

# The Feasibility of Developing Learning Media Based Schoology in Communication Psychology Subject

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**Abstract.** The goal of this study was to ascertain if it would be feasible for students enrolled in the Communication Psychology course at Universitas Negeri Medan to acquire interpersonal and intrapersonal content using media-based Schoology. This research and development project is using the ADDIE methodology, which stands for analysis, design, development, implementation, and evaluation. While material experts offer an average value of 4.5 in the very valid category for product feasibility, revisions and media experts provide an average score of 4.42 in the highly valid category.

**Keywords:** Feasibility, Learning Media Based Schoology, Interpersonal And Intrapersonal Material

## 1 Introduction

Presently, education holds great significance in human existence, as it is an essential need that must be satisfied throughout one's lifetime. In Indonesia, education is given great priority as, as the Pembukaan Undang-Undang Dasar 1945 alinea 4 states, education is vital to the nation's life. Formal, informal, and non-formal education can all contribute to the nation's goal of raising competent citizens. In order for education to serve as a link across generations to enhance their quality of life. One approach to raise the standard of education is to produce learning media and enhance the current university learning components.

Given how quickly the times have changed, it is now impossible to separate human existence from technical advancements. Technology has an impact on users and the world around them in the subject of education. The necessity for technology-based teaching and learning procedures and concepts has grown throughout time. This idea, which came to be known as e-learning, had an impact on the process of digitally altering traditional education in terms of both system and content. With e-learning, there is new hope for solving the majority of Indonesia's educational issues. Diverse expert viewpoints exist on e-learning. Here are some professional viewpoints on online education. Technology-driven learning, particularly through electronic networks or networking, is known as e-learning [1]. "The use of electronic and computer-based technology for learning" is what e-learning is defined as [2]. E-learning is defined as "the application of technology to facilitate instruction and learning, both online and in the classroom [3]. "E-learning is defined as "the use of technology to provide and enhance learning" [4]. E-learning is defined as "learning through electronic media, including computer networks, audio and video recording, the Internet, intranets, and extranets [5]." The term "e-learning" refers to "any form of learning that involves technology, including the use of

computers and the internet to assist teaching and learning [6]. "A process of learning that facilitates communication between learners and educational materials, as well as between learners in a social or group learning environment" is the definition of "electronic learning" [7].

E-learning may be used in a variety of settings, such as professional training and formal education (colleges and schools). Flexibility, accessibility, and the capacity to provide educational content rapidly and reliably are benefits of online learning. But there are other difficulties as well, like making sure students are motivated to study and that there is productive engagement in an online setting. College students find that e-learning helps them grasp the topic better since it allows them to learn at any time and from any place. With e-learning, students may review content they missed or did not comprehend in class, which helps them grasp it better since they have more time than they would in a traditional classroom setting. As a result, using technology-based learning resources in universities has become an integral part of the educational process.

Researchers' observations revealed that lecture and discussion approaches are still used in the learning process for the Interpersonal and Intrapersonal topics in the Communication Psychology course. College students learn in class using the lecture technique, which uses a white board to enhance the explanation of the content and PowerPoint presentations. To enhance the learning activities conducted, the discussion technique is employed during group tasks such in-class presentations that make use of a projector, laptop, and white board.

After the findings of these observations were analyzed, it was determined that the difficulties lecturers faced stemmed from their inability to create digital learning materials and from their inexperience using them, which led to them relying solely on books as their primary source of knowledge. The classroom learning process remains primarily focused on the lecturer due to the dominance of the lecture technique. This leads to a greater amount of one-way communication and subpar grades for college students.

In light of the aforementioned issues, it is imperative that instructional materials for Communication Psychology courses on Interpersonal and Intrapersonal topics be created in an approachable and engaging manner. Schoology is the learning medium on which it is founded. The capabilities of Schoology that can be utilized to generate learning materials are the reason it was chosen as a platform for creating educational media. One useful option for exchanging content via shared files is the file sharing function offered by Schoology. In order to prevent data from being lost and to guarantee that all college students receive content from the system once the files are shared, sharing files through Schoology is safer than sharing them offline. Schoology is a conversation platform as well. Teachers can create many groups out of college students using the class group tool. The goal of the Schoology class group function is to allow college students to have direct discussions with their group. This list of factors serves as a guide while selecting a school.

As per the description, the research and development project that the researchers are interested in working on is "The Development Of Learning Media Based Schoology On Interpersonal And Intrapersonal Material In The Communication Psychology Subject At Guidance And Counseling Department, Universitas Negeri Medan".

