

## **DEVELOPMENT OF WORDWALL LEARNING EVALUATION ON CONSUMER BEHAVIOR MATERIAL**

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### **ABSTRACT**

This study aims to assess the validity of the development of wordwall-based learning evaluation in business communication subjects with consumer behavior material for class X retail business at Vocational High School Tamansiswa 1 Jakarta. This study uses Research and Development (RnD) using the ADDIE development model. Thus, the analysis, design, development, and implementation stages are the first stages carried out in the research and development of this learning evaluation. The results of this study are the results of the media expert validation analysis which gives a percentage of 84% in the very valid group. In addition, 80% of the results in the valid category come from the material expert validation analysis. Furthermore, based on the validation results by the teacher, the figure was 80%, which is also in the valid category. The results of the small group trial by students showed a figure of 82% which falls into the very valid category. This percentage shows the validity and feasibility of using wordwall-based learning evaluation as a learning assessment in the classroom.

**Keyword: Learning evaluation, Wordwall, Consumer behavior**

### **ABSTRAK**

Penelitian ini bertujuan untuk menilai validitas pengembangan evaluasi pembelajaran berbasis wordwall pada mata pelajaran komunikasi bisnis dengan materi perilaku konsumen untuk kelas X bisnis ritel di SMK Tamansiswa 1 Jakarta. Penelitian ini menggunakan Research and Development (RnD) dengan menggunakan model pengembangan ADDIE. Dengan demikian, tahap analisis, desain, pengembangan, dan implementasi merupakan tahap yang pertama kali dilakukan dalam penelitian dan pengembangan evaluasi pembelajaran ini. Hasil dari penelitian ini adalah hasil dari analisis validasi ahli media yang memberikan persentase 84% dalam kelompok sangat valid. Selain itu, 80% hasil dalam kategori valid berasal dari analisis validasi ahli materi. Selanjutnya, berdasarkan hasil validasi oleh guru menghasilkan angka sebesar 80% yang juga masuk kategori valid. Hasil uji coba kelompok kecil oleh siswa menunjukkan angka 82% yang masuk dalam kategori sangat valid. Persentase tersebut menunjukkan kevalidan dan kelayakan penggunaan evaluasi pembelajaran berbasis wordwall sebagai penilaian pembelajaran di kelas.

**Kata kunci: Evaluasi pembelajaran, Wordwall, Perilaku konsumen**

### **INTRODUCTION**

Educational paradigms and approaches are evolving in the age of Industry 5.0 to better educate students for digital literacy, creative thinking, and problem solving. Millennials may

now more easily access information from around the globe because to developments in communication and technology. Smartphones, which are digital communication devices, provide access to all information (Fajarianti & Zuhdi, 2023). According to Hartutik and Aprilia (2024), while most teachers are aware of the use of technology, others are unfamiliar with online learning materials. This emphasizes how crucial it is for teachers to use a variety of learning resources. Teachers frequently rely solely on teacher handbooks as their source of knowledge. Naturally, this can lead to ineffective learning and the delivery of content that students still do not fully understand, which lowers their motivation to study. Teachers need to encourage students to be more creative learners in order to support learning in a laid-back environment and assist students in meeting learning objectives. Teachers need to be proficient in learning management in order to be able to contribute significantly to the learning process. Therefore, in order for learning to be carried out efficiently, teachers must also be able to adapt to new technological developments.

According to preliminary studies at Vocational High Schools Tamansiswa 1 Jakarta, teachers in the business communication subject in class X majoring in retail business used several website-based learning evaluations that could be accessed online, such as Quiziz and Google Forms, in teaching and learning activities in class. Teachers also utilize a variety of additional resources and references to produce learning materials, including e-books, textbooks, powerpoints, and YouTube videos that are relevant to the material and have been updated for real-world applications. Subsequently, the teachers has integrated teaching strategies with group discussions, lectures, and presentations.

