

Investigate the needs of students and educators in the development of a learning model for reading comprehension in middle school

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Abstract: This research aims to describe a framework for investigating the needs of students and educators in developing reading comprehension learning models in junior high schools. The research was carried out at Magelang City Middle School because Magelang City is one of the oldest cities in Indonesia, whose existence is very strategic in the center of Central Java. Several elements in its vision are smart people and smart living, which means education and the development of technology-literate human resources, research support, the development of the socio-cultural character of the community, as well as easy access to educational services. This research was conducted from August to September 2023. The subjects in this research were 85 students and 3 educators from 3 schools selected using the purposive sampling method. Data collection techniques included questionnaires and interviews. Data analysis techniques employed qualitative descriptive analysis. The results of the research show that investigations to analyze the needs of students and educators in developing reading comprehension learning models in junior high schools are needed to improve students' reading comprehension skills. In the implementation of learning to read, comprehension is not yet optimal because an innovative model that supports 21st-century competence has not been fully designed. The learning model is applied to language skills in addition to reading skills. The use of technology has not been fully utilized, and texts containing local wisdom have not been utilized. The use of teaching materials is limited to government-issued textbooks. Students still need a good understanding to find text ideas, connect text ideas, and conclude the text.

Keywords: Learning models, Needs of students and educators, Reading comprehension.

1. Introduction

Reading as an important language skill is mastered by every individual. Every individual has two reasons for reading, namely reading for pleasure and reading for information to find something [1]. By reading, someone can obtain information and broaden their horizons. By reading, a person can also differentiate between information that is factual and what is just information *hoax*. Not all of the information circulating widely contains correct information. There is false information that is created and spread easily through *platform website* [2].

Literate individuals can determine the extent of information needed, how to access information effectively and efficiently, being able to evaluate information and sources critically, incorporate selected information into one's knowledge base, use information effectively to achieve specific goals, and understand the economic, legal, social issues surrounding the use of information, accessing and using information ethically and legally [3].

Reading is a skill that every individual needs to do to be successful in life. Reading is not only a skill that can support success in participating in classroom learning but is a skill that every individual needs to have both during the study period and after completing education [4].

Reading involves a variety of skills. The skills that exist in reading include recognizing scripts, deducing the meaning and use of unknown lexical items, understanding information that is stated explicitly, understanding information when it is not stated explicitly, understanding conceptual meaning, understanding the communicative value of sentences and utterances, understanding relationships in sentences, understanding relationships between parts of the text through lexical cohesion devices, understanding cohesion between parts of the text through lexical cohesion devices, understanding cohesion between parts of the text through grammatical cohesion devices, interpreting text, and recognizing indicators in discourse [1]. In reading a reading text, readers need understanding to be able to obtain information accurately. Therefore, reading is a skill that continues to develop [5].

The reading ability of students in Indonesia is considered to be in the low category. Various surveys, both national and international, show less encouraging results. The understanding of students in Indonesia tested by the International Association for the Evaluation of Educational Achievement (IEA-the *International Association for the Evaluation of Educational Achievement*) through *Progress in International Reading Literacy Study* (PIRLS) shows that the reading ability of Indonesian students is ranked 42nd out of 46 countries. The score obtained was 405, a level higher than Qatar (353) [6].

Another survey regarding Indonesia's participation in the *Program for International Student Assessment* (PISA) generally does not show a significant increase in literacy skills from 2000 to 2018. In the first four rounds of PISA, the average reading ability score of Indonesian students moved up. In 2000, Indonesia obtained an average score of 371. In 2009 the average score for reading ability rose to 402 (the highest score Indonesia has ever achieved). In the last three rounds of PISA, the average score for reading ability decreased and reached the lowest figure in PISA in 2018, namely 371 points, the same as the average score obtained in the first round of PISA [7].

