The Mastery of Upper-Class Teachers in Multimodal Text-Based Learning at Primary Schools

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This research aims to identify the understanding and skill of upper-class teachers in using multimodal text-based learning, the benefit of multimodal text-based learning, the problem in applying multimodal text-based learning, and the solution to overcome the problem in applying multimodal text-based learning. This research used qualitative research with a descriptive research design. The information sources were gathered from the principal and upper-class teacher at SD Muhammadiyah 8 Jagalan with A accreditation and SD Negeri Kendalrejo with B accreditation. The data collecting techniques used were observation, interview, documentation, and questionnaire. The data was analysed through data reduction, data serving, and drawing conclusions. The techniques of the data validity tests used were technique and source triangulation. The research result shows that 1) The understanding of upper-class teachers in applying multimodal text-based learning is good, with a percentage score of 76.6%. 2) The skill of teachers in using multimodal text is good enough with a percentage score of 60.2%. 3) The benefits gotten by teachers in applying multimodal text-based learning include improving their understanding and skill about the multimodal text, gaining a more efficient learning process, and increasing students’ activity and reading motivation. 4) The problems in applying multimodal text-based learning are the teachers’ skill in technology is unequal, and teachers teach in the conventional learning process. 5) The solutions to overcome the problem in multimodal text-based learning are by conducting an evaluation in the previous learning activity, looking for learning model reference based on the material taught, asking for help, and searching information from another teacher who has better technology literacy.

Key words: Multimodal Text, Learning in the 21st Century.
Introduction

The advance of technology development has a big impact on influencing the education field. In the industrial revolution era, reading activity also evolved in education. The 21st-century learning acceleration makes digital literacy compulsory for people in this information era (Rebecca, 2009). The 21st-century skill consists of three main components as 1) innovative thinking 2) skill in information, IT (digital literacy) and life skill (Trilling & Fadel, 2018). The 21st-century teacher is suggested to modify the education system to support skill and literacy development. One of the ways is through reading text. The text is commonly used by the student to get information. Varied and exciting reading texts is one of the good alternatives to increase students’ reading motivation. Various reading text that we usually see in this modern era is called a contemporary text. One of these contemporary texts that is known to be introduced to students is the multimodal text.

Multimodal text is a kind of text that provides concepts and methods in collecting and analysing picture, video, gesture and language (Kress & Leeuwen, 2006). Multimodal text is a combination of oral and written language, static and dynamic picture, which can be served on a paper or another electronic mode of media (Walsh, 2006). The multimodal text shows the picture, graphic, and text link as the main feature, various videos, and a combination of modern technology navigation (Anthony & Paul J, 2006). Various features in the multimodal text are essential to be applied by the teacher to increase learning effectiveness. On another side, the development of more modern reading texts and various features in the multimodal text is suitable to be applied by teachers in the 21st-century learning process. It will be very useful to develop students’ reading skills. The 21st-century learning process in primary schools indicates that students can have human resources that are oriented to mind work and environmental awareness through GLS (School Literacy Movement or Gerakan Literasi Sekolah) by habituation and learning 4C (Sugiyarti & Arif, 2018).

The curriculum of 2013 stresses the importance of students’ reading ability. On the other hand, a balance of affective and cognitive faculties, as well as skill, are also needed by the students. Nowadays, teachers develop students’ skill limitedly. Teachers tend to explain the learning material by using an expository technique that tends to give more points in declaring concepts, principles, or theories that make students get bored in the learning process. It also cannot be separated from lessons and media that are not quite right. Moreover, the 21st century asks teachers to operate more varied technology media and be able to apply it in their learning process. The 21st-century acceleration forces someone to have functional literacy. Literacy is a kind of ability to understand the reading text, graphic, table and diagram (Pamungkas, 2017). One of the literacy forms is digital literacy. It is significant for people in this information era. In applying this literacy, it needs skill and ability in speaking. Speaking ability is an essential ability in education (Amalia, 2009). It is significantly appropriate that a teacher has good...
speaking ability to apply the multimodal text in the 21st century because it can develop students’ critical reading ability. Critical reading ability is a part of information literacy: the ability to identify, find, and communicate legal, ethical, and humanist principles effectively (Azwar, 2011). On the other side, critical reading ability needs live action through the more sophisticated and more profound way of reading the text (Wheller, 2007). Kadir’s theory explains that teachers need to prepare the student to have this critical reading ability (Kadir, Subki, Jamal, & Ismail, 2014). By this way, the multimodal text becomes one of suitable reading text to be applied by the teacher in 21st-century learning, which is proposed to develop students’ critical reading ability in assessing a text.

