

## **Analysis of Student Needs for Digital-Based Teaching Materials**

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**Abstract.** This research aims to analyze the student needs for appropriate teaching materials for the Instructional Media and Technology course in the fourth semester of the Islamic Religious Education Department at STIT Ibnu Rusyd Tanah Grogot. The research method used is a qualitative method with a descriptive approach. The sample for this research was 29 students. The data collection technique was carried out by distributing questionnaires to 29 students. The analysis carried out is based on three indicators: the analysis of student conditions, the analysis of supporting capacity and campus conditions, and the analysis of the type of need for teaching materials. From the research results, it is known that as many as 52% of the digital teaching materials needed by students are web-based digital teaching materials. Apart from that, the research results found that there is a need for maximum campus support capacity so that digital-based learning can be implemented well, not only for certain subjects but also for a wider scope.

**Keywords:** *needs analysis, digital teaching materials, learning web*

**Abstrak.** Penelitian ini dilaksanakan guna melakukan analisis kebutuhan mahasiswa terhadap bahan ajar yang tepat untuk mata kuliah Media Dan Teknologi Pembelajaran pada Prodi Pendidikan Agama Islam semester IV di STIT Ibnu Rusyd Tanah Grogot. Metode penelitian yang digunakan ialah metode kualitatif dengan pendekatan deskriptif. Sampel pada mata kuliah ini ialah sebanyak 29 orang mahasiswa. Teknik pengumpulan data dilakukan dengan menyebarkan kuisioner kepada 29 orang mahasiswa. Analisis yang dilakukan di dasarkan pada 3 indikator yakni analisis keadaan mahasiswa, analisis daya dukung dan keadaan kampus serta analisis jenis kebutuhan bahan ajar. Dari hasil penelitian diketahui bahwa sebanyak 52% bahan ajar digital yang dibutuhkan mahasiswa ialah bahan ajar digital berbasis web pembelajaran. Selain itu dari hasil penelitian ditemukan bahwa perlunya daya dukung kampus yang lebih maksimal agar pembelajaran berbasis digital dapat dilaksanakan dengan baik bukan hanya untuk mata kuliah tertentu namun juga untuk ruang lingkup yang lebih luas.

**Kata Kunci :** *analisis kebutuhan, bahan ajar digital, web pembelajaran*

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### **INTRODUCTION**

STIT Ibnu Rusyd Tanah Grogot is one of the campuses in Tana Paser, East Kalimantan. This campus is the only one in Tana Paser that holds the Education Study Program. There are two study programs, namely the Islamic Religious Education Study Program and English Tadris. One of the goals of STIT Ibnu Rusyd Tanah Grogot is to produce professional graduates in the fields of education and teaching who are based on Islam and have information, communication, and technology (ICT)-based

competencies. As a way of realizing this goal, the Islamic Religious Education Study Program holds media and learning technology courses. Media and learning technology courses in the PAI study program contain theoretical material as well as practical material on how to apply it in the learning process. With this course, students are expected to be able to develop media according to the needs of the times. According to Sukinem et al. (2022), society, technology, and science continue to change. This requires greater ability for each individual to adapt and innovate, as well as increasing their readiness and ability to face the new education system, which is also continuously improving. So this course is very important to increase the understanding and knowledge of PAI study program students about learning media and so that students have the ability to develop and create media. With the rapid development of technology today, students with tarbiyah study programs should be more adaptive in using technology, especially in improving the learning process. According to Farhana et al. (2021), the world of education during the industrial revolution took the form of changes in students' learning styles, learning systems, and thinking concepts to foster innovative and creative attitudes in various fields. Meanwhile, according to Amien & Hasanah (2023), teachers who utilize technology in the learning process will have a positive impact on students. However, the gap that occurs based on field observations is that there is no teaching material that is appropriate to the material presented during lectures, considering that the development of learning technology is increasingly rapid and that new innovations emerge in the learning process by utilizing technology. Apart from that, the availability of digital-based teaching materials in the campus library that students expect has also not been fulfilled. According to Magdalena Dkk (2020), teaching materials can also be interpreted as all forms of materials that are systematically arranged to enable students to learn independently and are designed in accordance with the applicable curriculum. According to this statement, the teaching materials that are prepared should be adapted to the needs of the material and curriculum as well as current developments. Apart from that, learning in higher education is, of course, different from school-level learning. In higher education, the nature of the subjects taught and competency requirements really determine success in the learning process. According to Prata et al. (2021) Progress in the field of education, especially in higher education, requires renewal in the field of learning, both from the side of lecturers as teachers and from the side of students as learners. According to Hartati et al. (2020), teaching materials are also an important component for students because they can help them understand lecture material independently and measure their competency achievements. Meanwhile, according to Habibah and Oktavia (2022), by having structured teaching materials in accordance with the materials contained in the lecturer's RPS, it will automatically increase student motivation to participate in the lecture process. So from these statements, ideally, lecturers who teach courses prepare various components of learning tools that can be used anytime and anywhere during the lecture process.

