A FRESH LOOK AT STUDENTS’ ABILITY TO READ MULTIMODAL TEXTS: A CASE IN INDONESIA

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ABSTRACT

This paper will present a small part of the results of a study conducted in 2018, aiming to identify ten graders’ ability to read. The study involved 6,539 students from 298 schools (non-PISA) in 34 provinces in Indonesia. This paper will centre around the students’ ability to comprehend information presented in multimodal texts. The data were obtained from a reading test consisting of 40 questions, 16 of which involved information gained from multimodal (verbal and visual) texts. The data were analysed using descriptive statistics. The results show that in general students still need guidance to understand information presented in multimodal texts. The average of the correct answers of the 16 questions involving verbal and visual texts was 45.46%. A question asking students to synthesise information from the picture was answered correctly only by 9.24% participants. Moreover, questions to do with the relationship between visual and verbal texts were answered correctly by less than 40% participants. However, questions on information familiar to the students, such as the location of a new book in a library, could be answered correctly by 87.05%. It is recommended that students and teachers should be exposed to multimodal teaching materials and teachers should be trained to deal with multimodality and to explain the relationship between visual and verbal texts explicitly to the students in all subjects.

KEYWORDS

Multimodal text, visual and verbal text

1. INTRODUCTION

Literacy is defined as a series of ability to utilize reading, writing, and counting competences obtained and developed through learning process at school. However, within this last three decades, the definition as well as scopes of literacy has been broadening; it includes (a) literacy as a series of reading, writing, speaking, counting, as well as accessing information competences; (b) literacy as a social practical applied within social context; (c) literacy as a learning process in which reading and writing are the media to reflect, investigate, question, and criticize learned knowledge; and (d) literacy as texts varied in subject, genre, and language complexity levels (Ibrahim et al., 2017).

The advancement of technology had led to the creation of text which is represented not only verbally but also visually. Literacy changes and reading path also changes. This requires that teacher and student should also understand had to read multimodal text. Materials provided for student make intense representational use of image; in materials demanded form student-in various forms of assessment particularly-writing remains the expected and dominant mode. The development of visual text can be seen in many aspects of life, including in test or assessment.
1.1. The Concepts of Literacy

There are at least two concepts used in literacy, traditional and modern. Traditional literacy is defined as the ability to write, both actively and passively, or the ability to read, write, listen, and speak (Moat in Van Deursen & Van Dijk, 2016). Meanwhile, modern literacy is the ability to read, write, listen, speak, count, think critically, interpret, communicate, create, use printed and written materials in any context, read on screen, which does not only involve language, but also motivated multimedia design (Kress, 2003). This concept is in line with the vast array of social, technological, and economic factors. One hand, the centuries-long dominance of writing has shifted to the dominance of the image. On the other hand, the dominance of the medium of the book has also shifted to the dominance of medium of the screen (Kress, 2003). In another word, the shifts has constructed the revolution of the use of literacy, also the way people interpret and communicate in every level and domain (T. V. and C. J. Leeuwen, 2010).

In most teaching and learning context, communication takes place through the complex interplay of a range of modes that may include language, visual images, and other meaning-making resources (Jewitt, 2002; see also Kress et al. 2001; Lemke, 2000, 2002 in (Jauhara, n.d.), 2018: 1). These multimodal texts can also be seen in assessment, such as assessment from PISA. A recent study by (Horarik, Love, Sandifort, 2018) also show the needs of incorporating images in the literacy teaching learning process and reconceptualising grammar in a period of change in the communication landscape and widening disciplinary knowledge. Love et al. say:

If students’ are asked to compare meanings made in photo and caption, text and illustration and perhaps music and montage in film narration, they require a common terminology to integrate their analyses in an interpretive response in ways acceptable to teachers … (2018: 9).

Furthermore, nowadays many of school subjects make much more use of images, particularly so in the years of secondary schooling. Images have varied in their function between illustration, decoration, and information. Images are usually found in students’ worksheets, textbooks, or CD-ROMs. Conversely, assessment for students is still based on writing as the major mode. In another words, even though the materials are provided in the form of pictures, the assessment remains the expected and dominant mode (Kress & van Leeuwen, 2006). That is why; students find it difficult to face multimodal texts during the assessment.

