Challenges of Reading Literacy Assessment in the Digital Age
An Overview of Teacher Perspectives and Competencies

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ABSTRACT

Assessment of reading skills is very important in measuring the success of students' basic literacy skills. However, several obstacles and challenges are often found in the implementation of reading literacy assessments, especially in designing test tools. This study aims to describe the obstacles and challenges of teachers in carrying out reading literacy assessments. Using a qualitative approach, the data of this study were obtained from the results of the analysis of questions, observations, and answers to the Indonesian high school teacher's questionnaire. A total of 38 teachers were involved from different schools. The results of the study indicate that teachers experience limitations in reading materials and supporting technology devices as well as a lack of understanding of HOTS-based reading literacy assessments. Analysis of reading proficiency questions has met the criteria for good language form and presentation. However, the reading skills test instruments owned by teachers show inadequacies, which include discrepancies with the parameters for measuring literacy skills; focusing on memorizing structures and language; inappropriateness in formulating the assessment rubric; lacking the HOTS aspect; the content of the text does not represent the characteristics and level of students' thinking abilities; as well as discrepancies with the question indicators.

Keywords: Assessment, evaluation, HOTS, language learning, literacy, reading comprehension.

1. INTRODUCTION

Teacher's ability to conduct a valid evaluation of reading skills is essential for realizing the assessment of reading comprehension skills so that alternative solutions can be formulated to improve students' reading comprehension skills. A comprehensive reading comprehension evaluation program is directed at helping readers with reading comprehension difficulties to provide consistent and coordinated information by gathering basic data about students' cognitive, affective, and experiential status (Afflerbach, 2008). However, this has not been supported by the teacher's ability to carry out the evaluation process (Suwandi, Nurkamto, & Setiawan, 2019). In addition, based on data from the Program for International Student Assessment (PISA), Indonesia is ranked 72 out of 77 countries, and 7 out of 10 Indonesian students aged 15 have a reading literacy level below the minimum competency (Schleicher, 2019). This implies the need for an analysis of the quality of the evaluation tool as a measuring tool and a trigger for improving students' reading skills (as basic literacy).

In the context of language education, the assessment of reading skills is directed toward academic purposes. Consequently, the components of reading comprehension skills should at least contain the following aspects: reading fluency and reading speed; automaticity and fast word recognition; search process; morphological knowledge; awareness of text structure and discourse organization; strategic processing capabilities; summarizing (and paraphrasing) skills; synthesis skills; complex evaluation and critical reading; and accommodate individual differences (Clarke, Truelove, Hulme, & Snowling, 2014; Fletcher, 2006; Grabe, 2009). In this case, it is also undeniable that the decoding process involves morphological understanding as the basis for the meaning of the text at a higher level.

The assessment of reading comprehension skills cannot be separated from higher-order thinking skills. This is in line with the level of reading comprehension skills, namely literal, inferential, critical, and creative abilities which focus on measuring the ability to determine main ideas, idioms/phrases according to the context of the discourse, inferences, grammatical features, detailed information, unwritten facts, supporting ideas, vocabulary according to the discourse context (Anderson, 2008; Brown & Abeywicakrama, 2010; Caldwell, 2008; Hibbard & Wagner, 2003; Scanlon, Anderson, & Sweeney, 2010; Tindale, 2003; Westwood, 2001). In line with the reading comprehension ability, the evaluation of reading comprehension ability needs to include aspects of thinking: analysis, evaluation, and creation (the "top end" of Bloom's taxonomy); logical reasoning; judgment and critical thinking, problem-solving by real-life tasks by placing reading as a necessity; creativity and creative thinking (Brookhart, 2010; Hauser et al., 2005). The reading comprehension test can be carried out by (1) reading the passage or paragraph and providing the missing keywords; (2) answering multiple choice questions in response to the examiner's directions; (3) retelling the results of reading, summarizing, or answering questions related to the text after reading quietly (Rathvon, 2004; Raphael & Au, 2010; Harris, & Graham, 2014). With several parameters of reading skills assessment, test questions can be formulated as an effective tool for measuring the achievement of students' reading ability. However, based on observation in several schools in a regency in Indonesia, not all reading skills test questions used in schools meet these parameters. Unfortunately, little is known about the problems raised from this discrepancy. In order to address the issue of reading literacy assessment, this study aims to describe the results of searching for information regarding teachers' obstacles and opportunities in carrying out reading comprehension evaluation activities both in the process of planning and preparing test questions as well as in the implementation of the test/assessment.

