Needs Analysis of Teaching Materials Based Technology: An Empirical Study of Students and Lecturers in Listening Skills Learning

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Abstract. This research is an exploratory, descriptive study that aims to determine the needs of students and lecturers for technology-based teaching materials in listening learning in the Indonesian Language Skills course. Data were collected through observation, interviews, questionnaires, and document studies. The observations show that it is difficult for students to appreciate the language content they are listening to; they also have problems with motivation and interest in learning. This can be seen when students cannot provide feedback on the material they have heard. The results of the questionnaire analysis revealed that most of them did not have teaching materials for listening learning activities and admitted that they needed teaching materials for learning listening skills. Meanwhile, interview data supported by document studies revealed that packaging and integrating materials through technology on Listening Skills was needed. So that students get thorough learning about listening skills. Through this, students will be able to improve the quality of student appreciation of the reading material. Based on these findings, it can be concluded that it is necessary to develop teaching Materials based technology to improve the quality of student appreciation.

Keywords: Needs Analysis · Teaching Materials · Listening Skills · Technology

1 Introduction

Students' Indonesian language skills need to be developed to adapt to their field of work in the future [1]. One of the language skills is listening skill. Listening skills have an essential role in learning Indonesian. Listening skills will affect the language skills possessed by everyone [2]. Every human being is perfectly equipped with potential listening skills, but not everyone is a good listener. Good listening skills need to be possessed by every individual to make it easier for them to communicate. Listening is an essential skill in communication activities [3], according to Rivers and Temperley [4]. Students spend as much as 45 percent of their time listening, 30 percent on speaking, 16 percent on reading, and 9 percent on writing. Based on these findings, it means that listening activities have an essential role in communicating. Activities involving

listening skills must be experienced as a learner in receiving information and learning content. In language learning, listening skills also need to be possessed so that students can appreciate and respond to the content they are listening to.

The Indonesian language skills course is a subject taught in the Elementary School Teacher Education study program, Faculty of Teacher Training and Education, University of Riau. This course is expected to help students understand and master various language skills (Listening, Speaking, Reading, and Writing), as well as apply language skills and improve the quality of student appreciation.

Implementation of lecture activities, especially in the Indonesian Language Skills course, students are continuously trained to carry out listening activities, especially listening to literary works; students are expected to be able to interpret the intent and content of the reading material. If observed, the implementation of learning Indonesian Language Skills is ideally able to make students have good appreciation abilities easily.

Teaching materials are one of the crucial components in the implementation of lectures. Teaching materials should be designed entirely and systematically so that they can be easily understood and used by students and lecturers. Teaching materials are needed in the hope of being able to facilitate students in mastering the material or skills to be studied [5]. In addition, teaching materials need to be integrated with learning outcomes and course outcomes; this is done so that the teaching materials used are efficient and optimize learning [6].

Learning listening skills is closely related to the sense of hearing, meaning that the ideal teaching materials are teaching materials that utilize audio, video, or multimedia. Therefore, in carrying out the development of teaching materials, it will be more meaningful to use technology that seeks to collect listening materials in the form of audio, video, and multimedia available online. The use of online audio to learn a language is an aspect that is needed to increase interest in learning, and its use becomes practical [7]. Technology is expected to be a medium for understanding and practicing to master the materials and skills needed in learning [8]. Furthermore, the role of technology in learning becomes essential in providing quality learning; through technology, students can get a variety of teaching materials they need [9]. Technology-based teaching materials provide additional functions compared to ordinary teaching materials, including utilizing the advantages of computerization, multimedia technology, independent teaching materials, and data exchange [10]. Technology-based teaching materials have a role in increasing the efficiency and effectiveness of learning. To improve the quality of appreciation in students' listening skills, teaching materials that support listening skills are needed to provide studies and responses from the reading material [11].

This study aims to determine the need for teaching materials for lecturers and students in the implementation of learning Indonesian Language Skills Courses. The study's results revealed the need for technology-based listening skills teaching materials to help learn listening skills, which improve student appreciation. The research results are expected to be used to develop teaching materials for learning listening skills.

2   Method

This research is an exploratory, descriptive research conducted on students and lecturers at the Elementary School Teacher Education Study Program, Faculty of Teacher Training and Education, Riau University. The subjects of this study were students who had contracted the Indonesian Language Skills course and several lecturers who became the course lecturers. This research is a needs analysis research. Data were collected through observation, interviews, filling out questionnaires, and document studies. Observations were made during the implementation of listening skills learning. Interviews and questionnaires were conducted for students who contracted the Indonesian Language Skills course and the lecturers of that course. Meanwhile, document studies are carried out by examining curriculum documents, lesson plans, and teaching materials.

Needs analysis research was conducted in the primary school teacher education study program by conducting observations, interviews, giving questionnaires, and document studies. Observations were made to obtain data on student activities when learning listening skills and the obstacles encountered during learning. The interview was conducted to obtain direct opinions from students and lecturers about the need for teaching materials to improve listening skills. Giving questionnaires was done to strengthen observation and interview data related to conditions, constraints, and needs in learning listening skills. Meanwhile, document studies were carried out by observing and analyzing the curriculum and teaching materials.

3   Result and discussion

3.1   Field Studies

In this section, the findings of the field study are organized into three. The section begins with (1) observing student activities in learning listening skills and (2) interviews to discover the process and views of the situation and needs in learning listening skills. Further research results from distributing questionnaires and documentation analysis are also discussed in this section.