Research on literacy rankings through the National Literacy Index by the Ministry of Education and Culture which produced the 2019 Indonesian Alibaca Index (Reading Literacy Rate) also shows that of the 34 provinces in Indonesia, there are nine provinces (26%) in the moderate literacy activity category; 24 provinces (71%) are in the low literacy activity category; and one province (3%) is in the very low category. This means that not a single province in Indonesia is yet included in the high literacy activity category [8]. These findings indicate that students' literacy skills in Indonesia require serious attention to catch up with other developed countries. To be able to catch up and improve students' literacy skills, it is necessary to first carry out a preliminary study to investigate the needs of students in learning reading comprehension in junior high school so that the results of this investigation can be followed up to determine the next steps.

Several relevant studies show that students have minimal knowledge about reading strategies. After practicing comprehensive reading strategies, students' reading abilities improve [9]. Reading comprehension is a complex domain. Understanding reading is an academic achievement that supports success. Therefore, efforts must continue to be made to improve reading comprehension difficulties. Theoretical frameworks such as primary knowledge about reading, assessment development, and appropriate reading teaching approaches can improve reading skills [10]. The general framework of reading systems should reflect reading more completely by adding word-level processes to higher-level processes [11]. The difficulties experienced by students in understanding reading can be shown in understanding words, sentences, and discourse levels [12]. Reading comprehension involves understanding sentences and sentence comprehension involves using information about sentence structure. Therefore, students need strategies that can help improve understanding [13].

Reading comprehension is done by connecting schemata or initial knowledge that the reader has and new knowledge obtained while reading so that the comprehension process is developed optimally. Smith [14] suggests that understanding is the core of the act of reading. In this reading process, readers use several types of understanding [14]. This understanding is literal, interpretive, critical, and creative understanding [14].

Reading comprehension is a multidimensional process that includes the reader, text, and factors related to reading activities [15]. Reading comprehension is the process of understanding the text that is read [16]. Reading comprehension is a reading activity carried out by someone to gain in-depth understanding. Reading comprehension is usually taught in schools in two ways [17]. The first way is for educators to ask students to read the text and then answer questions based on the text. The second way to teach students to understand texts is by forming reading groups.

Reading comprehension is considered an important factor in psychological tests because the assessment instructions and test tasks presented must be read and understood. Students with low levels of reading comprehension skills often face difficulty in following detailed instructions or understanding the meaning of an item which can have a negative impact on their scores. Therefore, students need sufficient practice [18].

The problems regarding learning to read described above must of course be solved. Educators as one of the components in learning must be able to create conditions that allow students' thinking processes to occur, one of which is through reading comprehension learning. Reading comprehension as one of the sub-skills contained in Indonesian language learning can be developed using various learning models. The learning model is a systematic framework and can be used by educators to plan and implement learning activities. Joyce, et al. [19] define a learning model as a description of learning how to improve students' learning abilities so that it is easier and more effective from a cognitive and skills perspective. The learning process carried out by educators is expressed through a learning model that helps students obtain information, ideas, skills, values, ways of thinking and ways of expressing themselves. The teaching carried out by educators must greatly impact students' abilities. Before developing a learning model, it is necessary to analyze the needs of students and educators. This is in line with the opinion of Hutchinson and Waterr [20] which suggests that it is necessary to consider target needs in developing learning models.

2. Method

2.1. Research design

This research uses qualitative research methods with a case study design. Relevant case studies answer questions that require intensive and in-depth descriptions of social phenomena [21]. This case study was conducted on class VII junior high school students in Magelang City. The research was carried out at Magelang City Middle School because Magelang City is one of the oldest cities in Indonesia whose existence is very strategic in the center of Central Java. Several elements in its vision are *smart people* and *smart living* which means education and development of technologically literate human resources, research support, development of the socio-cultural character of the community, as well as easy access to educational services and other services such as health and security. Therefore, researchers want to photograph and investigate what the needs of students and educators are in learning reading comprehension.

2.2. Place and Time of Research

This research was carried out from August to September 2023 at 3 junior high schools in Magelang City, namely SMP Negeri 3 Magelang, SMP Negeri 11 Magelang, and SMP Negeri 13 Magelang.

2.3. Research Subject

The subjects in this research were 85 students who were selected using the sampling method *purposive sampling*. The subjects came from 3 junior high schools in Magelang City, namely SMP Negeri 3 Magelang, SMP Negeri 11 Magelang, and SMP Negeri 13 Magelang.