However, there are also feature constraints with the online assessment of website-based learning that teachers utilize for teaching and learning activities in the classroom, such as Quiziz and Google Forms. For instance, using a Google Form appears to be an ordinary and inflexible visual display devoid of any music or moving motion. Wordwall-based interactive learning materials offer users a selection of eighteen templates that they can use as they suit their needs. These templates are offered to users for free, up to five times. This is likely a drawback in the evaluation of interactive learning using Wordwalls as a teaching tool for teachers to incorporate variety and innovation into the learning process in order to increase student enthusiasm and motivation.

Based on the preliminary studies with teachers of related subjects as well as two representatives of class X students majoring in retail business, it was determined that students' lack of motivation to complete the teacher-given assignments was the reason behind their failure to meet the minimum completion criteria for this business communication subject. Some students also struggle with the theoretical and memory aspects of the content. Consequently, wordwall-based learning evaluations have been developed so that teachers may use them as a way to change up the way that students learn in the classroom. They can also be used as practice questions, quizzes, or daily assignments to get students more excited and motivated to complete the work that their teachers provide in class.

The development of this wordwall learning evaluation is anticipated to boost students' enthusiasm and activity in learning activities, particularly in business communication subjects, so that in the future students can get better learning outcomes (Tomczyk et al., 2023). As a result, researchers are interested in using this wordwall-based learning evaluation in consumer behavior material. To enhance students' comprehension and enthusiasm for corporate communication courses, learning materials should provide a greater variety of practice questions.

According to Zahroh et al. (2024) the use of online learning evaluation media is helpful in assembling questions and facilitating the assessment process for teachers, as teachers no longer need to manually correct student replies. Consequently, while implementing learning assessments through a variety of media or applications, educators must possess a high level of

creativity. Therefore, the researcher anticipates that this interactive learning evaluation based on wordwalls would boost students' interest and passion in completing assignments during the classroom learning process as well as provide them with the knowledge and abilities to understand the topic being taught.

This is supported by earlier research (Fahira & Kemal, 2024), which found that using interactive learning resources based on wordwall-based instructional games greatly improved the vocational students capacity to create negotiation texts. It is evident that students who receive instruction using interactive learning media based on educational games using wordwalls have better learning outcomes than students who do not receive intervention by using a pre-test to measure initial abilities prior to receiving treatment and a post-test to measure abilities following treatment. Additionally earlier research by Angguglian et al. (2024), which showed that the usage of wordwalls in learning positively impacts students' engagement and excitement in the subject matter. Students' passion is heightened by the interactive wordwall feature, which also makes their interest in learning more apparent while they are studying. The difference between this research and previous research that has been conducted is that the researcher used business communication subjects with consumer behavior material for class X students majoring in Retail Business at Vocational High Schools Tamansiswa 1 Jakarta. Then the research method used by the researcher is a research and development method (RnD) with the ADDIE model. This study aims to assess the validity of the development of wordwall-based learning evaluation in business communication subjects with consumer behaviour material for class X retail business at Vocational High School.

## LITERATURE REVIEW

### Learning Evaluation

Evaluation is a methodical procedure that includes determining and evaluating potential courses of action (Rosmana et al., 2023). One method used by educators to determine the level of student development in their participation in learning activities is learning evaluation. Furthermore, learning evaluation activities are crucial as a measure of how well teachers impart knowledge and help students understand it (Sulistiyorini et al., 2023). According to Azizah and Zainuddin (2020) evaluation is carried out in the context of national education quality control as a form of accountability of education providers to interested parties, both students, institutions, and education programs. Evaluation and improvement are necessary to ascertain the extent of learning that has been completed in order to maximize the outcomes of that learning. We call this procedure "learning evaluation." Even though they are closely linked, learning evaluation—which has a different meaning—is frequently referred to as a "exam" in this context. Exams and examinations are one way that students can finish the evaluation process (Rahmawati, 2024).