The purpose of this research is to identify teacher understanding of multimodal texts, teacher skills in the use of multimodal texts, the use of multimodal texts, problems in applying multimodal texts, and solutions to overcome problems in applying multimodal texts. Based on the above objectives, the researcher is interested in researching the title “Mastery of Primary School Upper-Class Teachers in Multimodal Based Learning in the 21st Century.”

**Methodology**

This type of research was qualitative. This research used descriptive analysis. Holistically, the description included in the form of words and language was viewed in a specific natural context and utilized various scientific methods. Descriptive qualitative research is a research method conducted to describe fully and deeply about social reality and various phenomena that occur in the community that is the subject of research so that the characteristics and models of the phenomena are described (Sanjaya, 2013). Subjects of research in this study were teachers and principals.

Data collection techniques used in this study were (1) Interview, which is a way to collect data by asking questions face to face, verbally or in writing, (2) Observation, which is a way to collect data by observing the object under study directly, (3) Documentation, is data in the form of writing used for research purposes, (4) Questionnaire, is a data collection technique that is done by giving several questions and statements in writing to respondents to be answered (Cresswell, 2015).

Data analysis techniques used in this study were the Miles and Huberman model in the form of data collection, data reduction, presenting data, drawing conclusions, and verification (Ahmadi, 2014). In testing the validity of the data, researchers used technique and source triangulation. Technique triangulation is a technique of checking the validity of data through credibility, transferability, dependability, and conformability stages by utilizing something outside the data for data checking purposes or as a comparison of the data (Moleong, 2014).
Results and Discussion

From the data that has been collected through interviews, observations, documentation, and questionnaires, regarding the mastery of multimodal based learning of student texts in the 21st century among the upper-class in primary schools, researchers found the following:

Teachers’ Understanding of Multimodal Texts

The data collected in this study was in the form of data on the understanding of primary school class teachers regarding multimodal text-based learning. From the results of the questionnaire that was filled out by six upper-class teachers, it can be concluded that the average teachers’ understanding of multimodal based text learning is good with a percentage score of 75%. The results of this study have similarities and dissimilarities with the research conducted by Farhani & Mulyati (2018) about the ability to read creatively multimodal text for students. The research similarity found that there is an increase in terms of understanding. Meanwhile, dissimilarity comes from the subjects studied. They were teachers and students. The achievement results score is 76.4% for research on teacher understanding and 26.9% for research on students’ understanding. From the research data that has been obtained, information coming from the principal and teachers regarding the teachers’ understanding of multimodal based text learning is illustrated in the diagram below:

Teachers’ Understanding of Multimodal Definition of Text

The results of the image data about the teachers’ understanding of the definition of multimodal text showed that the red colour indicated the understanding of 4th-grade teachers, green colour for the understanding of 5th-grade teachers, and yellow colour for the understanding of 6th-grade teachers. From this data, it can be concluded that the teachers’ understanding of multimodal texts is not fully understood. This is clarified from the circular diagram picture that showed how 5th-grade teachers understood multimodal texts better in terms of their definitions than 4th grade and 6th-grade teachers. The data is supported by interviews conducted with teachers and principals who described multimodal texts as pictorial text. Kress & Leeuwen (2006) argues that “the notion of multimodality in which modality is understood as modes of meaning, such as the mode of image, the mode of speech and the mode of space. Texts are multimodal when they consist of more than one mode of meaning.” It can be understood from the statement that a text can be called multimodal if it consists of more than one meaning. It is following the theoretical definition from Oliveira (2014), who states that pictorial books are multimodal texts used in many classrooms as a basis for learning media because the modes used will work together to communicate meaning in pictures. Designing a picture story can also improve student reading comprehension (Rahmawati, 2016). Thus, it can be said that the picture story is part of a multimodal type of printed text. Multimodal texts enhance
comprehensive learning through the use of different learning channels. Thus, it can be concluded that some teachers have understood what multimodal texts are, although not fully.

