Primary teachers’ perspectives on teaching critical reading incorporating multimodal text

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Abstract. This paper explores a group of primary teachers’ knowledge and perspectives about multimodal text and its usage in teaching critical reading skills for upper primary students in Surakarta, Indonesia. This case study explores a group of primary teachers’ knowledge and perspectives about multimodal text and its usage in teaching critical reading skills for upper primary students (students of grades 4, 5 and 6) in Surakarta, Indonesia. A focus group discussion (FGD) was conducted among 30 primary teachers and 10 school principals by using open-ended inquiries. The discussion administered several topics related to teachers’ perspectives about multimodal texts, teaching critical reading instructions, and the application of multimodal text in upper primary learning. The results of the research shows that text-based learning in the primary curriculum was mostly using written text with minimum illustration and often was only supported by a video from the internet. Most participants confirmed that they develop upper primary students’ critical reading skills by asking students to retell, finding key information, discussing the main ideas, and mostly answering questions about the text they read. The conclusion of the research is that the implementation of multimodal text in upper primary learning was limited to written text with illustrations, posters, advertisements, and video or animation videos from the internet. The implication of this research urges teachers to use multimodal texts to enhance critical thinking skills.

1. Introduction
The development of technology in the twenty-first century provides innovation in communication. Students in communicating already involve various multimodal texts as well as in communicating using mobile phones and being active in social media. Rapid technological growth is one of the main causes of the shift from monomodal to multimodal. Examples of such multimodal transformations include the integrated use of written and spoken language with still and moving icons and images (examples of the visual mode of meaning); music and sound effects (from audio mode); facial expressions and hand and arm movements (from gestural mode); and games that require a touch of interaction (e.g. tactile mode) [1].

The 21st-century multimodal text consists of various elements, including written text, audio narration, images, music, video, and/or sound effects [2]. Multimodal texts integrate several modes of communication (for example, language, visual, auditory, gestural, and spatial) to convey meaning [3]. 21st-century multimodal text development requires the use of various digital devices, such as computers, computer software, digital cameras, iPad devices, audio recording devices, and scanners [2].
Atsusi [4] argues that students today are not quite right if carrying out learning using traditional methods because many things have changed in students. These changes are due to the influence of TV, the internet, cellphones, and so on. The current generation of students known as Digital Natives has grown up in a technologically filled environment because they are flexible to change and are familiar with the ICT language. Digital natives are also skilled in using ICT in an innovative and creative way [5]. Now there is acceptance of the textual shift that has taken place for students today whose environments are full of visual, electronic and digital texts where the world of communication for children is completely different from what schools offer and prepare them for [6].

Jewitt [7] states that technology plays a role in shaping information in the curriculum. In contrast, most teachers who teach the current generation are Digital Immigrants because they face challenges in adapting to change and understanding the language of ICT (Prensky, 2001 as quoted in Carroll, 2011). Now it has become a necessity to redefine the term literacy with the growing visual importance in the texts students face [8]. This evolution in the literacy landscape calls for an educational shift toward multimodality [9], where teachers help students create and make meaning from various texts and modalities [10].

Daily activities of students like this suggest the need for transformation in learning in elementary schools. As a teacher integrating multimodal texts in the 21st-century in learning. NCTE [11] defined various skills needed for students in 21st century global society namely (1) using advanced and fluent technology; (2) building goal connections and relationships with diverse people to engage with collaborative inquiry thinking and problem solving; (3) creating and sharing information for various purposes with various global audiences; (4) directing, researching, and synthesizing the succession of synchronous information from various sources; (5) design, study, analyze, and criticize multimodal texts.

Several studies in recent years have investigated certain aspects of this complex area emphasizing the importance of teachers knowing how to use multimodal texts and multimodal learning environments in the classroom to enhance student learning. Lauren Geiser, a grade 3 teacher with more than ten years of teaching experience, has combined the 21st-century multimodal text in her elementary class with great success. While Lauren herself is not a digital native, she is actively looking for ways to enhance both her personal and professional skills with 21st-century multimodal texts [12]. Bearne [13] has examined students’ production of their own multimodal texts, showing how they need to be included in literacy assessments. Walsh [14] has examined various types of readings needed for multimodal texts.