Learning evaluation allows teachers to better comprehend learning obstacles or accomplishments and pinpoint the requirements of their students. A thorough review indicates that the learning process plays a significant role in attaining high learning results. Learning evaluation, according to Ramandani et al. (2024) is a crucial step in the teaching and learning process. Activities aimed at teaching and learning must align with the goals of the teacher's learning evaluation. The primary goal of this evaluation is to ascertain the degree to which learning objectives have been met. The two primary strategies for evaluating learning are non-test and test-based methods.

Evaluation, then, is a technique that may be applied to any individual, thing, action, circumstance, or particular entity in order to ascertain its weight, value, and meaning in accordance with a set of predefined standards that can be independently confirmed (Suardipa & Primayana, 2020). If this definition is linked to "learning outcomes," evaluation is described

as an activity or procedure to guarantee the worth of an individual's (student's) learning performance following the conclusion of the learning process.

It will be simpler to gather information and data on students' progress and to monitor future learning with the help of teacher-conducted learning evaluations. Furthermore, assessment plays a critical role in helping educators choose the best course of action for their teaching and learning activities. In education, evaluation entails gathering data and information in order to anticipate future results and evaluate learning progress. In an attempt to gauge each student's aptitude, teachers assess the students they teach. Evaluation provides oversight of all activities connected to educational activities in schools and makes control over the evaluation process easier (Azizah & Zainuddin, 2020).

There are several goals for evaluation, some of which might not be pertinent to other goals. Therefore, teachers need to be aware of these goals and the prerequisites in order to plan and carry out evaluations in a proper and acceptable manner. Effective evaluation needs to be, (1) valid, (2) reliable, (3) objective, (4) balanced, (5) discriminating, (6) normative, (7) fair, and (8) practical (Azizah & Zainuddin, 2020). Thus, it can be concluded that one method used by teachers to assess how far their students have come in engaging with instructional activities is through learning evaluation. Activities for evaluating student learning are also crucial in determining how successfully teachers can impart knowledge and aid in students' understanding (Leber et al., 2017). Assessment and development are necessary to ascertain the extent of learning completed in order to optimize the outcomes of that learning. One method that students might use to evaluate themselves is through exams. Evaluation is viewed as an activity or process to ascertain the value of an individual's learning achievement (students) after the learning process is finished if this definition is connected to "learning outcomes".

## **Wordwall**

According to Latifa and Dewi (2024) one of the interactive learning resources that teachers can utilize to create interesting lesson plans is wordwall learning media. Wordwall is an application that offers templates in the form of interesting, efficient, and effective games, which can facilitate the creation of learning media by teachers. Wordwall is a website-based learning media that can be used as learning media, wordwall has a variety of features that can be selected so that it allows various ways to present educational material. The application includes 18 templates that are available for free. This program can also be used by teachers in evaluating learning and developing learning evaluation strategies (Fajarianti & Zuhdi, 2023).

According to Andini et al. (2024) said there are advantages and disadvantages of using wordwall . The advantages of Wordwall features include the ability to play and watch games created by other users, the ability to create games collaboratively with other members, the ability to play games offline, multiplayer functionality, and printable media functionality. As according to research conducted by Lestari et al. (2024) the unique characteristics of the wordwall game, which is presented as a game, can attract more students. Teachers can also use wordwall online on the internet. After that, the material is taught through various activities that arouse student interest, encourage competition between students, and motivate other students to learn. A further form of wordwall application support is the variety of templates provided by wordwall.