One of the many components of the teaching system is learning resources. In a simple sense, learning resources are teaching materials, whether reading books or the like. According to Susanto et al. (2023), there are various forms of learning resources used in the learning process. Learning resources that can be prepared by lecturers to support the learning process are print technology, audio-visual, computer-based, or digital-based teaching materials. According to Rahmawati and Nurdianingsih (2023), online modules can be one of the solutions as teaching material in this modern era. Meanwhile, according to Hayati and Azizah (2021), in order to increase student motivation in the learning process, digital teaching materials are very necessary. Based on the previous statement, it can be concluded that the quality of learning starts with how a lecturer determines the teaching materials used in learning in his course, because teaching materials are an important component in the learning process because teaching materials contain material that will be delivered by the

lecturer. Therefore, the type of teaching materials needed by students will also be the focus of this research.

### RESEARCH METHODS

The research method used is a qualitative method with a descriptive approach. According to Rusandi and Muhammad Rusli (2021), descriptive research is a research strategy in which the researcher investigates events and phenomena in the lives of individuals and asks a person or group of individuals to tell stories about their lives. This research was carried out to analyze student needs for appropriate teaching materials for the Media and Learning Technology course in the fourth semester Islamic Religious Education Study Program at STIT Ibnu Rusyd Tanah Grogot. This research was carried out for 2 months, from September to October 2023.

The sample in this course was 28 students. The data collection technique was carried out by distributing Google Form questionnaires to 28 students. The analysis carried out is based on three indicators: the analysis of student conditions, the analysis of supporting capacity and campus conditions, and the analysis of the type of need for teaching materials.

### RESULTS AND DISCUSSION

This research is qualitative with a descriptive approach. The aim of this research is to analyze student needs for digital-based teaching materials. To obtain this data, data was collected using a questionnaire for 29 students to analyze the need for appropriate digital teaching materials. The data collection carried out was focused on three indicators, namely the analysis of student conditions, the analysis of supporting capacity, and campus conditions, as well as the analysis of the type of need for teaching materials, with a total of 10 questions on the questionnaire. The following is the grid on the questionnaire.

Indicator	Number	Amount
Analysis of the student's situation	1,2,9	3
Analysis of carrying capacity and campus conditions	3,4,5,7	4
Analysis of the types of teaching material needs	6,8,10	3

Table. 1 Grid Questionnaire questions

#### Indicators of analysis of student conditions

In this indicator, researchers explore information about students' readiness to use digital materials, such as students' initial knowledge about digital teaching materials, technological abilities, and student support facilities that can be used to access digital teaching materials. Based on the results of the questionnaire, the following data was obtained:

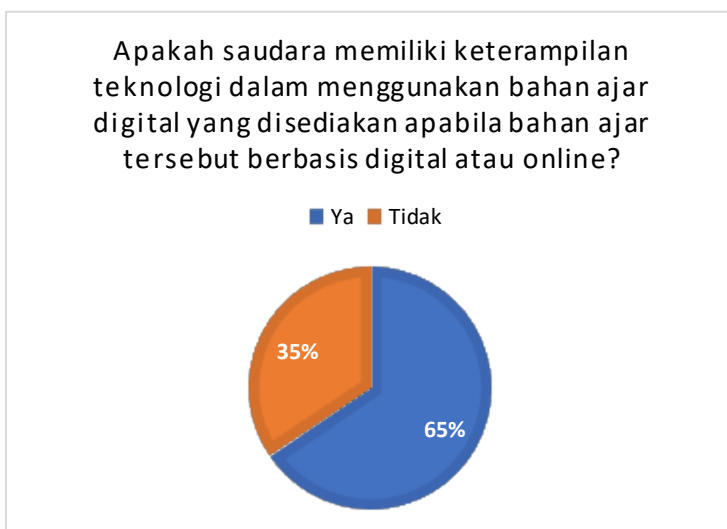


Diagram. 1 Student technology skills

Based on the diagram above, it can be explained that as many as 65% of students stated that they had adequate technological skills if the teaching materials in lectures used digital teaching materials. Meanwhile, in other questions, but still on the same indicators, such as ownership of supporting facilities, 100% of students stated that they had gadgets that could be used to support the learning process using digital teaching materials. Then, in the next question, 59% of students stated that they had a gadget in the form of a cell phone, 41% stated that they had a gadget in the form of a laptop, and none of the students had a gadget in the form of a tablet.