2.4. Data Collection Techniques and Instruments

The data collection techniques used in this research were questionnaires and interviews [22]. Interviews were conducted with the aim of exploring information related to learning reading comprehension. Meanwhile, a questionnaire is a data collection technique that is carried out by giving respondents a set of written questions that must be answered [23]. The questionnaire is filled out by the respondent directly.

2.5. Data Analysis Techniques

The data analysis technique used in this research is the qualitative descriptive analysis technique. Qualitative descriptive analysis is used to analyze qualitative data including the results of questionnaires and interviews.

3. Results and Discussion

3.1. Students' Needs Regarding the Urgency and Role of the Reading Comprehension Learning Model

Investigating the needs of students in developing a reading comprehension learning model is done by conducting a needs analysis. The analysis is carried out in two ways, namely *need analysis* and *front-end analysis*. *Need analysis* (needs analysis) is carried out to determine the gap between what currently exists and what is expected. Meanwhile, *front-end analysis* is carried out to collect techniques in determining the solutions needed from existing gaps.

The analysis was carried out with the aim of (1) identifying the urgency and role of the learning model being developed; (2) describing students' desires related to learning reading comprehension including learning models, learning methods and strategies, learning topics, learning media, learning assessments, and desired teaching materials; (3) knowing things that have not been mastered in learning reading comprehension; and (4) knowing the role of students in learning reading comprehension.

Based on the results of the analysis of student needs carried out in reading comprehension learning for class VII junior high school students in Magelang City, information was obtained that the majority of students wanted a new model in learning reading comprehension. This is shown by the percentage of students who filled out a questionnaire regarding the need for a new learning model, namely 82%. Students want a new reading comprehension learning model because the learning model used by students is relatively monotonous and learning is still centered on educators because more educators present learning using the lecture method. The opinions of students who want a new reading comprehension learning model are depicted in the following diagram.

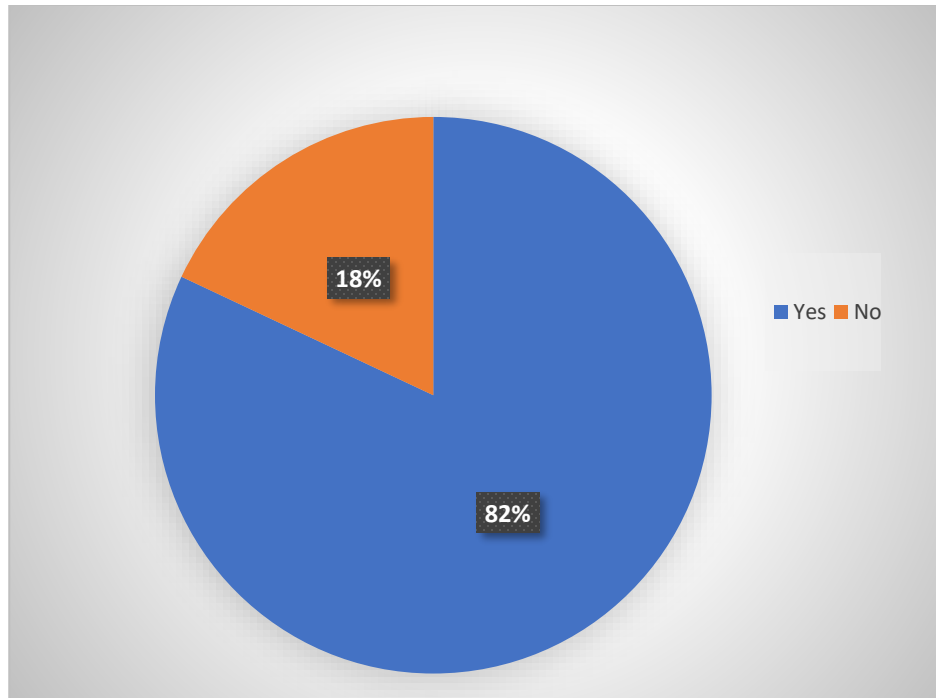


Figure 1.
Diagram of Students' Desires for Learning Models Reading New Comprehension

The diagram above shows that 18% of students do not want a new learning model, while 82% of students want a new reading comprehension learning model. The results of the questionnaire regarding students' desires were also supported by the results of interviews with students wanting a new reading comprehension learning model.