Wordwall is suitable for use in learning media because in its implementation students are not bored and saturated when interspersed with interactive games. In addition, wordwall can also be used in online and offline learning and can be used as a daily evaluation tool or semester evaluation tool. In addition, wordwall also has a wide variety of 18 template variations that can be used for free 5 times such as: (a) Quiz, A set of questions with multiple choice answers. Press the right response to continue; (b) Matching Game, Click and drag every term to the appropriate definition; (c) Unboxing, Tap each box sequentially to open it and see what's

inside; (d) Correct Sentences, Rearrange each sentence into its proper order by dragging and dropping words; (e) Flash cards, Use cards with instructions on the front and answers on the reverse to test yourself; (e) Random wheel, Turn the wheel to discover what will appear next; (f) Finding matches, To make the matching response vanish, tap it. Continue until no more answers remain; (g) Group sorting, Move each object by dragging it into the appropriate group; (h) Complete the sentence, A cloze game in which you move words around to fill in the text's blanks; (i) Anagram, To reveal a word or sentence, drag the letters to the appropriate location; (j) Word Search, A grid of letters conceals words. Locate them as soon as you can; (k) Gameshow quiz, A multiple-choice test with time constraints, life points, and extra rounds; (l) Matching pairs, To find out if two tiles match, tap a pair of tiles at a time; (m) The labeled diagram, Drag and drop the pins on the drawing to the appropriate locations; (n) Random cards, Shuffle a deck of cards and distribute them at random; (o) The Executioner, Select the appropriate letter to finish the word; (p) Whack-a-mole, Molecules will surface one by one; you must hit the right one to prevail; (q) Flip the tiles, Use your finger to swipe to flip and tap to zoom in on a succession of double-sided tiles.

Wordwall is an app that provides templates in the form of games that are engaging, practical and fun. It can help teachers create learning media and has various customizable features that allow different approaches to presenting learning content (Dilgard & Hodges, 2022). In addition, teachers can use this media to assess student learning and to evaluate student learning, including daily tests or midterm exams. In addition, wordwall is also available for free with eighteen other template options.

## METHOD

The researchers in this study used the research and development (RnD) method. The wordwall website-based learning evaluation that the researchers will create will be based on the ADDIE (Analyze, Design, Development, Implementation, Evaluation) research and development paradigm. Research and Development (R&D) research is a research process used to generate specific goods and assess their efficacy. Therefore, the process of research and development can be understood as a research methodology that results in a product within a certain area of expertise, the validity and efficacy of which are assessed.

This study was carried out at Vocational High School Tamansiswa 1 Jakarta, with several participants (Lecturer) from Jakarta State University and Vocational High School Tamansiswa 1 Jakarta serving as media and material experts, including two lecturers from Faculty of Economics Jakarta State University and one teacher from Vocational High School Tamansiswa 1 Jakarta. Students in class X-2 Retail Business served as the study's the sample, and business communication and consumer behavior were the topics covered.

The third phase of research and development in this study applies to the concepts of Sugiyono (2021), according to which researchers conduct research to develop new products, enhance existing ones, and assess the efficacy of these items. Level 3 research and development involves investigation and experimentation to enhance current products. The researcher conducts a literature review (theoretical studies and pertinent research results/experiences) after reviewing current products to determine their specifications, benefits, and drawbacks. The researcher then creates a product design with the goal of developing or improving already-existing product. Next, internal testing is done on the product design. Internal testing refers to evaluating the design using practitioners' and experts' perspectives. The internal test findings are then utilized to develop, design, and revise the product. The design is then turned into a first product after revisions. After the initial product is finished, the product is tested in the field on a limited basis. The results of the limited test are then used to revise/improve the product.

The ADDIE development model, which has been updated with the level 3 development and research method based on Sugiyono (2021), which is confined to the validity test, was the

basis for the construction of this wordwall-based learning evaluation. Thus, the phases of analysis, design, development, and implementation are the first to be completed throughout the research and development of learning evaluation medium. Criteria for media and material validity is shown in Table 1. The data analysis technique in this study uses descriptive analysis.