The above background encourages researchers to conduct this research. This study aims to explore the learning of multimodal text-based critical reading in the upper classes of elementary schools in the city of Surakarta. This research is considered to be very rare to see the perception of the teacher. Bal [15] argues that there are still teachers experiencing problems relating to technology, pedagogical knowledge, and the field. Especially, that they are unable to integrate knowledge and knowledge technology fields.

2. Research Methodology
This case study explores a group of primary teachers’ knowledge and perspectives about the multimodal text and its usage in teaching critical reading skills for upper primary students (students of grades 4, 5, and 6) in Surakarta, Indonesia. The data collection technique used Focus Group Discussions. A focus group discussion (FGD) was conducted to 30 primary teachers and 10 school principals by using open-ended inquiries. The respondents chosen are from 10 primary schools in Surakarta, Indonesia: both are public and private primary schools. The sampling technique in this study used purposive sampling. Purposive sampling refers to the data selected based on certain considerations or goals. The selected teachers are upper-class teachers (grades 4, 5, 6) who have at least 5 year of teaching experience with the minimum age of 27-45 years old. The instrument used in this research was the discussion topic consists of interview guidelines. The discussion administered several topics related to the teachers’ perspectives about the multimodal text, teaching critical reading
instructions, and the application of multimodal text in upper primary learning. The data sources in this study which were the subject of research are upper primary teachers, the school principals, and relevant documents. Measurement of the validity of the data is done through triangulation of sources, and peer review through discussion. The instrument is validated through peers who have an understanding of the topic discussed.

The data were analysed through interactive analysis as stated by Miles and Huberman [16], they are: (1) data collection; it is the part and parcel of data analysis activities. The data collection activity in this research have been done by using interviews, observation, and questionnaire; (2) data reduction; it is the process of summarizing, selecting the essentials, focusing on the important things, removing the unnecessary. In this stage, the data have been shortened to provide a clearer picture, and allow researchers to collect further data; (3) data presentation; it is a description of a set of arranged information that provides possible conclusions and actions. The presentation of qualitative data is presented in the form of narrative text, matrix, diagrams, tables, and graphs; (4) Conclusion, as the absolute activity of data analysis. Withdrawal of conclusions in the form of interpretation activities is presented in the finding the meaning of data, and there is data analysis activity between the data presentation and conclusion.

3. Research Findings and Discussion

3.1. Research Findings

The study collected several data and the findings were concluded as follows:

3.1.1. Teachers' Perceptions of Critical Reading Learning in Primary Schools

The teachers were asked about the views on critical reading for their students. This question aims to find out critical reading learning carried out by teachers teaching in upper primary classes. Some teachers suggest that critical reading means reading which aims to find facts and to understand them by identifying, analysing, comparing, evaluating and organizing information from the discourse.

"Critical reading learning is learning that aims to find out the facts contained in the reading then provide an assessment of that fact" (NRA).

"Learning to read with the ability to identify, find, evaluate, filter, and organize information" (TP).

"Critical reading learning is learning that seeks to understand the contents or meanings expressed in reading books through a process of analysis, comparing, and assessing" (SM).

Generally, all teachers suggest that critical reading learning is an advanced reading process. Critical reading aims to find out the facts contained in the reading. Stages in critical reading involve the ability to identify, analyze, compare and assess or evaluate.

In terms of teaching and learning critical reading, most respondents express similar approach:

"Students are presented with reading texts then given the opportunity to read in accordance with the specified time to be able to express the content of the text" (NH).

"Because of students’ poor reading skills, there are still many students who have difficulty in reading, so every day they are given the opportunity to read 15 minutes to practice with books provided at school" (NI).

"Still using textual books and students still have difficulty reading critically" (TP).

"More often use printed text" (DL).

The critical reading practices mainly use text books, especially the ones provided by the government. The teachers also stated about the students’ poor reading skills so that it is a challenge to teach critical reading for their students.

The strategies or models commonly used in learning to read critically in upper primary, but not limited to, are:

"Cooperative learning model, reading aloud, and reading in turns (RI)"
"Implementing cooperative learning models because students can exchange ideas in analyzing information" (TN).