3.2. Student Needs Regarding Student Desires Related to Learning Reading Comprehension

Investigation of students' needs in developing a reading comprehension learning model was also carried out by exploring students' desires related to reading comprehension learning including the learning model used, learning methods and strategies used, learning topics, learning media, learning assessment, and teaching materials used in reading comprehension learning. The results of the questionnaire show that 99% of students want a reading comprehension learning model that is innovative, fun, and communicative.

In a fun learning context, students are directed to have high motivation in learning by creating fun situations. This is in accordance with Law Number 20 of 2003 concerning the National Education System in Article 40 paragraph 2 which states that teachers and education personnel are obliged to create an educational atmosphere that is meaningful, fun, creative, dynamic, and dialogical.

In implementing reading comprehension learning, 96% of students also want to use various learning media. These various learning media include audio-visual media in the form of films and videos; visual media in the form of drawings, sketches, diagrams, posters, photos, and paintings; and print media including magazines, newspapers, articles and books. It cannot be denied that the use of learning media can have a positive impact on learning. The students' opinions regarding the use of various learning media are shown in the following picture.

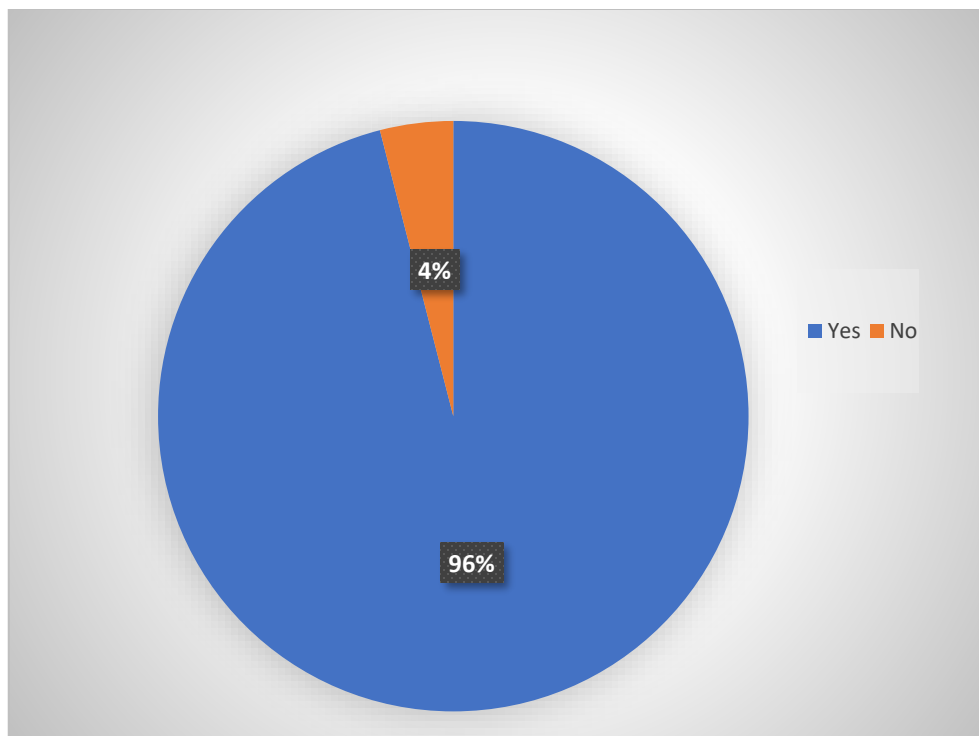


Figure 2.
Diagram of Students' Desire to Use Various Instructional Media.

Apart from using a variety of reading comprehension learning media, 95% of students want educators to apply varied learning methods and 53% of students want reading comprehension learning to be carried out with varied learning strategies. A diagram showing students' opinions regarding the use of various learning methods and strategies is presented in the following image.