## **2 Research Method**

### **2.1 The Type of Research**

Creating instructional resources for the Communication Psychology course based on interpersonal and intrapersonal Schoology content was the aim of this project. The purpose is to build learning media based Schoology on Interpersonal and Intrapersonal content in Communication Psychology topic in an effort to address learning challenges related to learning media according to the requirements and characteristics of college students. This work is classified as research and development (R&D). Research and development (R&D) is a systematic creative activity that individuals or groups in society undertake to increase knowledge, including understanding of people, cultures, and societies, as well as the application of new knowledge to create new products, services, processes, or systems [8]. R&D is an approach to searching for the unidentified [9]. Research and development (R&D) is a deliberate, systematic process that alters knowledge inside an organization or in society, with the ultimate goal of producing new goods or services [10]. Scientific concepts are developed, experimental research and testing is designed and carried out, and results are disseminated as part of a deliberate and systematic endeavor to expand human knowledge and understanding of nature and natural processes [11]. Research and development aims to transform our perspective on the world in addition to producing new products [12]. This research employs the Analysis, Design, Development, Implementation and Evaluation (ADDIE) development technique. One of the primary factors in the model's selection was how easy it was to grasp.

### **2.2 The Development Model**

The ADDIE development paradigm is adapted in this study technique. A systematic methodology called ADDIE gives instructional designers a platform for resolving learning issues [13]. The processes of analysis, design, development, implementation, and evaluation are all included in the ADDIE paradigm, which aids in the planning and creation of successful learning initiatives [14]. The adaptable ADDIE instructional design methodology may be used in a variety of learning environments. It supports the planning and organization of the learning process by instructional designers [15]. A methodology called ADDIE aids in the creation of goal-based learning, in which the objectives of each step are to meet specific learning objectives [16]. The model's simplicity of understanding was a deciding factor in its selection.

#### **2.2.1 Analysis Stage**

At this stage, field and literature studies were carried out.

- a. Field Study  
Researchers observe firsthand in the field to determine the best course of action or methodology for teaching college students using media-based Schoology.
- b. Study of literature  
There are currently no learning media items that are tailored to the needs and characteristics of college students, despite research analyzing the CPMK and Sub

CPMK that are most appropriate for adapted content and observed from the level of difficulty.

### **2.2.2 Design Stage**

Researchers develop study tools and patterns for learning media. The design consists of educational tools and a narrative board.

- a. Story Board  
The first stage is to draft the content, discussions, and questions that will be printed in the media.
- b. Learning Instruments  
Create tools or features that can offer organized facilities for learning media products after creating the instructional content. Examples of these features are groups, courses, and learning resources.
- c. Making research instruments  
The process of creating the study instrument includes creating an evaluation sheet for media and material experts to gauge the viability, a questionnaire sheet to gather feedback from users (college students), and an experiment to determine how successful the learning media are.

### **2.2.3 Development Stage**

Researchers used a number of Schoology capabilities to generate content for learning media.

- a. Making activities ready  
Based on CPMK and Sub CPMK, the material design process produces material that is appropriate for the RPP. This information is then added to Schoology resources, which include files, links, and other tools, as well as chats, assignments, and exams.
- b. Validation and amendment of the product  
Products are verified by media and materials science experts. Product revisions are carried out in response to advice from content and media experts.

## **2.3 The Research Subjects**

The study topic has many components, specifically:

- a. Expert in materials  
A material specialist offers suggestions and evaluations for the Schoology learning media that is being created. The material features of the learning media-based Schoology that is being created are the focus of the material expert.
- b. Media specialist  
Additionally, media specialists offer feedback and evaluations on the learning media-based Schoology that is being created. A material specialist concentrates on the media components of the newly designed Schoology learning platform.

c. Subjects of experimentation

The test subjects were chosen at random in the hopes of gathering information about the usefulness and efficacy of media from representatives of Medan State University guidance and counseling majors during the third semester of the 2023–2024 academic year.

## 2.4 The Research Location

This study will be conducted for eleven months, from January to November 2023, at Medan State University's Department of Guidance and Counseling.

## 2.5 The Data Collection Techniques

In this R&D, several data collection techniques were used, namely as follows:

a. Observation

The purpose of the observation is to gather data on issues pertaining to educational media so that a product may be produced based on the findings of the study.

b. Questionnaires

The questionnaire is used to collect data on media expert validation and material expert validation. A Likert scale was used as the measuring scale when creating the questionnaire. Respondents can indicate how much they agree or disagree with certain assertions using this psychological measuring instrument, which ranges from "Strongly Agree" to "Strongly Disagree" [17]. Because it avoids binary nature and offers a more nuanced degree of response, the Likert scale offers increased flexibility in evaluating emotions or views [18]. Likert scales offer for the flexibility to record different degrees of ideas or sentiments by allowing responses to be given in more depth [19]. Because the Likert scale is a more sensitive assessment technique than a binary scale, it can yield findings that are more subtle [20]. A versatile instrument for measurement, the Likert scale is frequently employed in studies across several disciplines, particularly for assessing behavioral and psychological aspects [21]. The following criteria must be met in order to assign scores for questionnaires sent to college students, media experts, and subject matter experts.