Table 1. Criteria for Media and Material Validity

No	Assessment	Description
1.	81.00% - 100.00%	Very Valid
2.	61.00% - 80.00%	Valid
3.	41.00% - 60.00%	Fair
4.	21.00% - 40.00%	Weak
5.	00.00% - 20.00%	Very Weak

Source: Adapted from Riduwan in Andira and Puspasari (2023)

## RESULTS AND DISCUSSION

### Expert Validation

Expert validation is an assessment performed by experts with the goal of providing an evaluation of the learning evaluation product in development. Two expert lecturers from Faculty of Economics, Jakarta State University serve as expert material validators and expert media validators, and one teacher at Vocational High School Tamansiswa 1 Jakarta who specializes in retail business will do expert validation. Experts will validate the learning evaluation based on a range of particular criteria in order to determine its viability. If the professionals who carried out the validation have any comments or ideas, the product can be updated to see if the media design and learning materials are feasible.

#### *Validation by Material Experts*

There are ten statements in the material expert validation indicator questions. The validator will be requested to offer an evaluation and commentary on the generated product. The following are the responses to the questionnaire that the material expert validator received. The material expert validation achieved a value of 80%, indicating that it satisfies the "Valid" criterion within the 61% - 80% range. On the other hand, the material expert validator has indicated that a number of inputs require improvement. This demonstrates the validity and applicability of the design of this wordwall-based learning evaluation medium for assessment tasks in the classroom. The media expert in this research is a lecturer at the Business Education Program, Faculty of Economics Jakarta State University.

#### *Validation by Media Experts*

Ten statements are going to bring up the media expert validation indicator questions. Validators will be requested to offer evaluations and comments on the developed items. The following are the responses to the questionnaire that the material expert validator received. The professor served as the media expert validator, and it was reported that the media expert validity results were 84%, meaning that the study satisfies the 81%–100% "very valid" standards. Nonetheless, a number of inputs require improvement in accordance with the media expert validator's recommendations. This indicates the validity and feasible it is to use wordwall-based learning evaluation media in learning assessment activities. The media expert in this research is a lecturer at the Business Education Program, Faculty of Economics Jakarta State University.

#### *Validation of Teachers*

There will be ten statements in the subject teacher validation indicator questions. Validators will be requested to offer evaluations and comments on the developed items. The

expert teacher's assessment of the material's validity yielded a percentage of 80%, indicating that it fits the "Valid" requirements within the 61% to 80% range, based on the assessment of the business communication subject instructor. Furthermore, this assessment can be used without revision. This shows as valid and useful it is to create wordwall-based learning assessments for use in learning assessment activities.

### *Small Group Trial*

After conducting a validity assessment carried out by experts, the researcher proceeded to conduct a trial on a small sample of 10 students from class X-2 Retail Business at Jakarta State University Tamansiswa 1 Jakarta. According to the small group trial results, 82% of students fit into the category of very valid. This percentage demonstrates the applicability and validity of applying development evaluation findings based on wordwalls in student learning activities.

### **Discussion**

The first step is researcher gathers information in the initial phase so that learning evaluation media items can be developed. Teachers and students are interviewed in order to gather data for the study. Then, the materials for learning evaluation that are created by the researcher are produced in the second phase. The design stage will consist of the following steps:

1. The learning resources that will be used during the assessment are created in accordance with the learning objectives that have been established to satisfy the requirements of the students.
2. Choosing the educational evaluation materials that will be produced. An study of the requirements for learning assessment resources that have not been used during the teaching and learning process in the classroom is required in order to make this decision.
3. Developing an assessment instrument for use by knowledgeable validators.
4. Producing a preliminary design, like a menu layout estimate for learning evaluation materials based on wordwalls.

The third stage is the implementation of the development stage, in which the researcher creates learning evaluation media based on the concept developed during the design stage. Where the researcher creates designs for products, like:

1. To utilize the Wordwall template, researchers and other users must first register by going to the website <http://wordwall.net>.
2. After selecting to register, researchers can then enter their personal data to establish a wordwall account.
3. Researchers can access their wordwall account by providing their previously created email address and password.
4. Next, researchers can select the wordwall template they wish to utilize, such as the wordwall display, based on their demands. For this study, the quiz template was selected by researchers.
5. After selecting their favorite design, researchers can alter the questions' content by creating the activity title, adding directions, writing questions, and writing replies, till the last step is finished.