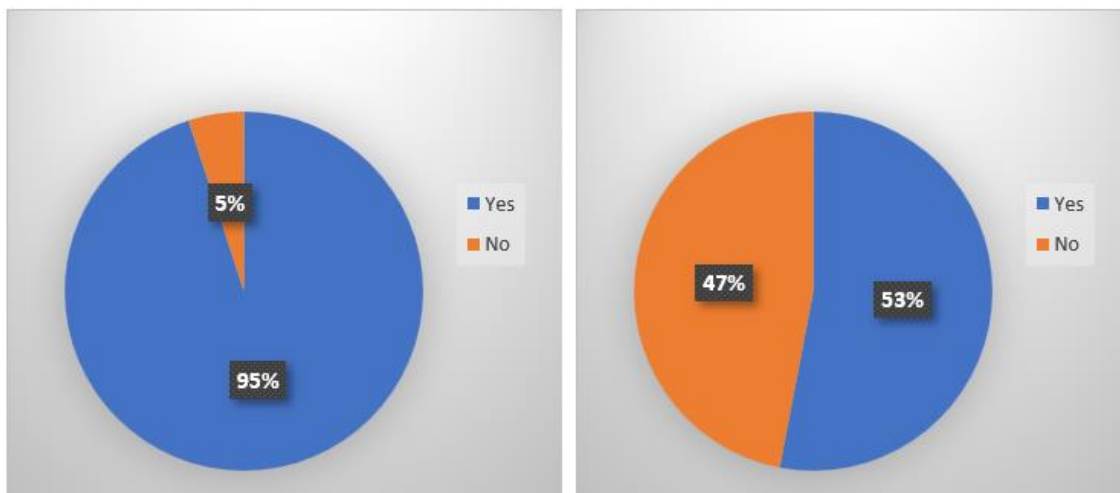


Figure 3.
Diagram of Students' Desire to Use Various Learning Methods and Strategies.

Description of students' desires regarding learning to read and understand what they want as well as regarding the learning material/topics presented. In learning to read the text presented has a general

theme. Students (with a percentage of 100%) want the texts presented in reading comprehension learning to also present texts containing local wisdom with an Indonesian perspective. The teaching materials that students want in learning reading comprehension are teaching materials presented in printed books (98%), design *full color* (91%), and contains local wisdom (96%). For assessment, students want a written assessment model with a percentage of 60%, while only 33% of students want an assignment-based model.

3.3. Students' Needs Regarding Things That Have Not Been Mastered in Learning Reading Comprehension

Based on the results of a preliminary study or needs analysis carried out in reading comprehension learning for class VII junior high school students in Magelang City through questionnaires and interviews, it can be seen that 34% of students have low ability in reading comprehension, 33% of students do not understand texts well, 84% of students are less able to find ideas, 29% of students are less able to connect ideas in texts, and 84% of students are still less able to compare and conclude texts. When learning takes place in class, there are still 35% of students who are passive and only listen. The following diagram shows that students are less able to find ideas in the text and less able to compare and conclude texts.