Additionally, there are a number of different teaching strategies used by teachers, depending on the nature of the students:

"Everyday, students are provided with time to read, so that children are accustomed to reading" (NI).
"I usually make questions that are in accordance with the reading" (SR).
"Using lecture, assignment and question and answer methods" (HPH).

The main genre of texts used in upper primary learning are: narrative, descriptive, and informative texts.

"By using narrative text and description" (RI).
"Texts quoted from online newspapers (the latest news) that have been adjusted to the age and ability level of students" (NH).
"Reading library books provided in class" (NI).
"The printed text forms include newspapers and magazines" (MZS).

Teachers do not provide only written texts but also basic multimodal texts such as PowerPoint slides, Video, Movies, and online articles.
"LCD, Laptop, Video, Movie, Mass Media" (HS).
"Using power points, learning videos" (ES).

3.1.2. Teachers’ Perceptions of Multimodal Text-Based Critical Reading Learning in Primary Schools

Teachers’ understanding about multimodal texts are limited to videos, images with text, electronic and digital articles, and movies.

"Video viewing, viewing and reading newspaper activities" (HS).
"Analyzing a reading with interesting media images and text" (EF).
"Reading aims to find out the facts in reading by combining two or more modes, namely text mode (newspaper, magazine) and non-text mode (film, video)" (TP).

The facilities and infrastructure that teachers need in implementing multimodal text-based for critical reading learning are a various type of printed texts, and video player and tools to support.
"Books, magazines, comics are needed by children. Video equipment and operating "(NI).
"LCDs, Laptops, Speakers, Textbooks, Newspapers and Magazines" (AR).
"Combination of text and images" (V).

In implementing multimodal text-based for critical reading, teachers experienced several obstacles related to (1) students’ reading skills, understanding, and habit; (2) infrastructure, materials and facilities; and (3) lack of knowledge and experience owned by teachers in teaching critical reading using multimodal texts:

"There are still some children who do not understand reading text critically" (TP).
"Children still have difficulty in understanding texts. The solution uses reading assignments in groups "(AT).
"Some students cannot understand multimodal texts. The solution accustoms students to reading, trains students to communicate the contents of reading orally and in writing and the teacher must be creative in looking for references about multimodal text material "(MR).

"Not familiar. So it needs to be a more routine reading exercise "(ES).
"Infrastructure facilities are incomplete. Children still have difficulty in accepting the purpose of the media display presented. The solution is to provide regular guidance until the child understands and knows multimodal text learning "(HPH).

"Not optimal because it has to take a long process" (DEI).
"Inadequate tools, inadequate materials in KBM" (HS).
When teachers were asked about the importance of multimodal texts in critical reading learning in the 21st century, most teachers answered in an agreement:

"It is very important to support 21st century skills, such as communication, collaboration, critical thinking, and creativity" (NH).
"Important, because it equips students to be able to understand, analyze, and solve problems" (MZS)
"It is very important to develop students' ability to think highly and critically" (DAR).
"Very important because it can increase enthusiasm in reading" (MR).

3.2. Discussion
This study results that in teaching and learning critical reading, most teachers use printed media such as books in the library, newspapers, and magazines. This shows that teachers are still comfortable using conventional media and have only a little adjustment to the development of existing technology. Although there are some teachers who have used technology, the incorporation is very minimal and infrequently. This is in accordance with the opinion of Keengwe, et al [17] that although technology has developed rapidly, technology is still not applied in teaching and learning activities. Students today are born in a world that is completely sophisticated and that they are the digital natives. Therefore, it is substantial to accommodate students' interests and integrate technology in learning [18] because today’s students see technology as interesting and entertaining [19].