**Teachers’ Understanding Regarding Multimodal Type of Texts**

Types of multimodal printed texts include newspapers, magazines, picture books. Meanwhile, multimodal texts that are non-printed comprise videos, films, and other digital media. It is known that only some teachers are new to an understanding of the types of multimodal texts. The data shows that teachers in 5th grade and 6th grade have a higher type of multimodal text than 4th grade. From interviews with teachers and school principals, it is identified that only some teachers recognize the types of multimodal texts and have not conveyed in detail the types of multimodal texts to students. The teachers only recognize the non-print media, and the teachers do not fully understand that the media is part of a multimodal text. Most teachers only recognize the multimodal type of text in the form of printed text. The teachers use pictures from newspapers or magazines related to the material to be taught. Also, it is reinforced by the teachers’ lesson plan documentation, which has not adequately demonstrated the specific form of multimodal texts. Therefore, it can be concluded that the teachers’ do not fully understand the types of multimodal text.

**Teachers’ Understanding of the Multimodal Semiotic Form of the Text**

The teachers’ understanding of the multimodal form of the text varies. Kress & Leeuwen (2006) mention the multimodal form of text. Those types are five semiotics that needs to be recognized by the teachers, namely: a) linguistics, b) visual, c) audio, d) gestural, and e) spatial. Moreover, the image media contained in multimodal texts play a role in improving four competencies, i.e., listening, reading, writing, and speaking (Istriwati, 2013). It is known that only some teachers understand the multimodal form of texts. From the majority of upper-class teachers, only the semiotic form of linguistics and visuals are known. Following the graphic image data above, 5th-grade teachers understand more about the multimodal form of text compared to 4th grade and 5th-grade teachers. So, the data obtained in the field proves only that some teachers know and understand the multimodal form of text. An understanding of multimodal principles has become the basis for the development of literacy learning models in the last ten years. As expressed by Vasquez (2003), multimodal is the concept that “meaning and knowledge are built up through various modalities including images, texts, symbols, and interactions.” In other words, the text is understood as all kinds of ways of communicating. According to Lenters (2013), an understanding of the multimodal form of text for teachers is essential because it is very much needed in literacy in the 21st century as a modern digital element. The data is further strengthened from the results of interviews which show that teachers understand multimodal texts in the form of picture stories or only know two semiotics, namely visual and linguistic. It is line with the statement of Jancsary, Dennis; Hollerer, Markus
A.; & Meyer, (2016), which reveal that the multimodal text does not only store messages in words, but also store signs outside the language, such as images that need to be analysed.

**Teacher Skills in the Use of Multimodal Texts**

In the multimodal text-based learning process, teachers must have skills in utilizing multimodal texts. In the multimodal text-based learning process, teachers apply multimodal texts in thematic subjects on folklore material. In the delivery, the teachers can display the story in the form of pictorial text and can also play the video. To explain the learning, it is necessary to have a supporting workshop, such as a laptop, LCD, projector screen, speakers, newspapers, and magazines. However, not all teachers can apply multimodal text-based learning. It is due to various factors.

**The Use of Multimodal Text Types**

Based on the results of the data that has been collected, it is known that 5th-grade teachers are higher than 4th grade and 6th-grade teachers in utilizing multimodal types of text in the form of printed text shown in blue. As for the use of a multimodal type of text in the form of non-printed text shown in orange, 5th-grade teachers are still higher than 4th grade and 6th-grade teachers in terms of utilizing non-printed text in the learning process. So, it can be concluded that upper-class teachers have not evenly applied the use of multimodal types of text in the learning process. Text is a language unit that has meaning and is formed due to communication interactions (Suprakisno, 2015). All of these communication interactions are referred to as multimodal (Sinar, 2012). The multimodal analysis emphasizes that all means of communication both verbal and non-verbal play an essential role in generating meaning because language contains meaning that is informative in content (O’Halloran, 2004). The examples of multimodal types of printed text are picture books, where textual and visual elements are arranged on one page. Examples of multimodal types of non-printed text are web pages, where elements such as sound, spoken language, written language, music, and still or moving images are combined into one. Multimodal texts can be sent through a variety of media or technology (Lim-Fei, V., & Yin, 2017).