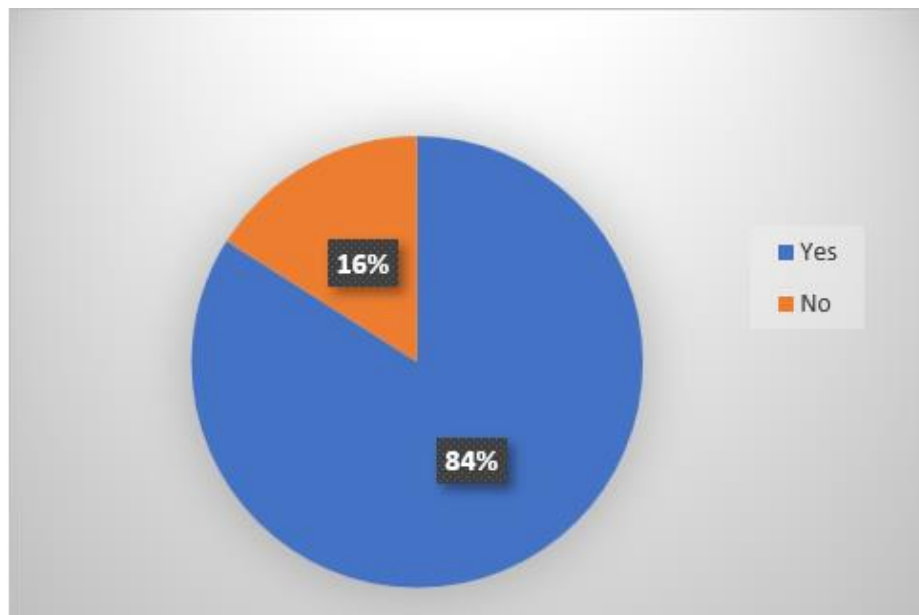


Figure 4. Diagram of Students' Poor Ability in Finding Ideas, Comparing, and Concluding Text

Based on the results of preliminary studies that have been carried out, reading comprehension learning in schools is still carried out classically. Educators apply learning models, but more often apply learning models for language skills other than reading skills. This then has an impact on students' low reading comprehension abilities. Students are less able to understand the text well. Students have not been able to find the idea of the text, connect ideas in the text, compare ideas, and conclude the text. Apart from that, books as learning resources used during learning are also focused on government-published textbooks.

The results of the needs analysis show that the use of learning models in schools has not adapted to the characteristics and needs of students. Even though students are at the same level, students have different thought processes and perceptions of the material presented by educators [24]. Therefore,

educators need to develop and apply learning models by paying attention to characteristics and adapting to students' needs so they can understand texts well.

From the needs analysis carried out, factors that influence learning to read comprehension can be identified, including the learning model used, learning methods and strategies used, learning topics, learning media, learning assessment, and teaching materials used in learning reading comprehension.

3.4. *The Needs of Educators in Developing Reading Comprehension Learning Models in Junior High Schools*

An analysis of educators' needs was carried out to find out information related to reading comprehension learning in junior high schools and to understand the urgency and role of the reading comprehension learning model developed in this research. Information was obtained through questionnaires and interviews related to learning models, learning methods and strategies, learning materials, learning media, teaching materials, and assessments in learning reading comprehension.

Based on the results of the needs analysis through filling out questionnaires carried out by educators, information was found that educators needed a new reading comprehension learning model. This is reinforced by interviews regarding the learning models that educators have been using. Educators already use learning models but still refer to learning models in the previous curriculum. On the other hand, educators have also implemented learning methods and strategies, but not on all material. Educators need a reading comprehension learning model that can develop skills in the 21st century such as high comprehension, critical thinking, collaboration, and communicative.

Analysis of educators' needs related to reading comprehension learning includes several things including, learning models, learning methods and strategies, learning topics/materials, learning media, teaching materials desired by educators, and learning assessment. Based on the results of the analysis of educators' needs obtained through a questionnaire, it is known that educators want a reading comprehension learning model that is designed with concepts that are innovative, fun, communicative, utilize technology, utilize various types of texts, utilize texts containing local wisdom, and utilize various learning media. The following diagram shows that educators want a reading comprehension learning model that is innovative, fun, communicative, utilizes technology, utilizes various learning media, utilizes various types of texts, and utilizes texts containing local wisdom.

Local wisdom (*Local wisdom*) can be interpreted as local ideas that are full of wisdom and discretion that are followed by the community. Local wisdom or also known as *local indigenous* namely something original that originates or belongs to a region or area. Something original that originates from a region or area can be knowledge, beliefs, arts, language, morals, customs, social institutions, intelligence, activities, artifacts, ideas, regulations, values, norms, customs and traditions Harsoyo [25].

Geertz [26] defines local knowledge as knowledge that is owned locally by local people, a cultural system that becomes common sense for people who share communal sensitivities and this developing cultural system becomes a guide for local people in carrying out daily activities. In learning to read, educators can utilize texts containing local wisdom. Chusorn, et al. [27] define local wisdom as knowledge that is suitable for use for national development. To encourage education in schools and communities, the learning process can use local resources and knowledge.