**Table 1.** Provisions for Scoring Product Feasibility

Information	Likert Scale Score
Very Suitable	5
Suitable	4
Not Appropriate	3
It Is Not In Accordance With	2
Very Inappropriate	1

c. Documentation

The research documentation takes the form of images or photos showing the process of incorporating learning media-based Schoology into the Interpersonal and

Intrapersonal course materials, as well as images or photos pertaining to the production of learning media-based Schoology in the Interpersonal and Intrapersonal course materials.

## 2.6 The Data Types

- a. Qualitative data  
College students, media specialists, and material experts provided ideas for this study, which served as the qualitative data source. The items that are being produced are revised in light of these ideas.
- b. Quantitative data  
The quantitative information used in this study comes from the answers to questionnaires given to college students, media specialists, and subject matter experts. The goal of the questionnaire scores given to media and material specialists is to ascertain how feasible the product under development is. The goal of the questionnaire scores given to college students is to ascertain how feasible the product under development is. Test results that were given to college students are another source of quantitative data in this study. The purpose of the test results given to college students is to evaluate the efficacy of the product that is being created.

## 2.7 The Data Analysis Techniques

The information gathered from tests given to college students and from surveys given to media experts, material experts, and college students is then examined to ascertain the viability, usefulness, and efficacy of the product under development. Use the following formula to get the average media feasibility score: Total test subjects x Acquisition score = Average score. The table below then provides an interpretation of the average score.

**Table 2.** Media Validation Interpretation

Score	Interval	Mark	Category	Range
5	VV (Very Valid)	A	$X > \bar{X} + 1,80 Sbi$	$X > 4,20$
4	V (Valid)	B	$\bar{X} + 0,60 Sbi < X$ $\leq \bar{X} + 1,80 Sbi$	$3,40 < X$ $\leq 4,20$
3	E (Enough)	C	$\bar{X} - 0,60 Sbi < X$ $\leq \bar{X} + 0,60 Sbi$	$2,60 < X$ $\leq 3,40$
2	IV (Invalid)	D	$\bar{X} - 1,80 Sbi < X$ $\leq \bar{X} - 0,60 Sbi$	$1,80 < X$ $\leq 2,60$
1	VIV (Very Invalid)	E	$X \leq \bar{X} - 1,80 Sbi$	$X \leq 1,80$

### **3 Results and Discussions**

#### **3.1 Results**

##### **3.1.1 Analysis**

The initial action performed by the researchers was to conduct the analysis at the Universitas Negeri Medan Guidance and Counseling Department. The study done involves examining the learning styles of college students, the media that is utilized in the classroom, the teaching strategies employed by professors, and the facilities that will assist researchers in gathering data. This phase serves as an analytical step that forms the basis for choosing whether to go to the next stage of adopting a position on the current issue.

a. Field study

College students differ in their degrees of focus throughout learning. Among these include inadequate study skills, a lack of engagement in the classroom, and a college student's less-than-ideal absorption ability. College students chat to their friends and feel drowsy when they are still studying, among other behaviors that happen in the classroom. Because of this habit, college students frequently overlook what the speaker is saying. Corrective measures are required to address current issues based on an examination of the current environment. In order to ensure that no college student loses out on current learning activities, learning media that may be utilized to disseminate learning materials or activities online are thus required. Thus, it is evident that creating learning materials based on Schoology is essential.

b. Study of literature

The Universitas Negeri Medan library is used by researchers to examine or look for materials and subjects for their studies. Scholars make use of all pertinent data and concepts found in books written by reliable writers (with a greater emphasis on scholarly work), recognized scientific publications, and research findings.

##### **3.1.2 Design**

The material quality is carefully taken into consideration in this section as the researchers analyze the Schoology learning media based on the analysis stage results. This allows the media evaluation process to be completed as quickly as possible and be classified as an ongoing learning media.

a. Designing learning instruments

This section's design focuses on the created learning activities, evaluations, and patterns. The boundaries of the learning activities developed include content delivery, online forums, assignment completion, and assessments using Schoology, a learning medium. Meanwhile, after all learning activities have been finished, the evaluation plan is implemented.

b. Story board

Using the narrative board as a guide, the researchers now create a design that includes deciding on the product concept to be developed, selecting the materials to be utilized, creating test questions, and creating Schoology-based learning media. At this point, the researchers also develop the essential research tools, such tests and questionnaires.

c. Making research instruments

The process of creating the research instrument involves creating questionnaires for media and material experts to gauge the feasibility, as well as asking users (college students) to respond to them to gauge the practicality and efficacy of the learning materials.