However, despite the interplay between verbal and visual texts, research on students’ ability to comprehend the multimodal texts is still limited, especially in Indonesian context. Thus, to fill the gap, this study is concerned with identifying students’ ability to comprehend multimodal texts in reading tests. Theo Van Leeuwen, 2005, p.276 in (Horarik, Love, Sandifort, 2018) the issue this way:

Traditionally words and pictures have been analyzed in quite different ways. Different disciplines, different terminologies, different methodologies, and different criteria of relevance grew up for each: linguistics for language, art history for pictures – and for children’s drawings mostly Piaget-inspired developmental psychology. … This made it difficult to compare the two, to investigate, for instance, whether a text and its illustration, or a photo and its caption derive from the same underlying construction of the reality that is being represented. (2018:9)

A multimodal metalanguage is not only a disciplinary (and arguably an ethical) responsibility, but a semiotic one. We use the word ‘semiotic’ advisedly. Semiotics is the study of meaning and meaning making in texts. This includes but transcends linguistically-mediated meaning. It creates immediate problems for our extension of grammatics to analysis of non-linguistic modes. As a key theorist of multimodality argues:

[A] linguistic theory cannot provide a full account of what literacy does or is; language alone cannot give us access to the meaning of a multimodally constituted message; language
and literacy have to be seen as the partial bearers of meaning only. (Kress, 2003, p. 35 in (Horarik, Love, Sandifort, 2018): 8)

1.2. The Views of Theoretical Assumptions on Multimodality

There are views of theoretical assumptions on multimodality. Bezzermer and Jewitt (2010 in Jauhara, 2018: 71) proposed three assumptions on multimodality as follows: First, social semiotics assumes that representation and communication always draw on a multiplicity of modes, all of which contribute to meaning. Second, multimodality assumes that all forms of communication (modes) have, like language, been sharpened through their culture, historical, and social uses. Third, the multimodality focuses on people’s process of meaning making, a process in which people make choices from a network of alternatives: selecting one modal resource over another. Moreover, Jewitt (2011, pp.14—15 in Jauhara n.d, 2018: 72) proposes four assumptions of multimodality conception. The first assumption is that language is part of a multimodal ensemble. The second is that each mode in a multimodal ensemble is understood as realizing different communicative work. The third assumption is that people orchestrate meaning through their selection and configuration of modes. The last, multimodality is built on the assumption that the meaning of sign fashioned from multimodal semiotic resources.

However, both language and multimodal have their own possibilities and limitations of meaning (Kress & van Leeuwen, 2006). Not everything can be realized in language can also be realized by means of images, and vice versa. For example, language has to use names to refer to something represented, but language does not need angels of vision to achieve perspective. On the contrary, images does not need names to refer to particular object since the image itself is the representative of the object; however, images need angles of vision to achieve perspective. Thus, the meaning of language is ‘conscious’ and the meaning of image is ‘unconscious’ (Kress & van Leeuwen, 2006). Furthermore, Kress and Van Leeuwen (2006 in Jauhara, 2018:33) elaborate visual syntactic patterns in terms of their function of relating visual participants to each other in meaningful ways. There are two kinds of representational patterns, narrative and conceptual pattern. Narrative images are recognized by the present of a vector and relate its participants in terms of doing or happening something consists of participants i.e. people, animals or objects which do things or have things done to them through processes. Conceptual images can be considered to represent concepts or ideas. The images are used to convey factual information. They commonly use labeled diagrams, cross-sections, maps, tables, tree diagrams and graphs (Kress and van Leeuwen, 2006, Callow, 2013 in Jauhara, 2018:34-40).

In relation to the purpose of the study, this study has been drawn from the theory of multimodality or visual literacy and systemic functional linguistics. Visual images play an important role in our lives because they provide pleasure and enjoyment. They usually work in harmony with written text, whether they are persuading, informing, entertaining or decorating (Callow, 2013, p. 6 in Jauhara, n.d, 2018: 15).

The study is significant theoretically and practically. Theoretically, the result of the study can enrich the literature on multimodal texts, especially in education contexts. Practically, the results of the study are significant for both teachers and policy makers. For teachers, this study can provide information on the use of multimodal text in educational context, especially in assessment. Teachers at the moment are seeking to chart the ever shifting terrain of grammatical knowledge to seek the best literacy outcomes for diverse students. Moreover, for policy makers the results of the study can also profoundly influence curriculum development, especially on the creation and the use of multimodal texts in the teaching learning process. The results of the study are especially curriculum advisors and developers who seek to support the design and national implementation of curricula.
2. METHOD