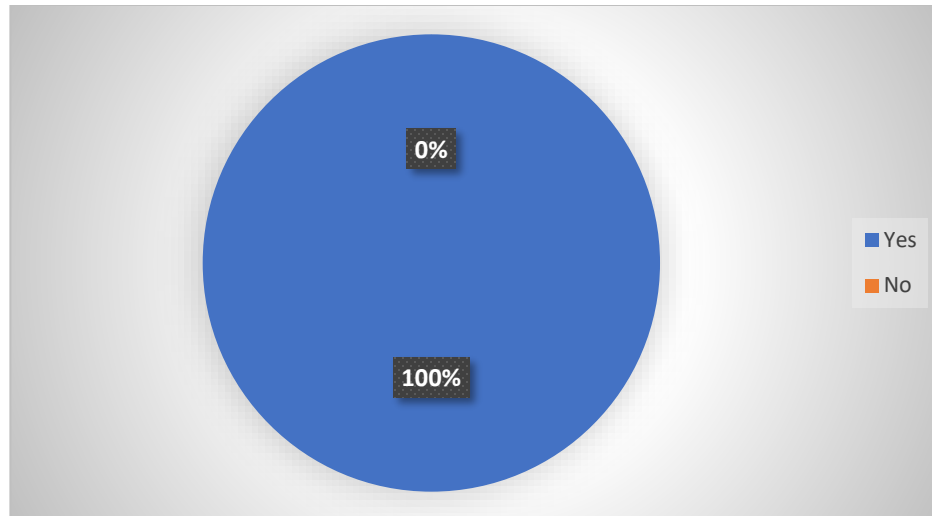


Figure 5. Educator Needs Diagram Reading Comprehension Learning Model Designed with Innovative, Fun, Communicative Concepts, Utilizing Technology, Utilizing Various Types of Texts, Utilizing Texts Containing Local Wisdom, and Utilizing Various Learning Media

The results of this questionnaire are also supported by interview data conducted with educators who stated that so far educators have designed reading comprehension learning, but the implementation has not been optimal because educators have not fully designed it with an innovative model, educators have not maximized the use of technology in reading comprehension learning, and have not utilized texts containing local wisdom. The texts taught only focus on texts in government textbooks or textbooks, and do not present a variety of information and various learning media. Apart from that, educators in teaching still use the lecture method. On the other hand, the teaching materials used are also focused on Indonesian language books published by the government. Educators do not yet have accompanying books apart from the government.

Based on the results of the questionnaire, all educators who were respondents revealed that educators had prepared learning tools, educators had also prepared ATP (Learning Objective Flow) along with teaching modules, educators had also prepared teaching materials, and as facilitators, educators had also developed the potential of students. Apart from that, educators carry out assessments and even become *role models* or role models in classroom learning. Even though the teacher has prepared learning tools well, in its implementation there are phenomena in reading comprehension learning, namely students' reading comprehension skills are still low, students' ability to understand the text is still lacking, and students' ability to find ideas in the text is still lacking. Apart from that, students are less able to connect text ideas and less able to compare and conclude texts. Based on the results of the needs analysis that has been presented, it is concluded that educators need a reading comprehension learning model that can help students better understand texts that contain diverse information and support 21st-century competencies.

4. Conclusion

Based on a preliminary study of learning models, teaching materials, evaluations, educators' perceptions and students' perceptions, it shows that the learning model has been implemented but its application is on language skills other than reading skills. In the implementation of learning to read, comprehension is not yet optimal because an innovative model that supports 21st-century competence has not been fully designed. The learning model is applied to language skills in addition to reading skills. The use of technology has not been utilized and texts containing local wisdom with an Indonesian insight have not been utilized in learning reading comprehension. The use of teaching materials is

limited to government-issued textbooks. Students still need a good understanding to find text ideas, connect text ideas, and conclude the text. Based on this data, it is necessary to develop a reading comprehension learning model that can help students better understand texts that contain diverse information and support 21st-century competencies.

Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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