2. METHOD

This study uses qualitative methods with descriptive analysis. The research data was obtained from observations without manipulating the environment of the research subjects (Creswell & Creswell, 2014; Denzin & Lincoln, 2009; O'Reilly & Kiyimba, 2015). The research was carried out by documenting, capturing, and classifying data in the form of the results of distributing questionnaires, and field observations regarding the opportunities and obstacles experienced by teachers in carrying out activities to evaluate reading comprehension skills.

This study utilized the main data in the form of answers or responses from 38 high school teachers in Subang Regency, West Java province, Indonesia (from different schools) on questions regarding obstacles and challenges in conducting reading comprehension evaluations. Observations were also made of five teachers from different schools who were randomly selected to find out the implementation of reading literacy skills assessment in class. The research data were analyzed using interactive analysis techniques which included the stages of data collection, data reduction, data presentation, and conclusion (Miles & Huberman, 1994). It includes stages as described in the Figure 1.
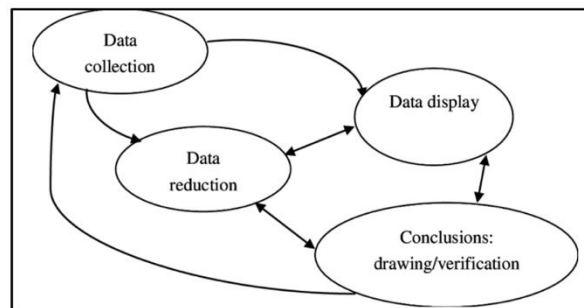

Figure 1 Interactive data analysis Miles & Huberman (1994).

2.1. Data Collection

At this stage, the researchers distributed the questionnaire and collected reading test questions of the teacher's work were. To ensure the validity of the data, observation was also done by observing the implementation of reading literacy assessment by teachers in the classroom.

2.2. Data Reduction

At this stage, selection, grouping, and data analysis were carried out. Data in the form of the teacher's answers to the competency assessment questionnaire for reading literacy were grouped and sorted so that they could be described.

Analysis of teacher reading test questions was also undertaken to ensure the competence of teachers in assessing reading literacy.

2.3. Data Display

At this stage, data were presented in visual or graphic form and tables. Furthermore, they were described and interpreted based on the concept of parameter assessment of reading literacy and ideal reading comprehension ability. The findings from the distribution of questionnaires, observations, and reading ability test questions written by teachers were compared with the theory of reading comprehension ability and the concept of assessing reading literacy based on Higher Order Thinking Skills (HOTS) and the level of reading comprehension ability for high school students.

2.4. Conclusion: Drawing/Verification

The conclusion was taken by checking the appropriateness of the data obtained from three data acquisition techniques, namely distributing questionnaires, observing, and searching/documenting questions about the teacher's reading ability. The data were reinforced by the theory of reading literacy assessment and the level of reading ability of high school teenagers.

3. FINDINGS AND DISCUSSION

The results of the research show some reading literacy evaluation information related to the competence and knowledge of teachers, school facilities, the consistency of the implementation of literacy programs, the quality of test questions, and the diversity of students' reading ability. This can be explained as follows.

