Analysis of Teacher Perceptions in the Development of LIAA (Linguistic Intelligence Assessment Android) in Elementary Schools

Otang Kurniaman[1]
Faculty of Teacher Training and Education
PGSD University of Riau, Indonesia

Eddy Noviana[2]
Faculty of Teacher Training and Education
PGSD University of Riau, Indonesia

Munjiatun[3]
Faculty of Teacher Training and Education
PGSD University of Riau, Indonesia

Zufriady[4]
Faculty of Teacher Training and Education
PGSD University of Riau, Indonesia

Kurniawan[5]
Faculty of Teacher Training and Education
PGSD University of Riau, Indonesia

Abstract: Technological developments in learning in elementary schools change teachers' perceptions of technology use in testing linguistic intelligence, therefore it is necessary to provide a survey using google form research instruments and analyzed using excel so that the percentage appears in the perceptions of teachers in the city of Pekanbaru. The results of this study the perceptions of teachers in the use of technology in the world of education are very often 52.10%, 45.80%, this illustrates that the use of technology among teachers is accustomed, but in testing linguistic intelligence it is very less with a percentage of 2.10%, and 8.30%, this gives a conclusion. that so far the teacher has tested using manuals in testing linguistic intelligence.

Keywords: Perception, Linguistic Intelligence, LIAA (Linguistic Intelligence Assessment Android)

Introduction

Education in Indonesia is experiencing a crisis in learning due to an outbreak of a disease which is often referred to as the coronavirus (Covid-19) which has resulted in changes in learning patterns in elementary schools (Zulhafizh & Permatasari, 2020). Home learning for students and teaching/working from home for teachers at all levels of education. Learning from home or conceptually is distance learning, including new for the elementary school level, so it has implications for the implementation process. (GTK Dikdas, 2020). Teachers no longer manage learning alone like in school, so parents can no longer submit all children's learning activities to the teacher, but parents and teachers work together to assist students in their learning activities. This change is felt by students, teachers and also parents, so a strategy is needed for the effectiveness of communication (Sudarmiatun, 2020). The interaction of teachers and parents in the process of children's learning activities requires strategies that can adjust the characteristics of students, teachers, parents who meet distance learning criteria (Hamid, 2017).

The development of technology in this modern era is very fast, now technology has provided many benefits in advancing in various aspects. This development is not only in a matter of years, months or days, but hours, even minutes or seconds, especially in relation to information and communication technology supported by electronic technology. The use of technology by humans to help complete work is a necessity in life (Astuti, 2020). This technological development must also be followed by developments in Human Resources (HR). Humans as technology users must be able to take advantage of existing technology, as well as subsequent technological developments. Human adaptation with the new technology that has developed is obligatory to do

through education. This is done so that the next generation is not left behind in terms of new technology. That way, technology and education are able to develop together with the new generation as the successor to the old generation (Dispernaker, 2020).

Changes in learning by using a distance that require technology as a means of connecting and delivering messages in learning (Noviana, Kurniaman, & Huda, 2018). The transformation of learning to technology has resulted in many changes in many strategic sectors, assignments, assessments, ability tests and final semester exams (Noviana, Kurniaman, Munjiatun, SismulyasihSb, & Nirmala, 2019). The use of technology aims to make it easier in all sectors of education so that in assessing and testing linguistic intelligence, it is starting to be developed to make android applications. The development of LIAA (Linguistic Intelligence Assessment Android) is the development of an assessment of linguistic intelligence for elementary school students using technology to make it easier for teachers to assess. Linguistic intelligence is the ability of a person or individual to process and use words very well, whether they are spoken or written (Kurniaman, Maharani, Noviana, &Afendi, 2020). This intelligence includes mature word mastery, the sound and rhythm are very clear and calm and the intonation spoken is very good (Tiffany, 2020). If the person has linguistic intelligence, it means that the individual has succeeded in sitting in a good environment and has good communication with other people as well. Not infrequently those who have this intelligence are considered authoritative and respected by many people. But back again on the basis of intelligence that every human being has weaknesses and strengths that include their respective intelligence.