This paper identifies student’s ability in comprehending information in multimodal text as a part of reading literacy study conducted by The Agency for Language Development and Cultivation in 2018. From 40 reading questions, 16 questions tests student’s comprehension on information presented in multimodal text. The data are analysed using simple descriptive statistic with correct answer percentage frequency within the question. From 16 multimodal questions, 8 questions are developed by Puspendik, those are (1) BIN_2017_BINT01_03 (Amanda and the Queen), (2) BIN_2017_BINT03_01 (a picture of library map), (3) BIN_2017_BINT03_02 (a picture of library map), (4) BIN_2017_BINT03_03 (a picture of library map), (5) BIN_2017_BINT03_04 (a picture of library map), (6) BIN_2017_BINT05_02 (PLAN International table), (7) BIN_2017_BINT05_03 (PLAN International table), (8) BIN_2017_BINT05_04 (PLAN International table). Meanwhile, another 8 questions are developed by Pusat Pembinaan, including (1) Batik_07, (2) Laskar_Pelangi_06, (3) Penyakit_Vektor_04, (4) Penyakit_Vektor_05, (5) Penyakit_Vektor_06, (6) Penyakit_Vektor_07, (7) Penyakit_Vektor_08, dan (8) Perbandingan_musim_03. Those 16 questions are then analyzed to examine the frequency of student’s correct answer percentage.

3. FINDINGS AND DISCUSSIONS

Average of Students’ Correct Answer Percentage

The average of correct answer percentage in 16 questions presenting multimodal text is 45.46% (table 1). This average shows that the percentage of the 16 questions answered correctly is under 50%. This means that students still find difficulties in comprehending information presented in multimodal text (verbal and visual text). Out of 16 questions, 6 questions can be answered correctly by >50% students, while another 10 questions can only be answered correctly by <50% students.

| No | Question Number | Question Item | %Correct |
|----|-----------------|---------------|----------|
| 1  | 7               | Batik_07      | 70.66    |
| 2  | 13              | Laskar_Pelangi_06 | 25.7     |
| 3  | 17              | Penyakit_Vektor_04 | 27.5     |
| 4  | 18              | Penyakit_Vektor_05 | 22.71    |
| 5  | 19              | Penyakit_Vektor_06 | 31.57    |
| 6  | 20              | Penyakit_Vektor_07 | 9.24     |
| 7  | 22              | Penyakit_Vektor_08 | 29.05    |
| 8  | 25              | Perbandingan_musim_03 | 36.15    |
| 9  | 31              | BIN_2017_BINT01_03 | 22.44    |
| 10 | 33              | BIN_2017_BINT03_01 | 56.81    |
| 11 | 34              | BIN_2017_BINT03_02 | 70.4     |
| 12 | 35              | BIN_2017_BINT03_03 | 87.05    |
| 13 | 36              | BIN_2017_BINT03_04 | 64.16    |
| 14 | 38              | BIN_2017_BINT05_02 | 65.14    |
| 15 | 39              | BIN_2017_BINT05_03 | 56.63    |
| 16 | 40              | BIN_2017_BINT05_04 | 47.9     |
|    | Average         |               | 45.46    |

The lowest percentage (9.24%) of students’ correct answer in in question Penyakit_Vektor_07. This question is categorized as difficult.
In this question, students are asked to synthesize information presented in the verbal text (picture 2) and visual text in the form of table (picture1)

![Picture 1. Penyakit_Vektor_07](image1)

![Picture 2](image2)
Correspondingly, BIN_2017_BINT03_03 is the question with the highest percentage (87.05%) from the whole 16 multimodal questions. This question is developed by Puspendik, displaying a library map (picture 3) which asks students to drag and drop an object (books), presented in visual text into verbal text (picture 4).

![Library Map](image3)

**Picture 3 Library Map**

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BIN_2017_BINT03_03

Lihat Pedoman

Klik pada satu pilihan jawaban!

Di mana buku-buku baru ditempatkan?
- Di bagian fiksi.
- Di bagian non-fiksi.
- Dekat pintu masuk.
- Dekat meja informasi.

**Picture 4 BIN_2017_BINT03_03**

This question asks students to identify the location of an object (book) presented in the picture. The reading competence tested in this question is accessing and retrieving information. There are 87.05% students’ answers this question correctly.

