficient (0.433) when compared to Hedonic Motivation (0.142), Effort Expectance (0.109), Social Influences (0.279), Facilitating Condition (0.245), ICT Usage Habits (IUH) (0.052). This shows that Perceived Learning Opportunities have the greatest influence on teacher loyalty using web-based multimodality learning media compared to Performance Expectancy, Effort Expectance, Social Influences, Facilitating Condition, ICT Usage Habits (IUH). While the Performance construct Expectancy is the least impactful construct because it has a path value negative coefficient (-0.258).

CONCLUSION

(Unified Theory of Acceptance and Use of Technology) UTAUT 2 is a user acceptance model influential and often appointed to carry out research related to user acceptance of an information technology that is more context-centered consumer (Hidayat et al., 2020). The UTAUT 2 model can be used to analyze the factors that influencing teacher acceptance of multimodality-based learning media web. The factors described in this model include perceived beliefs, experience needs, attitudes, and social factors. This research shows that teachers' perceived beliefs on ease of use, perceived benefits, and the need for technological experience has a positive effect on teacher acceptance on web-based multimodality learning media. Teacher's attitude towards the use of web-based multimodality learning media also influences their acceptanc. Teachers who have a positive attitude towards technology tend to be more receive and use the learning media. Social factors, such as support organization and peer support, also have an influence on teacher acceptance on web-based multimodality learning media. Support and collaboration between teachers in using this learning media can increase acceptance and the effectiveness of using the media. Suggestions based on the results of this study include: Exploring other factors which can influence teacher acceptance of multimodality learning media.

Web-based. In addition to the factors described in the UTAUT 2 model, there are other factors such as availability of infrastructure, technical support, and time availability which can affect teacher acceptance. Expand research area to other regions in Indonesia to get a more detailed picture representative about the acceptance of web-based multimodality learning media by primary school teachers. Each region may have different contexts and challenges in adopting technology in learning. Conduct further research for identify strategies and training that are effective in increasing acceptance and use of web-based multimodal learning media by elementary school teachers. In this case, the role of related parties such as the education office, educational institutions, and learning media developers can be included in collaboration to support wider adoption of technology. Involve students and parents in research further to understand their perceptions of learning media web-based multimodality. Involving other stakeholders will provide a more complete insight into the acceptability of this learning media and enrich research findings. Thus, further research in using the UTAUT 2 model to analyze the acceptance of learning media web-based multimodality by elementary school teachers in West Java can provide better understanding of the factors that influence acceptance and strategy recommendations for increasing the use of technology in context education.

ACKNOWLEDGMENTS

Through this invaluable opportunity, the author would like to express his deepest gratitude to all those who have helped with the completion of this article, especially to the honorable:

1. Dr. Yunus Abidin, M.Pd., as Chair of the PGSD Masters program at the Indonesian University of Education, Cibiru Campus;
2. Dr. Dede Trie Kurniawan, M.Pd., as the 2nd lecturer in the Pedagogic course at the Indonesian University of Education;
3. All elementary school teachers in West Java who have contributed to filling out this research questionnaire
4. To the family; as well as
5. All parties who have helped in the preparation of this report.

May God Almighty give a fitting reward for all the assistance that has been given.

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