According to Gardner (Armstrong, 2002), human intelligence is plural. The elements of multiple intelligences are mathematics, linguistics, naturalistic, visual-spatial, kinesthetic, interpersonal, musical, and intrapersonal. Linguistic intelligence is one of the most important intelligence for every child, this is because linguistic intelligence is one of the intelligence that will connect one intelligence to another. As previously explained, linguistic intelligence is one of the eight multiple intelligences pioneered by Gardner. Linguistic intelligence is the ability to use words effectively, both oral (for example as an orator, storyteller or politician) and written (for example as a poet, playwright, editor or journalist).

The development of LIAA (Linguistic Intelligence Assessment Android), seen from teachers' perceptions of the need for technology during the pandemic, looks bigger than in the pre-pandemic period (Koh, Burke, Luke, Gong, & Tan, 2017). The use of technology for teachers is expected to make it easier to measure linguistic abilities in elementary schools because this intelligence is very important for teachers to know. Linguistic intelligence in primary schools consists of four aspects, namely reading skills, writing skills, speaking skills and listening skills, these aspects are also very important as interrelated components, so it is necessary to analyze the needs of a teacher in developing applications that are able to assess students in linguistic intelligence (Maharani, Kurniaman, & Noviana, 2019).

Methodology

The survey method is one method that is widely used in social research. Research using survey methods is also called survey research methods. In a survey, information is collected from respondents using a questionnaire or questionnaire that is distributed directly or through intermediaries such as telephone or online media (Sugiono, 2017). In general, research that uses survey methods can be described as scientific research where data is collected from a sample that has been selected from the entire population.

The subject of this research is focused on elementary school teachers in Pekanbaru, by filling in an instrument in the form of an online form to see the teacher's perceptions of the use of technology in testing linguistic intelligence for elementary school students, so that the teacher's needs are seen. This data is preliminary data to describe teacher perceptions so that the development of LIAA (Linguistic Intelligence Assessment Android) is carried out to make it easier to assess the linguistic intelligence of elementary school students.

Result and Discussion

The research was given to elementary school teachers in the city of Pekanbaru, to determine the need for technology in testing linguistic intelligence. The perception of the need in developing LIAA (Linguistic Intelligence Assessment Android) in elementary schools is very important to initial data in the development of this research. The use of technology during the coronavirus epidemic is very important because learning in schools has been very limited. Therefore, learning at schools is closed, the learning process through online activities using zoom meetings, google classrooms, and others, so it is necessary to see the teacher's perception of the technology to be developed. The teacher's response will be seen in table 1 below.

Table 1. Teacher Perceptions of Technology Needs

NO	INDICATOR	CRITERIA			
		VERY OFTEN	OFTEN	SOMETIMES	NEVER
1.	often hear about digital technology.	45.80%	50%	4.20%	0%
2.	often feel helped by the presence of technology in the world of education.	52.10%	47.90%	0%	0%
3.	often use technology in schools in the learning process.	22.90%	60.40%	16.70%	0%
4.	often facilitated in learning at school by using technology.	39.60%	52.10%	8.30%	0%
5.	often feel the positive impact of technology in education.	37.50%	58.30%	4.20%	0%
6.	often feel the negative impact of technology in education.	4.20%	22.90%	64.60%	8.30%
7.	have ever measured or tested students' linguistic intelligence (reading, writing, speaking and listening skills).	8.30%	39.60%	41.70%	10.40%
8.	have ever measured or tested students' linguistic intelligence (reading, writing, speaking and listening skills) using technology.	2.10%	18.80%	47.90%	31.30%