3.1. Barriers to Teacher Competence and Knowledge

Based on the questionnaire results, many teachers stated that they had sufficient knowledge and did not understand the evaluation of reading skills. This is as shown in Figure 2.
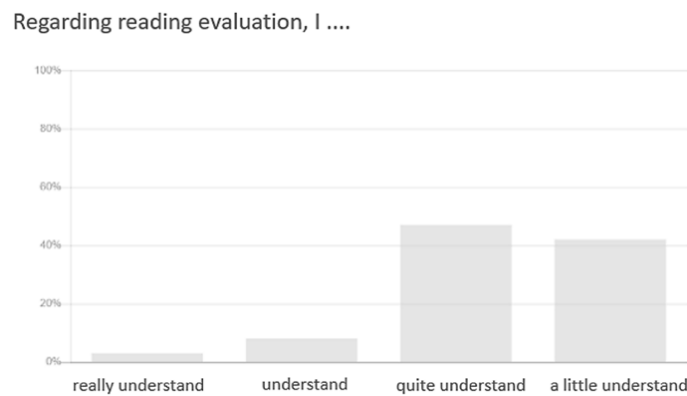
Regarding reading evaluation, I ....

Figure 2 Barriers to teacher competence and knowledge.

Figure 2 implies that very few teachers confidently express their understanding of reading literacy evaluations. Of the 38 teachers, only one person, or as much as 3% said they understood. As many as three people or around 8% of teachers stated that they understood the evaluation of reading literacy. The teacher's limited knowledge regarding the evaluation of reading literacy was also found in the responses to the answers regarding the form of reading literacy questions as shown in Figure 3.

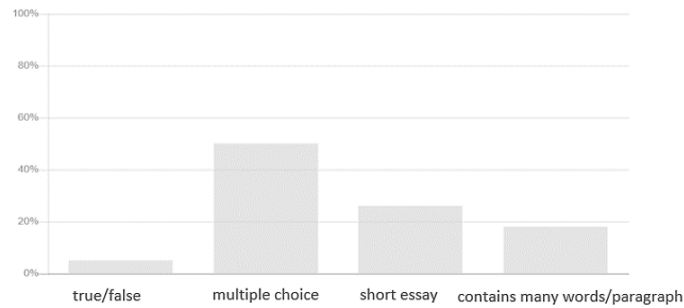I understand reading literacy evaluation as a form of test....

Figure 3 Barriers to teacher competence and knowledge.

As shown in Figure 3, it is known that the teacher's knowledge of the variety of questions is still limited. Teachers tend to do reading ability tests with the type of multiple-choice questions and short essays. Teachers still view reading literacy tests as an effort focused on obtaining a reading ability score. Thus, the questions in the form of multiple choice and short answers which facilitate the scoring process are more widely recognized and often used by teachers.

In making a reading evaluation instrument (Indonesian matter), I...
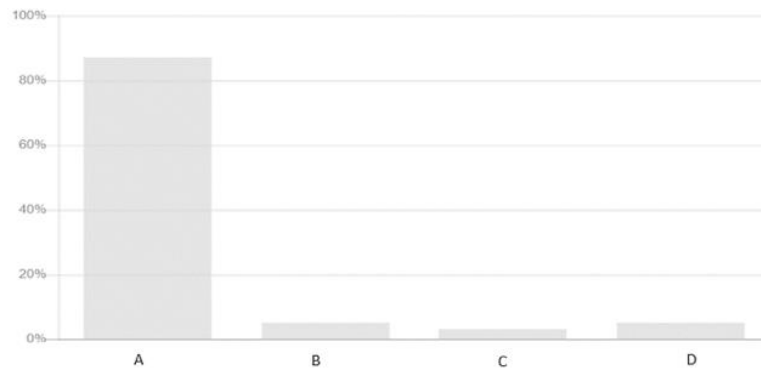
ANSWERS	RESPONSES
A. Create questions by including paragraphs/text	87%
B. include complex problems in test questions	5%
C. make questions that allow students to work on them for a long time	3%
D. trying to make the questions can only be answered with higher-order thinking skills	5%

Figure 4 Teachers' habits in designing reading test questions.

Based on Figure 4, teachers focus more on the existence of paragraphs or sentences in preparing reading comprehension ability questions. This does not conflict with the concept of reading literacy assessment. However, the existence of text as a question stem needs to consider the level of complexity of the issue and its readability. In addition, the response of teacher's answers implies that the usual preparation of questions does not prioritize the measurement of students' higher-order thinking skills from the results of reading activities. Questions that focus on the content of many text sentences without considering the readability level do not allow it to maximally measure students' reading abilities.