### 3.1.3 Development Stage

When creating learning media content, researchers used a number of Schoology features as starting points.

a. Preparation of activities

The outcome of the material design process yields material suitable for the RPS based on CPMK and Sub CPMK. After then, this content is added to Schoology's resources, which also contain files, links, and external tools, as well as assignments, tests, and debates.

b. Product validation and revision

Experts in materials science and media verify products. Revisions to products are implemented in response to recommendations from media and content specialists.

To ascertain if the developed learning modules are feasible, product and assessment tools are given to media and materials specialists. The material expert reviews the validation process by looking at the learning materials' quality and repair, their clarity, and their beautiful and straightforward presentation. The questionnaire was made using a Likert scale with five potential answers. There are three components to the material expert questionnaire. This is the material expert's evaluation of the viability.

**Table 3.** Material Expert Validation Result

Assessment Aspects	$\sum$ Item	$\sum$ Score	Mean	Category
1. Clarity of material content	10	45	4.5	Very valid
2. Presentation of material is simple and attractive				
3. Preparation and quality of learning material				

The material expert's evaluation of the assessment elements received an average score of 4.5, as shown in the chart. With a range of  $X > 4.20$  and partial changes, the aspects evaluated fall into the extremely valid category, meaning that adjustments must be done in accordance with feedback and recommendations from material experts.

The straightforward and endearing layout, text quality (size, type, font, color), and image quality are all evaluated in the validation process conducted by a media professional. The questionnaire was made using a Likert scale with five potential answers. There are four components to this media expert questionnaire. This is the feasibility evaluation from the media specialist.



**Table 4.** Media Expert Validation Outcome

Assessment Aspects	$\Sigma$ Item	$\Sigma$ Score	Mean	Category
1. Simple and charming	8	31	4.42	Very valid
2. Layout				
3. Text quality (size, type, font, color)				
4. Image quality				

The assessment provided by media professionals on the assessment aspects was found to have an average score of 4.42, as indicated by the table. The evaluation's findings demonstrate the predicate's high validity, with a range of  $X > 4.20$ . The evaluation provided by subject matter and media specialists leads one to the conclusion that the medium may be put to the test in order to ascertain its applicability and efficacy.

### 3.2 Discussions

According to research, using Schoology as a learning tool for college students is quite possible. This aligns with the perspective of Amri, who asserts that the degree of device design development determines the practicality aspect [22]. The results of this investigation align with Apriliani Arifatul Afwah's thesis, "Pengembangan Media Blended Learning Berbasis Schoology Pada Materi Larutan Penyangga." The results of the material expert test in that thesis were 52, while the media expert validation test yielded 119 scores in the extremely valid category [23]. The approach used in this study and development is based on Sezer et al.'s ADDIE development model [24]. A media specialist and a material expert have assessed Schoology's viability as a learning platform. When studying media-based Experts in interpersonal and intrapersonal communication psychology content are evaluated using Schoology; the findings indicate that the evaluation has a total score of 45 and an average score ( $X$ ) of 4.5, lying between  $X > 4.20$ . The average score falls into the "Very valid" category. This finding demonstrates the validity of using learning media based on Schoology's interpersonal and intrapersonal material in the Communication Psychology course for learning, as evaluated by subject matter experts based on the elements of the content offered in the learning media. Learning media-based Schoology on interpersonal and intrapersonal material in the Communication Psychology subject, when viewed from the perspective of design, yields an assessment with an average score of 31, with an average score ( $X$ ) of 4.42, which is in the range of  $X > 4.20$ , according to the assessment of media experts. The "Very valid" category is where the average score falls. This result demonstrates that learning media based on Schoology's interpersonal and intrapersonal content in the field of communication psychology are highly valid for use in the classroom when evaluated by media experts based on the design of the learning media.

## 4 Conclusion

Studies from the field and literature are part of the analysis step. Storyboards, teaching tools, and research instrument creation are all part of the design step. Activities such as preparation, validation, and revision of the product are included in the development stage. The extremely valid category had the validation data result from the material expert, which had an average of 4.5, and the revision and validation data result from the media expert, which had an average of 4.42 in the same category.

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