The perception of teachers in listening to technology with the criteria is often 50%, and very often 45.80%, this proves that teachers in elementary schools are very familiar with technology, and the use of technology is done by using cellphones they always use. The use of technology is also very helpful in the world of education, one of which is in learning activities by 52.10%, teachers use technology very often at this time due to the coronavirus pandemic. Technology makes the teaching process easier for teachers, but in testing technology intelligence teachers have never used technology so far using manuals.
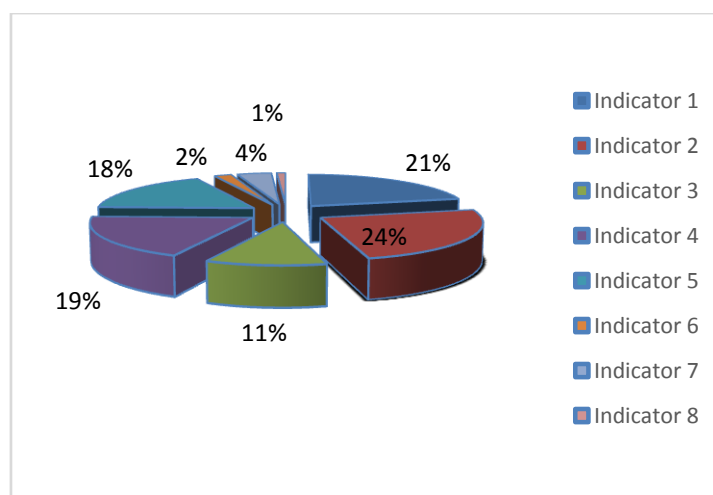

Figure 1. Teacher Perception Trend

The tendency of teachers to test linguistic intelligence seems very small in the use of technology, even though linguistic intelligence is very important to be obtained by students. If the person has linguistic intelligence, it means that the individual has succeeded in sitting in a good environment and has good communication with other people as well. Not infrequently those who have this intelligence are considered authoritative and respected by many people. But back again on the basis of intelligence that every human being has weaknesses and strengths that include their respective intelligence (Tiffany, 2020). Those who have linguistic intelligence have the advantage of mastering other languages apart from their mother tongue or the language commonly used in everyday life. Those who are clever in word processing certainly have a very large vocabulary (Osadi, 2017).

Individuals who have linguistic intelligence have the characteristics of learning to use reading and writing media. Meanwhile, to hone them using the discussion method or listening to other people's conversations and explanations. Read effectively and understand and can summarize what they have read. Not only that, they can return to explain and interpret what they have read and explained it in detail and detail to others. Imitating the voice, language and reading and writing of others (Tiffany, 2019). Especially if they want to become a specific profession that requires linguistic intelligence. Hear and respond to every voice, rhythm and colour of voice as well as words from others correctly and efficiently. Speaking effectively to listeners, where they do not use complicated or difficult words to understand and explain in simple language and are tailored to the listener. Individuals who have linguistic intelligence can also be fluent but passionate at the right and right time.

Linguistic intelligence for someone is important in the current era of the communication revolution. Of course, this intelligence concerns language skills, both written and spoken so that messages are conveyed well. Increasing linguistic intelligence is necessary in order to help someone solve problems well and also train abstract reasoning skills (Liwufamily, 2017). One type of intelligence that influences language learning is verbal-linguistic intelligence. This type of intelligence is the intelligence to understand the structure, sound and meaning of language (Armstrong, 2009: 6). Meanwhile, Ihsan (2017: 42) states that Verbal Linguistic Intelligence is intelligence related to the ability to show the ability to understand communication and information from the interlocutor, both in oral and written form. Verbal-linguistic intelligence was recognized for many years before the presence of other intelligence. Verbal-linguistic intelligence and logical-mathematical intelligence are used as measures of IQ. Both bits of intelligence has become standardized tests in several academics such as the National Assessment of Education Programs (NAEP), the Iowa Basic Skills Test (ITBS), etc. In addition, Alfred Binet made an IQ test to measure the intelligence of elementary school children in France. Later, the US Armed Forces began using the test in World War I. Basically, the Binet Test only measures two bits of intelligence: verbal intelligence - linguistic and logical-mathematical intelligence. So, it can be concluded that intelligence is used as the main focus of intelligence (Dewi, & Wilany, 2019).

Conclusions

The conclusion in this study is that the teacher's perception of the use of technology is very important in the world of education so that teaching is more varied and able to provide more meaningful learning. The use of technology in testing linguistic intelligence is also very much needed, especially at this time of the pandemic which limits direct contact with students. So it is very necessary for the development of LIAA (Linguistic Intelligence Assessment Android).

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