**Use of Multimodal Semiotic Forms of Text**

Based on observational and interview data, it is known that some teachers have used the semiotic form. However, from the five forms of semiotics, most of the upper-class teachers only use two semiotics, namely linguistics at 37% and visual at 27%. Henceforth, it can be concluded that most of the upper-class teachers do not use the semiotic form as a whole in the learning process. The 21st-century learning is flooded with images mixed with text, layout, sound, movement, speech, and 3D objects. Multimodal text is one form of text that provides
concepts and methods in collecting, analysing images, videos, gestures, and languages (Kress & Leeuwen, 2006). The various features of multimodal texts need to be applied by teachers to improve effectiveness in learning. Furthermore, from the development of more modern reading texts and the diversity of features available in multimodal texts, it is appropriate that multimodal texts can be applied by teachers in 21st-century learning which will be useful for developing students’ reading skills (Christie & Unsworth, 2005).

Student Interest in Multimodal Texts

Based on the interview results with teachers, it is recognized that students’ interest in multimodal texts is not evenly distributed. A total of five upper-class students have an interest in multimodal texts, but six students do not yet have an interest in multimodal texts and one student who is not interested in multimodal texts. It must be followed up immediately because of the understanding of the purpose of the text, audience, and communication methods are the key to achieving the learning objectives using multimodal texts. Anstey & Bull (2010) states that teachers and students need to understand the codes and conventions of each of the five semiotic systems to make or convey meaning. For example, when making multimodal texts, they need to decide whether to show the character’s emotions through sound, movement, facial expressions, or a combination of these character’s emotions.

The Use of Multimodal Texts for Teachers

In this study, the benefits obtained in applying multimodal texts are as follows:

1. Adding teacher understanding of multimodal texts
With the existence of multimodal texts in primary schools, it indirectly adds to the teachers’ understanding of what a multimodal text is, multimodal forms of technology, multimodal types of texts, and the importance of multimodal texts applied in learning. The teachers are admitted to be professional if they can use and utilize audio-visual media as the delivery of learning material so that in the learning process, the teacher is only as a facilitator (Rahman, 2014). However, most teachers do not yet know and understand what multimodal texts are. The information obtained is that what the teachers know about multimodal texts is only a picture that tells a story. From the documents in the form of teachers’ lesson plans also have not included the understanding, form, or type of the multimodal text. While from the questionnaire data, it is known that teacher understanding is good at 76.4%. Thus, if the teachers’ understanding of the multimodal text is understood deeply, then the teachers’ reference to multimodal text will improve and will have a good effect on learning.
2. Improving teacher skills in applying multimodal texts

In an increasingly sophisticated and modern era, teachers need to introduce students to contemporary texts which often referred to as multimodal texts. In 21st century learning, multimodal texts have many benefits for students. The results of interviews with principals and teachers about the benefits of multimodal texts for students in the 21st century are as follows: a) improving students’ critical thinking skills, and b) developing students’ critical reading skills. These benefits are in line with the theory stated by (Multasih, 2016), which explains that multimodal texts can create practical and efficient learning and increase the capability of students to be able to think critically and increase student interest in reading. Moreover, research conducted by Minsih & Maya (2014) regarding the application of the SAVI approach (Somatic, Auditory, Visual, and Intellectual) and audio-visual media, suggests that it can improve the listening skills of fifth-grade students of SD Negeri Ngadirejo 1 in academic year 2013/2014. By using audio media and the SAVI approach to the listening and reading skills of students who have fulfilled the assessment aspects, an increase in the final phase that is equal to 84.58% was be achieved. It was also shown to enable students to achieve active learning by adding technological skills and media technology to innovate in both their life and career (Wijaya, Sudimat, & Nyoto, 2016). An increase in student activity was also observed, and the way it equipped students to be able to understand, analyse, and solve social problems was highlighted. Lirola (2016) conducted a study entitled “The Use of Multimodal Material on Social Topics to Deepen Students' Social Competence.” The results of research conducted by Lirola uses multimodal texts with social content. Students will gain social competence and it can be applied in people’s lives. From the various benefits of multimodal text, it is crucial and necessary that multimodal text can be applied by the teacher in the learning process to achieve the expected goals.