In teaching critical reading, teachers have not used all features of the text. Most of them only focus on the words, sentences, and paragraphs of the reading. All teachers usually apply reading time for their students to comprehend texts and provide questions to assess their comprehension. This strategy is very common in upper primary critical reading activities. Teachers still perceive that the most important feature of a text is the words, sentence, and paragraph. On the contrary, students will be able to think in a more complex way when they were exposed to visual features in language learning as they will provide new forms of information, thus requiring new vocabularies and a new method for interpretation [20]. Spalter and Dam [21] state that students are involved in a constant cycle of consuming and producing visual media, however, as mentioned by Metros [22] "They are not visually literate. They do not have the skills to understand how to solve an image and make decisions about the validity and value of information". These skills are indispensable for students to face the present and the future. Zammit [23] suggests that when the reader or writer interacts with multimodal texts, he must feel all the elements that originate from general meanings not to try to explain separate meanings on each element. This points out that the reader or writer has more questions and stands critical when constructing or producing meaning [24]. Multimodal literacy is based on creating deeper meaning by using skills such as questions, analyzing, and synthesizing messages that involve different elements, i.e. writing, visual, sound, movement, and symbols.

The obstacle faced by teachers when integrating multimodal texts is that students are not yet accustomed so that it takes a long time for students to get used to it. In addition, teachers are lacking teaching skills, understanding, and strategies to teach their students critical reading incorporating multimodal text. The limited infrastructure and facilities are also an obstacle to the implementation. The technology used by teachers is aimed at administration, not teaching [25] [26], as they only use it for displaying and replacing the function of a conventional whiteboard. The teachers use a laptop several times as a learning medium for displaying pictures and videos. In addition there are teachers who are accustomed to using text alone who argue that there are students who are not fluent in reading.

Teachers must transform into multimodal based education by using texts presented in various ways: books, cartoons, web sites, video games, and many other digital platforms [27]. Falk-Ross in Seetharam & Ganapathy [28] suggested that students with reading difficulties would be motivated to read by using multimodal texts because they were easier to understand with the help of other supporting modes such as visuals and sounds. Smith [29] states that many students gain important knowledge and experience for critical thinking with the help of video games, while Walsh [30]
supports that digital reading strategies require the development of inferential, analytical, critical and evaluative insights. Lankshear & McLaren [31] also stated that critical literacy is the center of tradition and discipline built by multimodal literacy. People can create new things by trying different digital, visual, auditory devices and methods or by asking questions to do and tell about things imagined or discovered. Multimodal literacy is suitable for creating critical views when investigated by selecting relevant material and when it is designed within the framework of creative beliefs [32]. Walsh [33] states that students carry out critical thinking and evaluation in most activities involving digital technology. Students evaluate critical resources to choose relevant information and discuss other studies.

The results show the types of texts studied in history books by the elementary school students are tend to fiction and non-fiction (narrative) and descriptive texts. When they are in grade V and VI, the students are taught explanatory texts, report cards, and other more complex texts. However, students are only exposed to the printed text from student textbooks and have a lack of experience of reading various types of texts and texts, resources [34].

Multimodal based learning provides provisions for students for their future. Indeed, over the past quarter-century, visuals have become an integral part of social and cultural life around the world. Every day we interact with different types of visual technology, such as film, digital graphics, television, etc., as well as images projected through these media technologies, such as television programs, advertisements, films, or graphic arts which cover a wide range of political cartoons and books, and comic for illustration in children's book. This is in line with the opinion that a multimodal basis is an attempt to contribute to the ongoing conversation about what is the best way to prepare students for this digital era [35]. The use of multimodal texts is guided by a well-chosen reading can become a platform from which teachers and students of critical thinking programs collaborare.

Students respond positively to the different modalities provided in the 21st-century multimodal texts [12]. Multimodality is based on the assumption that learning is not only a linguistics achievement but also related to the dynamic relationship between various semiotics modes of meaning, such as linguistics, visual, gestural, spatial, or audio mode, which individuals can use to obtain and produce meaning. This means that text is made in increasingly multimodal ways, where the written language mode of meaning is spoken, visual, audio, and spatial patterns of meaning, so the effort to understand information is more critical. This is because it is not only done by the use of media in the form of language in a narrow view, but also meaning can be understood more through the use of various communication media such as pictures, videos, films, and various other literacy media or so-called multimodal. Based on the principles of 21st-century learning, reading activities are not only aimed to understand what has been read, but it is hoped that someone can process the information obtained and applied in everyday life.