The fourth stage is implementation, which will subsequently be executed. At this point, a small group trial and a questionnaire about wordwall-based learning assessment media will be delivered to the students. This questionnaire consists of ten questions. A wordwall-based learning assessment media product will be created following the completion of the media

development procedure. It must first pass through a validation analysis step, where media experts and material experts evaluate the viability of the learning evaluation media product under study before it can be employed in learning activities.

The media expert validation analysis yielded an 84% proportion, which was classified as very valid. Additionally, there were two phases involved in the validation study of the material expert results. With a percentage of 40%, the initial material validation step was categorized as less valid. Following revision, it obtained an 80% percentage in the second stage of material validation and qualified into the material expert validation's valid category. Furthermore, the teacher validation analysis yielded an 80% percentage and was classified as valid. According to the obtained validity results, the wordwall-based learning assessment was determined to be valid and feasible for use in the classroom during the teaching and learning process of students.

Previous researchers' research provides support for the findings of the research and development of wordwall-based learning assessment media. According to research by Amalia et al. (2024), the value obtained from the analysis of media expert validation data obtained a percentage of 87.5%, material experts 77.8%, and student responses 84.36%. Therefore, it is possible to conclude, based on the analysis's results, that the wordwall-assisted physics education game is appropriate for use as a learning medium and can boost students' motivation to learn.

After that, the research by Reza and Nopiyad (2022) further supports this study, leading to the conclusion that the evaluation tool for grade II elementary school students using the wordwall.net platform meets the criteria for "very valid" because it has a media validity percentage of 88.75% and a material validity percentage of 90%. The media fits the criterion of being "very practical" as seen by the 89% student answer rate and 100% teacher response rate on questionnaires. These results demonstrate the high grade of practicality of the media.

The research conducted by Mertha and Mahfud (2022) then demonstrated the construction of the historical learning assessment tool, which takes the shape of Class X questions on the subject of the History of Hindu-Buddhist Influence in Indonesia, a subtopic of learning Based on the evaluation of material specialists who received a score of 76% in the reasonably good category, media experts who received a score of 98% in the very good category, and history teachers who received an 81.3% score in the good category, Acculturation of Local Culture and Hindu-Buddhism was deemed appropriate for usage.

Furthermore, research conducted by Polili and Ghofur (2022) revealed that the application of wordwall-based gamification development produced a value for four materials with an average pre-test score of 60.5% and a grade of "C (quite good)". Additionally, the average post-test score was 86.26%, earning an "A" (very good) rating. In the meanwhile, there are two separate assessments from the validator: the media assessment and the material assessment. The evaluation of twelve materials yielded an average score of 92.90%, placing them in the Very Good category. With an average score of 91.7%, the wordwall-based media assessment, on the other hand, fell into the very good category. Based on the application and evaluation of the study's findings, gamification-based French cross-cultural question development based on wordwalls was declared effective.

## **CONCLUSION AND RECOMMENDATION**

### **Conclusion**

The validation test was used as a research method using a modified ADDIE development model, namely level 3 development, to build this wordwall-based learning evaluation. Therefore, in the study and development of learning evaluation media, the stages of analysis, design, development, and implementation are necessary. With a score of 84% from the media expert validation and a score of 80% from the material expert validation, a valid



criterion value was feasible at the expert validation test stage for the wordwall-based learning evaluation media development technique. An overall score of 80% from teacher validation was feasible, indicating a valid criterion value. Following that, students took a small-scale feasibility test using this media, and the results showed that the wordwall-based learning evaluation was viable for deployment with a score of 82%.

### Recommendation

It is suggested that to utilize the increasing array of capabilities, future researchers purchase a premium wordwall account. Next, as an alternative to learning evaluation, teachers at vocational high schools are expected to be able to apply and incorporate this wordwall learning evaluation into every class they teach.

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