#### Indicators for analysis of carrying capacity and campus conditions

In this indicator, researchers explore information about the use of teaching materials by lecturers, the availability of books in the library that meet the material, the availability of books in the library that are up to date in the last 5 years, and the availability of digital teaching materials. Based on the results of the questionnaire, the following data was obtained:

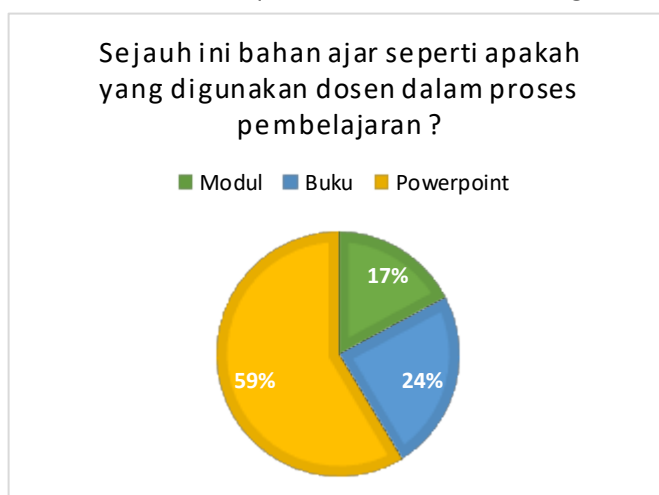


Diagram. 2 Types of teaching materials presented by lecturers

Based on the diagram above, it can be explained that as many as 59% of students stated that the teaching materials used by lecturers in the learning process were PowerPoint, while the use of books as teaching materials was 24% and the use of modules as teaching materials was 17%.

Meanwhile, on another question, but still on the same indicators, such as the availability of books in the library that meet the material, as many as 55% of students stated that the books in the campus library did not meet the material presented by the lecturer, and 45% stated that they met the material presented. Then, in the next question, 62% of students stated that the availability of books in the campus library had not been up-to-date in the last 5 years.

### Indicators for analyzing the types of needs for teaching materials

In this indicator, researchers dig up information about the type of teaching materials that students want in the learning process, the form of teaching materials that students want, and the benefits of teaching materials for students. Based on the results of the questionnaire, the following data was obtained:

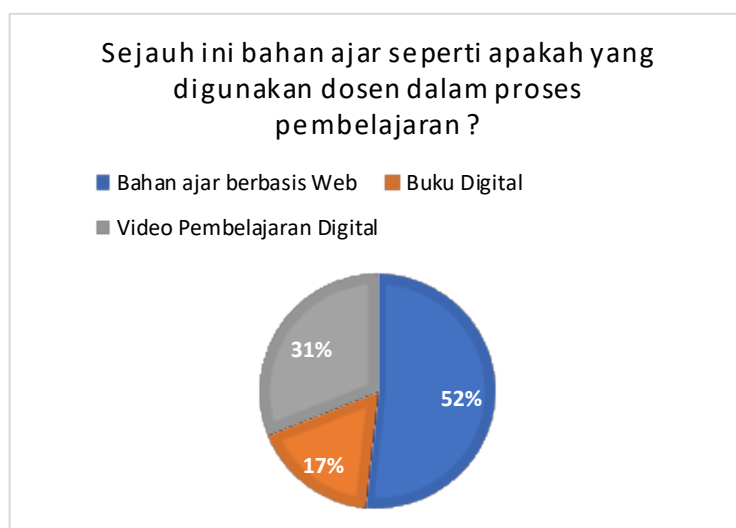


Diagram. 3 Types of teaching materials that students want

Based on the diagram above, it can be explained that as many as 52% of students stated that the teaching materials that students expected in the learning process were to use web-based teaching materials, while the use of digital books as teaching materials was 17% and the use of learning videos as digital teaching materials was 31%.

Meanwhile, on other questions, but still on indicators related to the question of the desired form of teaching materials, students stated that 59% chose digital or online-based teaching materials, and 41% of students stated that they chose offline-based print media. Then, as many as 94% of students stated that digital teaching materials would make it easier for students to understand learning material.

### CONCLUSION

The conclusion obtained from this research is that the existence of digital teaching materials

is something that is really needed at this time. From these opinions, it can be concluded that digital-based teaching materials are important to use in the learning process to motivate students and provide various solutions, such as the problem of incomplete teaching materials and teaching materials that make it easy for students to access them anywhere and anytime.

Along with the rapid development of digital technology, the direction of learning should also be based on digital technology. From the results of this research, it is known that as many as 52% of the recommended teaching materials are web-based teaching materials. Because with web-based teaching materials, students can learn anywhere and at any time, this is also in accordance with the skills of students who predominantly have strong digital skills, and all students have gadgets to access web-based digital teaching materials. Furthermore, teaching materials can ideally be adapted to suit material needs that are up-to-date, online, and tailored to student skills.

From this research, it was also discovered that the campus's carrying capacity must also be more optimal in supporting digital-based learning, and it is necessary to improve digital skills for lecturers. This really needs to be done to achieve the vision of the STIT Ibnu Rushd Tanah Grogot campus.

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