Multimodal text can provide experiences to engage students in critical thinking. For example, the teachers regularly assign simple writing assignments that ask the students to identify statements and supporting evidence in the text and after reading comprehension. Ulu et al. [36] argue that experimental research conducted so far proves that multimodal literacy improves critical reading skills related to meaning creation and self-expression. On the other hand, we see that critical reading skills are also needed as a result of the constructivist approach.

Papadimitrau, et al [37] state the important to change the role of teachers in a newly formed environment of new literacy. That will be enabling them to meet the requirements that define the current era. However, further research is mandatory, to investigate all field dimensions emerging from visual/multimodal literacy in educational practice. Educators need to “provide training and support to integrate multimodality into the existing [teacher education] curriculum” [38] and continuous professional development [39].

The results of the critical reading skills of upper-class students through multimodal text were quite good, with a score of 24.73% and 55.78%. From the results of this percentage, it can be seen that students do not fully understand multimodal texts, and students still need regular guidance from the teacher in understanding multimodal texts. 2) The obstacle in learning critical reading for upper-class
students is some students have not understood yet about critical reading and multimodal texts. Students have difficulty accepting the purpose of the media presented, and the lack of supporting facilities and infrastructure for learning activities through multimodal text is also a problem [40]. Versaci [41] found that his students participated more in comic discussions than with other literary texts, while Carter [42] found graphic novels and comics to teach critical reading and thinking skills with relative success.

Gregori-Signes [43] explains that critical reading arises as a result of the need to understand conflicting elements and to evaluate information. To think critically during the process of reading, writing, listening and speaking, we must share information in various and rich forms, interact with them and create meaning [44]. Students who use 21st-century multimodal texts, their level of thinking increases. Students are involved with higher thinking abilities, especially synthesis and analysis skills, because they use several modes for text during instruction constructing meaning. Multimodal texts also meet diverse student learning styles through the incorporation of visual, audio, and hands-on elements [12].

Sewell and Denton [27] conducted a study in which students did some critical thinking exercises through projects presented in digital media. A study conducted by Krause [45] shows that most participants use more than one mode and multimedia device to broaden their horizons and show that it can meet the need to promote critical thinking. Reading and evaluating texts including multimodal elements enhances critical reading skills.

4. Conclusion

The findings show that the teacher provides a positive attitude towards learning critical reading based on multimodal texts. Most teachers revealed that the existence of several modes: text, video, audio, graphics, etc., in reading allows students to think more deeply and critically to understand the meaning. However, teachers have no sufficient skills, understandings, and strategies to implement critical reading incorporating multimodal texts. So it is recommended to create a learning model that integrates multimodal texts in critical reading teaching and learning.

The multimodal learning that has been carried out by the teacher mostly uses written text with minimal illustrations and is often only supported by videos from the internet. Some participants ensure that they develop critical reading skills of primary school students by asking students to retell, find key information, discuss main ideas, and mostly answer questions about the text they read. Teachers do not have sufficient skills, understanding, and strategies to apply critical reading that incorporates multimodal texts. So it is suggested to make a learning model that integrates multimodal text in learning critical reading.

The results also show that there are several obstacles in implementing multimodal text-based critical reading, including the poor reading skills from upper primary students. Teachers need to pay attention to these obstacles before applying multimodal texts in critical reading in their classrooms. Multimodal-based learning provides provisions for students for their future. The teachers need to integrate multimodal text in learning to improve critical reading skills. Thus, students as readers or writers have more questions and stand critical when constructing or producing meaning. Multimodal literacy is based on the creation of deeper meanings using skills such as questioning, analyzing, and synthesizing messages that involve different elements (writing, visual, sound etc).

References

[1] Kalantzis, M., Cope, B., & Cloonan, A. (2010). New literacies: A multiliteracies perspective. In B. Baker (Ed.), The new literacies: Multiple perspectives on research and practice (pp. 61-87). New York, NY: Guilford Press.
[2] Luke, N., Tracy, K., & Bricker, P. (2015). Writing captions as a means of blending text features and digital stories. California Reader, 48(2), 29-35. Retrieved from http://californiareads.org/TCRdisplay.asp?p=TCRhome
[3] Martens, P., Martens, R., Doyle, M. H., Loomis, J, & Aghalarov, S. (2012). Learning from
picture books: Reading and writing multimodally in first grade. The Reading Teacher, 66(4), 285-294. doi:10.1002/TRTR.01099

[4] Atsusi. (2014). Bermain Game di Sekolah: Video Game dan Permainan Komputer Simulasi untuk anak SD dan SMP. Jakarta: Permata Puri Media.