3.1.1   Observation

The results of observations on Indonesian language learning in the context of listening skills obtain an overview of student experiences in learning listening skills. Students find it challenging to do listening activities and give appreciation to the material they hear. Students also tend to be less interested in listening to the material given. Based on observations, it was also found that the teaching materials used were still poorly structured and packaged in learning students' listening skills. The teaching materials used have not provided best practices in speaking activities, affecting students' listening activities. Teaching materials also have not utilized the sources of digital reading materials that are widely available online.

Based on the observation findings, it is known that it is necessary to follow up on the development of teaching materials that can overcome students' difficulties in listening activities. Teaching materials are needed to help make learning align with the lesson

plan [12]. Teaching materials must also be well packaged and structured, making them easy to learn and use [13]. Teaching materials need to be developed by the times [14]. In addition, using available digital technology will help and facilitate the improvement of the quality of learning [15].

3.1.2 Interview

Based on interviews with several lecturers who teach Indonesian language skills courses at the Elementary School Teacher Education study program at Riau University, it was found that listening skills learning materials were not completely available in the study program. The teaching materials used so far use teaching materials that have not been explicitly packaged for Indonesian Language Skills lectures. In detail, the results of the interviews can be explained in Table 1 as follows.

The interview results show that lecturers and students need teaching materials specifically packaged in learning to improve students' listening skills. Teaching materials need to be presented in a structured and developed manner by utilizing available

Table 1. Result of interviews with lecturers about using teaching material in listening skills learning.

No	Indicator	Discussion
1	Teaching materials used in learning listening skills	The teaching materials used in listening skills are still in the form of small parts like presentation slides and document files. So that it has not been structured and explicitly packaged for language skills learning lectures, especially learning listening skills.
2	Views on the conditions and constraints of teaching materials used	Teaching materials are not yet available in a structured and explicitly packaged for learning listening skills; it's necessary to develop listening skills in teaching materials for lectures on Indonesian language skills.
3	Suggestions for the development of teaching materials required	Teaching materials for listening skills need to be developed by utilizing available online listening resources to provide the students with an enjoyable, exciting experience. There is also a need for teaching materials that can improve the quality of student appreciation of the reading material.
4	A view on the development of Listening skills and learning materials based on technology	development of Listening skills learning materials based on technology is deemed appropriate to the needs in learning listening skills. The use of technology can enrich students' listening experiences and abilities.

online resources. Teaching materials are expected to improve the quality of students' appreciation of their listening activities.

3.1.3 Questionnaire

Questionnaires were distributed to students who had contracted the Indonesian Language Skills Course and several lecturers who taught the course. Questionnaires were given to strengthen data related to circumstances, needs, and constraints to appreciate learning listening skills. The questionnaires results obtained 34 respondents consisting of lecturers and students. In detail, the results of the questionnaire distribution are presented in Table 2 below.

Based on the results of the questionnaire analysis, it can be seen that students and lecturers do not have the primary teaching materials for learning listening skills. In addition, the desire to seek additional teaching materials tends to be passive. They need teaching material to facilitate listening skills learning activities. Teaching materials are

Table 2. Results of the Questionnaire for Lecturer and Student Needs

No	Questions	Frequency		Percentage	
		Yes	No	Yes	No
1	Do you have teaching materials for learning listening skills? If so, what is the form of the teaching materials?	8	26	24%	76%
2	Are you looking for additional teaching materials to help improve the quality of appreciation of listening skills? If so, how did you find these teaching materials?	5	29	15%	85%
3	Do you enjoy learning that demonstrates various language and literature reading materials to strengthen self-appreciation skills? Explain why!	25	9	74%	26%
4	Do you have difficulty appreciating the material you have heard? If so, how did you overcome these difficulties?	23	11	78%	32%
5	Do you need alternative teaching materials that can be used to learn listening skills material more quickly and interestingly? If so, what kind of teaching materials do you need?	28	6	82%	18%
6	Do you agree if there are teaching listening skills by utilizing technology that summarizes reading materials available online as learning materials? Explain why!	34	0	100%	0%

expected to help them overcome difficulties appreciating the material they have heard. The results of the questionnaire analysis also showed that 82% of respondents needed alternative teaching materials to learn easy and enjoyable listening skills. The teaching materials used should utilize technology by summarizing the reading materials available online as teaching materials.

3.1.4 Document Study

Study documents are used to examine learning documents, such as curriculum documents, Semester Learning Plans (RPS), assignments, evaluations, and teaching materials. The analysis begins by identifying the suitability of Course Outcomes, Learning Outcomes, and Lesson Outcomes. Based on the findings, learning listening skills in the Indonesian Language Skills course has a Semester Learning Plan (RPS), assignments, and evaluations that are good and quite complete. Unfortunately, the Semester Learning Plan (RPS) has not been equipped with teaching materials that support each stage of learning. Teaching materials must be developed according to the available learning plans [16].

4 Conclusion

Based on the findings of this study, it was concluded that the development of teaching materials-based technology was deemed necessary as a complement in the learning process to support students' ability to appreciate reading materials. Teaching materials must be developed to be used as a source of learning listening skills. Teaching materials are developed by utilizing technology by inserting several reading materials in digital form to provide concrete examples of literary works and other reading materials. The teaching materials developed need to be adapted to the applicable curriculum and prioritize students' interest and motivation in developing listening skills to increase their ability to appreciate listening materials. This research is a preliminary study in developing teaching materials-based technology to support students' listening skills.

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