Problems Encountered by Teachers when Implementing Multimodal Texts

Applying multimodal learning based on the text will not always run smoothly. There are several problems faced by teachers when using multimodal texts. These problems include:

1. The teaching teachers are still conventional. This means that the teachers in delivering the material are only directed in one direction at the source of the material presented, and the teachers have not fully implemented the multimodal text.

2. Teacher skills in applying multimodal texts have not been evenly distributed. It is because the teachers have not fully mastered the field of technology. The teacher competence is high in utilizing ICT-based media, but there is still a need for assistance in directly accessing media and learning resources from the internet (Yusrizal, Safiah, & Nurhaidah, 2017). The teachers can use simple forms of multimodal texts such as pictures and music. It is in line with the research stated by Hermawan (2012), which shows that there is a relationship between audio and visuals in the form of a text that helps students understand.
the text. A variety of learning models that include video, pictures, and audio will attract student interests. Conversely, if learning is still conventional, it makes the learning process monotonous and results in students feeling bored.

3. Unequal facilities and infrastructure exist in each classroom. It means that in every classroom, primarily, the upper-class does not yet have LCD and projector screens. From this problem, the teachers are not well supported, which will affect the learning process. Therefore, it is necessary for teachers who are creative and skilled in developing media and learning models based on multimodal texts, so that they can later create practical and efficient learning. However, there are limitations of teacher skills in applying multimodal texts.

**Alternative Solutions to Problems in Applying Multimodal Text**

With the various problems faced by teachers in implementing multimodal-based learning of text, there is a need for solutions. The following alternatives can be done by teachers based on the results of interviews conducted with school principals and teachers:

1. Teaching is still conventional. An alternative that can be done by the teacher to overcome this problem is that they can develop and utilize media that can help and expedite the application of multimodal texts.

2. Teachers are limited in implementing multimodal texts. This problem can be overcome by increasing teachers’ activity in finding references about multimodal text material that will be used in the learning process, such as accustoming students to practice communicating both verbally and in writing by using multimodal text-based learning. Teachers can ask for help from teachers who are competent in the field of technology. Teachers should improve their abilities and practice independently in operating media technology in applying multimodal texts.

3. An alternative in overcoming the unequal facilities and infrastructure in each classroom is that teachers should independently bring teaching materials in the form of modern and traditional technology media. The principal should look for other references both in the form of budget funds to buy technological media both in the form of LCD and projector screens. Therefore, the presence of these medias can help expedite upper-class teachers in implementing multimodal texts.

With these solutions, the teacher can at least minimize the limitations in applying multimodal texts, so that the teacher can create practical and efficient learning.
Conclusion

Based on the results of research and discussion described above, it can be concluded that:

1. The understanding of upper-class teachers regarding multimodal based text learning is good, with a percentage score of 76.4%. However, some teachers do not understand because the mastery of teachers is different, and teachers do not add insight into multimodal text-based learning. Thus, guidance is needed for primary school teachers to be able to understand multimodal text-based learning.

2. In terms of utilizing multimodal texts in learning, teachers apply quite well with a percentage score of 60.2%. The new teachers utilize two semiotic forms, namely visual and linguistic. Some teachers have not mastered or implemented multimodal text-based learning, due to limitations in operating media technology. Teachers are still conventional, and lack socialization in multimodal text-based learning.

3. The benefits gained in implementing multimodal text-based learning are: a) increasing teachers’ understanding of multimodal text-based learning, b) improving teachers’ skills in implementing multimodal text-based learning, c) gaining more efficient learning, d) facilitating students to achieve active learning, e) increasing students’ activeness and interest in reading, f) developing students’ critical reading and thinking skills.

4. Problems encountered by teachers when implementing multimodal text-based learning are: the skills of teachers in the field of technology have not been evenly distributed, and teachers are still conventional in delivering learning materials. Thus, it can be said that the teachers have not fully implemented multimodal based text learning.

5. Solutions to overcome problems that occur when teachers apply multimodal text-based learning, include: teachers conduct an evaluation of learning that has been carried out, search the references to learning models that fit the needs of students as well as the needs in the material to be delivered using multimodal texts. Teachers should also ask for help and research information from other teachers who are experts in the field of technology.
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