[5] Carroll, J., (2011). From encyclopaedias to search engines: Technological change and its impact on literacy learning. Literacy Learning: The Middle Years, 19(2), p.27.

[6] Gee, J. (2003). What Video Games have to Teach us about Learning and Literacy. New York:Palgrave Macmillan

[7] Jewitt, C. (2008). Multimodality and literacy in school classrooms. Review of Research in Education, 32(1), 241-267. https://doi.org/10.3102/0091732X07310586

[8] Kenner, C., & Kress, G. (2003). The multisemiotic resources of biliterate children. Journal of Early Childhood Literacy, 3(2), 179-202. https://doi.org/10.1177/14687984030032004

[9] Schieble, M. (2011). A case for interruption in the virtual English classroom with the graphic novel American Born Chinese. Australian Journal of Language and Literacy, 34(2), 202-218.

[10] Hughes, J. M., King, A., Perkins, P., & Fuke, V. (2011). Adolescents and “autographics”: Reading and writing coming-of-age graphic novels. Journal of Adolescent & Adult Literacy, 54(8), 601-612.

[11] National Council of Teachers of English. (2013). The NCTE definition of 21st century literacies. Retrieved from http://www.ncte.org/positions/statements/21stcentdefinition

[12] Laurie A. Sharp and Lauren Geiser. (2016). 21st Century Multimodal Texts: An Elementary Teacher’s Insights. Journal of Missouri Reading Association. Volume 40(1).

[13] Bearne, E. (2003) ‘Rethinking Literacy: Communication, Representation and Text’in Reading Literacy and Language, 37(3), 98-103.

[14] Walsh, M. (2006). The ‘Textual Shift’: Examining the Reading Process with Print, Visual and Multimodal Texts’. Australian Journal of Language and Literacy

[15] Bal, Mazhar. 2017. Development of Teacher Candidates’Text-Making Skills in Multimodal Literacy Framework. Journal of Education and Practice, vol. 8(25), 218-237.

[16] Miles, M.B. and Huberman, A.M., (2014). Analisis Data Penelitian Kualitatif: Pemahaman Filosofis dan Metodologis kea rah Penguasaan Model Aplikasi.

[17] Keengwe, J., Onchwari, G., & Agamba, J. (2013). Promoting effective e-learning practices through the constructivist pedagogy. Education and Information Technologies, 19(4), 887–898.

[18] Keengwe, J., & Georgina, D. (2013). Supporting Digital Natives to Learn Effectively with Technology Tools. International Journal of Information and Communication Technology Education, 9(1), 51–59.

[19] Heafner, T. (2004). Using technology to motivate students to learn social studies. Contemporary Issues in Technology and Teacher, 4(1), 42–53.

[20] Costa & Xavier. (2016). Critical visual literacy: the new phase of applied linguistics in the era of mobile technology. France: Research-publishing.net

[21] Spalter, A., & van Dam, A. (2008). Digital visual literacy. Theory into Practice, 48(2), 93-101. Retrieved from http://dx.doi.org/10.1080/00405840801992256

[22] Metros, S. E. (2008). The educator's role in preparing visually literate learners. Theory into practice, 47(2), 102-109.

[23] Zammit, K. (2007). Popular culture in the classroom: Interpreting and creating multimodal texts. Advances in language and education, 60-76.

[24] Liu, J. (2013). Visual images interpretive strategies in multimodal texts. Journal of Language Teaching and Research, 4(6), 1259-1263. https://doi.org/10.4304/jltr.4.6.1259-1263

[25] Kurt, S. (2013). Examining teachers’ use of computer-based technologies: A case study. Education and Information Technologies, 18(4), 557–570.

[26] Kafyulilo, A., & Keengwe, J. (2013). Teachers’ perspectives on their use of ICT in teaching and learning: A case study. Education and Information Technologies, 19(4), 913–923.
[27] Sewell, W. C., & Denton, S. (2011). Multimodal literacies in the secondary English classroom. English Journal, 100(5), 61-65.