Regarding the dimensions of factual, conceptual, procedural, and
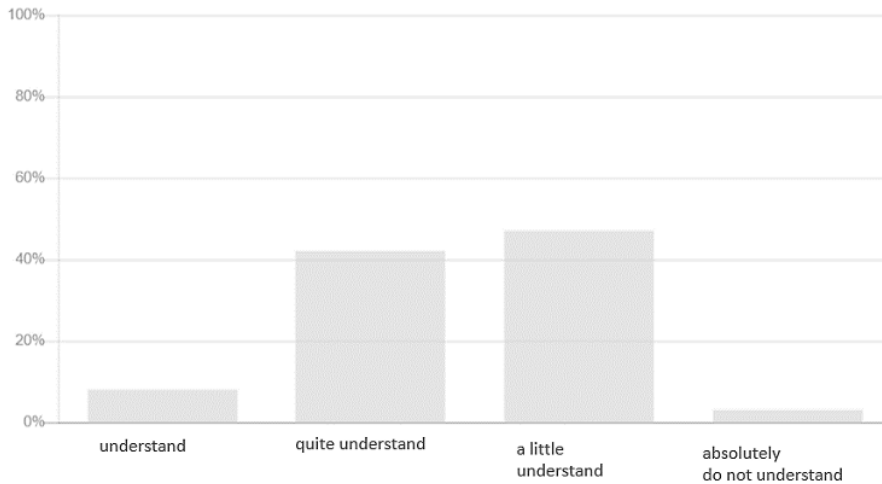metacognitive knowledge in reading evaluation, I...

Figure 5 Teacher knowledge related to knowledge dimensions in reading evaluation.

Figure 5 shows the number of teachers who do not have a comprehensive understanding of factual, conceptual, procedural, and metacognitive knowledge. The four types of knowledge are very important in the reading ability test questions. This is because the knowledge dimension determines the quality of the questions made. Measurement of reading ability by considering the knowledge dimension plays a role in improving students' ability to respond to problems in everyday life.

In the reading evaluation, I present questions that are...
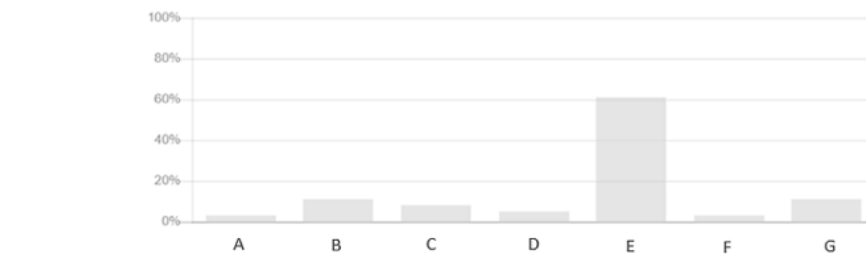
ANSWERS	RESPONSES
A. interpreting graphic symbols	3 %
B. remembering the concept of reading	11%
C. understanding the structure of the text	8 %
D. concluding the text	5%
E. . searching for and retrieving information in text	61%
F. Interpreting graphic symbol	3%
G. rating the text	3%

Figure 6 Teachers' habits of carrying out a reading evaluation.

Based on Figure 6, teachers understand that reading evaluation activities are related to activities of concluding or analyzing text. In this case, the teachers have not yet understood the activities of evaluating and developing reading results. Teachers only recognize text evaluation activities as dissecting and analyzing text structures. With this understanding, the assessment of reading literacy ability is only based on measuring basic level reading ability, namely literal ability. Meanwhile, holistic evaluation includes literal, inferential, vocabulary, main idea, evidence-

based/authentic based questions, author's response, and text structure accompanied by consideration of feasibility (Hao & Jhonson, 2013; McKoon & Ratcliff, 2016; Severino et al., 2018). Teachers should understand reading evaluation activities as activities to compare and assess information based on certain consideration criteria which can be followed by developing text ideas.