> **50% correct answer percentage**

Out of 16 multimodal questions, 6 questions can be answered correctly by more than 50% students, those are

1. Batik_07
2. BIN_2017_BINT03_02
3. BIN_2017_BINT03_03
4. BIN_2017_BINT03_04
5. BIN_2017_BINT05_02
6. BIN_2017_BINT05_03

Question BIN_2017_BINT03_02, BIN 2017_ BINT03_02, dan BIN_2017_BINT 03_04 are related to location in a map (library map), showed by picture 3, while BIN_2017_BINT05_02, and BIN 2017_BINT05_03 are related to the table of PLAN International (Picture 4).
Those two questions, BIN_2017_BINT03_02 and BIN_2017_BINT03_03 present ask students to identify location in a map. There are 70.4% students answer correctly question BIN_2017_BINT03_02 and 87.05% students answer correctly question BIN_2017_BINT03_03. Those two questions are categorized as easy because a lot of students can answer those questions. Meanwhile, the question that relates statement in verbal text and picture can only answered by 64.14% students (picture 4).
There are 65.14% students who can integrate information presented in verbal text supported with visual text. Picture 5 and 6 show the conceptual questions presenting verbal text (picture 5) to integrate information in visual text (picture 6).

![Picture 5](image5.png)

![Picture 6](image6.png)
<50% correct answer percentage

Out of 16 multimodal questions, 10 questions can be answered correctly by less than 50% students, some of them are Penyakit_Vektor_04, Penyakit_Vektor_05, Laskar_Pelangi_06, dan BIN_2017_BINT01_03 (Amanda dan Sang Ratu). Penyakit_Vektor_04 (picture 7) can be answered by 27.5% students and Penyakit_Vektor_05 (picture 8) can be answered by 22.71% students.

Penyakit_Vektor_04 is a question asking students to interpret information presented in visual text in the form of table with verbal text. The questions presented in unfamiliar concept and theme make them difficult to be answered by student; thus, only 27.5% students can be answered them correctly. The same is true in the next question, Penyakit_Vektor_05, which is only answered correctly by 22.71% students (picture 8).
Next, there is a text that is familiar enough with the student, untitled *Laskar Pelangi*. This text is taken from a novel (a verbal medium), which later adopted into a movie (an audio visual medium), thus this text is largely known by the students. However, when students are asked to evaluate a text taken from *Laskar Pelangi* in the form of visual text (picture 10), the students find it difficult for them to answer the question; thus, only 25.7% students can answer correctly such kind of question. Picture 10 shows the narrative question, presented by an object in progress of doing something.

The question presented information about location is also presented in text entitled Amanda dan Sang Ratu. Question BIN_2017_BINT01_03 (Picture 11) asks students to show the position of character Amanda dan Sang Ratu based on the displayed visual text. There are 22.44% students can answer that question correctly.
4. CONCLUSION

The reading comprehension competence, in particular interpreting texts, comprehending pictures, and also other visual texts, is an essential component in learning process. A text should not only perceive as a strain of sentences presented in verbal form, but also everything that has meaning; even object, practical, and voice can also have perceived as texts. Multimodal can be an alternative approach and learning material for teacher to teach text interpretation and visual text comprehension. For that reason, training for teachers on teaching multimodal is demanded since they have to be able to explain the relevance of visual and verbal texts towards their students. This study can also provide information on the use of multimodal text in educational context, especially in assessment. Moreover, for policy makers the results of the study can also profoundly influence curriculum development, especially on the creation and the use of multimodal texts in the teaching learning process.

REFERENCES

Horarik, Love, Sandifort, and U. (2018). Functional Grammatics. In Functional Grammatics. https://doi.org/10.4324/9781315669731
Ibrahim, G. A., Ismadi, H. D., Zabadi, F., Ali, N. B. V., Alipi, M., Antoro, B., … Aziz, M. (2017). Peta Jalan Gerakan Literasi Nasional (L. A. Mayani, Ed.). Retrieved from http://gln.kemdikbud.go.id/glnsite/wp-content/uploads/2017/08/peta-jalan-gln_rev.pdf
Jauhara, D. (n.d.). Visual and Verbal Relationship in Textbook for Teaching English in Indonesia EFL Context (A Case SFL-multimodal approach). Indonesia University of Education.
Kress, G. (2003). Literacy in the new media age. In Literacy in the New Media Age. https://doi.org/10.4324/9780203299234
Kress, G. and van Leeuwen, T. (2006). Reading images: the grammar of visual design (2nd eds.). New York: Routledge.
Leeuwen, T. V. and C. J. (2010). Handbook of Visual Analysis (V. T. & C. J. Leeuwen, Ed.). https://doi.org/10.4135/9780857020902.n2
Van Deursen, A. J. A. M., & Van Dijk, J. A. G. M. (2016). Modeling Traditional Literacy, Internet Skills and Internet Usage: An Empirical Study. Interacting with Computers, 28(1), 13–26. https://doi.org/10.1093/iwc/iwu027