[28] Seetharam & Ganapathy. 2016. The Effects of Using Multimodal Approaches in Meaning-Making of 21st Century Literacy Texts Among ESL Students in a Private School in Malaysia. Advances in Language and Literary Studies, Vol. 7(2), 143-155.

[29] Smith, A. M. (2014). Multimodal literacy in the English/Language arts classroom: Meeting standards and remaining relevant in the 21st Century (Master’s Theses). Department of Education and Human Development of the College at Brockport, State University of New York, New York.

[30] Walsh, M. (2009). Pedagogic potentials of multimodal literacy. In T.W. Leo & H.R. Subramanian (Eds.), Handbook of research on new media literacy at the K-12 level: Issues and challenges (pp.32-47). US: Science Reference, Hershey. https://doi.org/10.4018/978-1-60566-120-9.ch003

[31] Lankshear, C., & McLaren, P. L. (1993). Critical literacy: Politics, praxis, and the post-modern. New York State University: New York Press.

[32] Sanders, J., & Albers, P. (2010). Multimodal literacies: An introduction. In Albers, P. & Sanders, J. (Eds.) Literacies, the arts, and multimodality (pp. 1-25). Urbana, Illinois: NCTE.

[33] Walsh, M. (2010). Multimodal literacy: What does it mean for classroom practice?. Australian Journal of Language and Literacy, 33(3), 211-239.

[34] Amalia, Nur, Harun Joko Prayitno, Ratnasari Diah Utami, Dwi Yuniasih Saputri, Rino Dwi Irawan, Diana Tri Kusuma Wati. (2019). Analysis of Upper Primary Students' Critical Reading Skills in Surakarta Based on School Accreditation. Proceedings of the 4th Progressive and Fun Education International Conference, Profunedu 2019, 6-8 August 2019, Makassar, Indonesia.

[35] Lim, Fei Victor. (2018). Developing a systemic functional approach to teach multimodal literacy

[36] Ulu, Hacer, Ayşegül Avşar-Tuncay & Özlem Baş. (2017). The Relationship between Multimodal Literacy of Pre-Service Teachers and Their Perception of Self-Efficacy in Critical Reading. Journal of Education and Training Studies, vol. 5(12), 85-91.

[37] Papadimitriou, S. (2015). Training Teachers in Media Literacy: Conclusions from the Workshops in the framework of the MEDEAnet Project in Greece. Διεθνές Συνέδριο για την Ανοικτή & εξ Αποστάσεως Εκπαίδευση, 8(1A).

[38] Choi, J., & Yi, Y. (2016). Teachers' Integration of Multimodality Into Classroom Practices for English Language Learners. Tesol Journal, 7(2), 304-327.

[39] Miller, J. P. (2010). Whole child education. University of Toronto Press.

[40] Utami, Ratnasari Diah, Nur Amalia, Harun Joko Prayitno, Dyna Qurotul’ Ain. (2020) Critical Reading Skills Through Multimodal Text to Upper-Class Students in Elementary School. International Journal of Innovation and Creativity, 11(5), 125-137.

[41] Versaci, R. (2001). How comic books can change the way our students see literature: Our teacher’s perspective. The English Journal, 91(2), 61-67.

[42] Carter, J. (2007). Introduction—carving a niche: Graphic novels in the English Language Arts classroom. In J. Carter (Ed.), Building literacy connections with graphic novels: Page by page, panel by panel (pp. 1-25). Urbana, IL: National Council of Teachers of English.

[43] Gregori-Signes, C. (2014). Digital storytelling and multimodal literacy in education. Porta Linguarum, 22, 237-250.

[44] Rowsewell, J., & Walsh, M. (2011). Rethinking literacy education in new times: Multimodality, multiliteracies, & new literacies. Brock Education Journal, 21(1), 53-62. https://doi.org/10.26522/brocked.v21i1.236

[45] Krause, M. B. (2015). Facilitating a transdisciplinary approach in teacher education through multimodal literacy and cognitive neuroscience (Graduate Theses and Dissertations). College of Education University of South Florida, Florida.