3.2. Barriers to Facilities and Low Student Interest in Reading

Based on the teacher's response, limited access to actual and interesting reading materials causes students to have difficulty practicing reading. It is difficult for students to read books because the available books are inadequate with limited choices of themes/topics. As is well known, reading comprehension is supported by many different language and cognitive skills as well as information processing loads to form understanding (Cain & Oakhil, 2006; Shin, Dronjic, & Park, 2018). This requires the existence of representative reading materials to support the processing of this information. The reading materials available in schools are mostly academic. Many teachers state that it is very rare to find reading material that is of students' interests.

3.3. Conformity of Questions with Parameters Reading Comprehension Skills and HOTS

Based on the level of reading comprehension skills, the teacher's questions are oriented toward literal reading skills. These questions contain questions regarding important factual information regarding the place, subject/object/character being described, time, event, certain situations that are in the stimulus item, and main ideas/ideas that were explicitly contained in the text. Meanwhile, the reading comprehension ability test ideally measures the ability to extract implicit information, criticize, and develop information in texts (Brown & Abeywicakrama, 2010). This is to hone students' ability to respond to various texts in real life that need to be selected for truth and credibility and developed into innovative work through the integration of reading and writing skills. As for the topic of the text fragment in question, the stem does not yet contain actual/up-to-date information and has not shown compatibility with the interests/favorites of the majority of teenage students. The following is an example of a reading comprehension test made by the teacher.

Example of Reading Skills Test Question Findings-1

Basic competencies
Identify the text of the observation report presented orally and in writing.
Question
Read the following report text!
Freshwater fish are divided into three groups, namely domestic fish, wild fish, and wild fish. Pet fish consists of fish that are easy to reproduce. For example: milkfish, goldfish, gourami, etc. Wild fish have an evil nature towards other fish. For example: snakehead fish and catfish. Wild fish, although rarely kept, have economic benefits. For example: stingrays, bunter fish, and jeler fish.
The report text above is part of...
a. Description
b. Definition
c. Classification
d. Cause and effect
e. example
Answer key: c

In the multiple-choice question 1, the answer choices have been prepared and presented in a balanced way with the correct cheater. However, the question does not reflect the relevance of reading ability measured by realistic tasks of students in real life. Of course, in everyday life, students are rarely or even not asked what and how the names of text structures are. An understanding of theoretical concepts regarding text genres and their structures needs to be known by students and not to be used as 'memorization' but to be applied to language skills such as analyzing texts or developing texts resulting from the reading process (Anderson, 2008; Clarke et al., 2015; Grabe, 2009). Therefore, competency measurement in reading ability questions needs to be directed at how students' thinking processes organize information and achieve reading comprehension skills at critical and creative abilities levels, for example, identifying correct information/selecting information based on text, or identifying the relationship between the content of the text and the everyday life of students.

Example of Reading Skills Test Question Findings-2

Basic competencies
Analyze the structure and language of procedure texts.
Essay Questions
What happens if the order of the procedure changes?
Answer: the desired result will not be appropriate

The question-2 does not contain a stem/stimulus question. Meanwhile, reading comprehension questions must contain stem questions/ text quotes/ infographics/ images that are contextual and representative of the problems of everyday life (Hauser et al., 2005; Harris & Graham, 2014; Raphael & Au, 2010). In the case examples of the description questions, it can be seen that the long essay questions are focused on efforts to explore students' knowledge about the concepts of procedure text. This is an example of a question about measuring linguistic competence in the reading results of students but is trapped in measuring theoretical concepts regarding certain text genres.

Example of Reading Skills Test Question Findings-3

Basic competencies
Identify the linguistic characteristics of the lecture text read
Essay Questions
Several linguistic characteristics mark a persuasive speech text, what are the 4 linguistic characteristics that mark a speech?
Answer:
use argumentative conjunctions; using direct statements; use reference words; use direct statements

In question-3 there is a misunderstanding regarding the language rules of the text by specifying certain linguistic characteristics absolutely so that it seems that it only belongs to one of the genres of the text. This can potentially confuse students in understanding linguistic concepts and obscure the measurement of reading comprehension ability. As is known, conjunctions, direct statements, and reference words are not only found in speech/lecture texts but can also be found in other types of texts such as narrative or expository texts. This is also not to the characteristics of long essay questions which require alternatives to various possible student answers. This kind of question does not measure students' actual reading comprehension skills.

Based on the results of the data analysis, questions on the teacher's reading comprehension ability did not measure higher-order thinking skills. The questions presented are still at the level of measuring the ability to extract basic information in texts such as main ideas/main ideas and factual information in texts. The questions only contain measurements of how students find several information that is already available in the text or even previously designed in such a way by the teacher so that students can easily find out the answer indicators in the question stem. In measuring reading comprehension skills that hone higher-order thinking skills, students can be directed to criticize, test the truth, or rewrite the contents of the text with several modifications or even transformations of the text form (Connor, Ingebrand, & Dombek, 2014). In other words, students are trained to find metaphysical things related to the text they read.

3.4. Results of Reading Skills Assessment Implementation Observation

Based on the results of observations of the evaluation of reading comprehension learning in class, the supporting factors are related to freedom/flexibility of time to carry out evaluations in class and support from superiors.

Meanwhile, the obstacles to implementing reading comprehension evaluation activities optimally are the limited diversity of reading materials presented and measuring reading proficiency has not yet reached the measurement of high-level reading ability. Barriers were also found regarding archiving evaluation results and following up on reading evaluation results which had not been implemented on an ongoing basis. The reading literacy habituation program has been implemented in several schools observed, namely by allowing students to read for ten to fifteen minutes during the first period or when starting learning. However, this was done without any teacher guidance regarding steps and follow-up on reading results. This activity is not equipped with an evaluation of the reading process.

The ratio of Indonesian language teachers and students is also less balanced. Based on the results of observations, one teacher carried out reading literacy skills assessment activities in more than two to eight classes with an average number of students reaching 30-35 people per class. In addition, several teachers who were observed were also given the task of guiding literacy cultivation activities. Of course, this makes the assessment not optimal due to the limitations of the assessor or evaluation implementer. For this reason, teachers tend to carry out reading literacy assessment activities simply by practicing asking questions based on the results of reading the text or answering multiple choice questions such as tests/exams.

4. CONCLUSION

There is harmony in the information on the answers to the teacher competency questionnaire with the results of observation and analysis of the teacher's work questions. Based on the results of the study, it can be concluded that the obstacles in assessing reading literacy skills are known to be the impact of teachers' lack of understanding regarding the ideal formulation of reading literacy skills, school facilities related to the availability of relevant reading topics and

books, as well as factors of students' initial ability since they first entered high school. As an implication, it is necessary to consider the existence of factors supporting the ability to reading comprehension (such as easy access to reading materials, structured exercises, and teacher guidance) in the learning process and evaluation of reading in schools. Collaboration between teachers and parents also needs to be done to assess, measure, and monitor the development of students reading skills.

REFERENCES

Afflerbach, P. (2008). Meaningful assessment of struling readers. In Lenski, S. & Lewis, J. (Editors), *Reading success for struggling adolescent learners*, (pp. 249-264). New York: The Guilford Press.

Anderson, N. (2008). *Practical english language teaching reading*. New York: McGraw-Hill companies.Inc.

Brookhart, S. M. (2010). *How to assess higher-order thinking skills in your classroom*. Alexandria: ASCD Publication.

Brown, H. D., & Abeywicakrama, P. (2010). *Language asseement principles and classroom practices*. United States of America: Pearson Education.

Cain, K., & Oakhil, J. (2006). Assessment matters: Issues in the measurement of reading comprehension, *British Journal of Educational Psychology*, 78, 697-708, DOI:10.1348/000709905X69807

Caldwell, J. S. (2008). *Reading assessment: A primer for teachers and coaches*. (Second Edition). New York: The Guilford Press.

Clarke, P. J., Truelove, E., Hulme, C., & Snowling, M.J. (2014). *Developing reading comprehension*. United Kingdom: John Wiley & Sons, Ltd.

Connor, C. M., Ingebrand, S., & Dombek, J. (2014). Integrating reading and writing instruction. In Miller, B., McCardle, P. & Long, R. (Editor). *Teaching reading and writing: improving instruction and student achievement*, pp. 7-20. Maryland: Paul H. Brookes Publishing Co., Inc.

Cresswell, J. W. & Cresswell, J. D. (2014). *Research design: qualitative, quantitative, and mixed methods approaches*. London: SAGE Publications, Inc.

Denzin, N. K., & Lincoln, Y. S. (2009). *Handbook of qualitative research*. (Translated by: Dariyatno, dkk.). Yogyakarta: Pustaka Pelajar.

Fletcher, J. M. (2006). Measuring reading comprehension, *Scientific Studies of Reading*, 10:3, 323-330, DOI: 10.1207/s1532799xssr1003_7

Grabe, W. (2009). *Reading in a second language: Moving from theory to practice*. New York, NY: Cambridge University Press.

Hao, S., & Jhonson, R. L. (2013). Teachers' classroom assessment practices and fourth graders' reading literacy achievements: An international study, *Teaching & Teacher Education*, 20, 53-63, https://doi.org/10.1016/j.tate.2012.08.010

Harris, R., & Graham, K. R. (2014). Integrating reading and writing instruction. In Miller, B., McCardle, P. & Long, R. (Editors). *Teaching reading and writing: improving instruction and student achievement*, pp. 35-44. Maryland: Paul H. Brookes Publishing Co., Inc.

Hauser, R. M., Edley, C. F., Koening, J. A., & Elliot, S.W. (eds.). (2005). *Measuring literacy: Performance levels for adults*. Washington DC: The National Academies Press.

Hibbard. K. M., & Wagner, E. A. (2003). *Assessing and teaching reading comprehension and writing*. New York: Routledge.

McKoon, G., & Ratcliff, R. (2016). Adults with poor reading skills: how lexical knowledge interacts with scores on standardized reading comprehension tests. *Cognition*, 146, 453– 469. doi:10.1016/j.cognition.2015.10.009

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: an expanded sourcebook*. Sage Publications Inc.

O'Reilly, & Kiyimba, N. (2015). *Advance Qualitative Research: A Guide to Using Theory*. London: Sage Publication Ltd.

Raphael, T. E. & Au, K.H. (2010). QAR: enhancing comprehension and test taking across grades and content areas. In Afflerbach, P. (Editors), *Essential readings on assessement*, pp. 73-88. USA: the International Reading Association, Inc.

Rathvon, N. (2004). *Reading assessment: a practitioner's handbook*. New York: The Guilford Press.

Scanlon, D. M., Anderson, K. L., & Sweeney, J. M. (2010). *Early intervention for reading difficulties: the interactive strategies approach*. New York: The Guilford Press.

Schleicher, A. (2019). *PISA 2018: Insight & interpretations.* Paris: OECD Publishing.

Severino, L., De Carlo, M., Sondergeld, T., Izzetoglu, M., & Ammar, A. S. (2018). A validation study of a middle grades reading comprehension assessment. *RMLE Online*, *41*(10), 1– 16. doi:10.1080/19404476.2018.152820

Shin, J., Dronjic, V., & Park, B. (2018). The interplay between working memory and background knowledge in l2 reading comprehension. *TESOL Quarterly*, (), –. doi:10.1002/tesq.482

Suwandi, S., Nurkamto, J., & Setiawan, B. (2019). Teacher Competence in Authentic and Integrative Assessment in Indonesian Language Learning. *International Journal of Instruction, 12*(1), 701-716.

Tindale, J. (2003). *Teaching reading*. Sydney: The AMEP Research Centre, the National Centre for English Language Teaching and Research (NCELTR), Macquarie University.

Westwood, P. (2001). *Reading and learning difficulties: approaches to teaching and assessment*. Victoria: The Australian Council for Educational Research Ltd.