An Assessment of the Contextualized Graphics-Based Reading Material to University Students

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Abstract

Reading is now described as a process of constructing meaning from a written document, rather than just decoding printed symbols and recognizing words. Local literature, on the other hand, was described as an informative booklet written in the local or native language about environmental events. As can be seen today, some adults are unable to read well, which is concerning, especially for their children. Most learners do not understand what they are reading, they know the words but they do not know the real meaning. This study evaluates the effectiveness of contextualized graphics-based reading material (CGBRM) on its readability and usefulness for the students. There were five participated and five English teachers including the adviser of the students took part in the evaluation of the reading material. A quasi-experimental research design was adopted by the researcher. Using a quasi-experimental study approach, it is possible to determine if educational interventions have an effect on academic performance and conduct (Longva & Foss, 2018). The findings of the study proved that the utilization of the CGBRM as a reading material in school is effective in teaching-learning scenario. The general opinions and suggestions made by the teacher-evaluators are used to identify areas for development and enhancement of the instructional materials.

1. Introduction

The researcher has experienced and observed that most learners during their time in our country, most learners like them do have poor reading comprehension. They do not understand what they are reading. They know the words but they don't know their meaning. They know how to read sentences but they don't know their real message. They don't know how or where to get the information regarding the story that they just read. Probably, mainly because most if not all of our textbooks were purely textual or word-based back then which may also lead in losing their interest to read. As can be seen today, some adults are unable to read well, which is concerning, especially for their children. With the aforementioned issue, the researcher studied the contextualized graphic novel. Graphic novels are widely known to be effective in assisting reluctant readers. Jones (2010), affirmed that by using graphic material like graphic novels, have overall positive effect on the Gonzalez and De Peralta (2010) said that integrating the graphic novels into texts set is the best way to begin as part of the curriculum.

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Objectives of the Study

The goal of this study is to see how successfully contextualized graphic novels are as reading materials. This aims to evaluate the effectiveness of CGBRM in enhancing the reading skills and comprehension, its readability and usefulness for school students. This is also to address the recommendations of the teachers and experts to effectively utilize the CGBRM:

1.   Describing the levels of reading interest in using the CGBRM.

2.   Figuring out the level of readability of CGBRM.

3.   Determining the level of readability of CGBRM for teachers.

4.   Assessing the level of usefulness of CGBRM.

5.   Identifying the evaluation of the teachers and experts on the CGBRM.

Research Questions

1.   Do learners have reading interest in using the CGBRM?

2.   What is the level of CGBRM readability?

3.   What is the level of CGBRM readability of teachers?

4.   What is the level of usefulness of CGBRM?

5.   How do teachers and experts evaluate the CGBRM?

2. Literature Review

2.1 Contextualized Reading Material

Krause et al. (2016) revealed the three principles in the use of content contextualization: prior knowledge, promoting conceptual change and promoting metacognition. First, contextualized engages student prior knowledge and encourages more effective problem solving. will remember knowledge better if it is relevant to their daily lives. Second, when contextualization exercises the participatory and engaging, are motivated to learn because the topic is engaging. Finally, contextualization allows to reflect on their learning by connecting ideas from a familiar tangible context of an abstract thought, allowing them to distinguish their own personal associations with these ideas.

2.2 Readability

Webster's Unabridged Dictionary defines readability or readable as: "legible", "easy to read because interesting or pleasing". Thus, the primary goal of readability is to assess a piece of writing's comprehensibility, whether it is suitable, acceptable and appropriate for teaching reading so that can have meaningful reading experiences. Moreover, this can also assist teachers in selecting passages appropriate for both youngsters and adults.

2.3 Usefulness

Various researches showed positive effect on the use of contextualized reading material. The teacher's position as a facilitator is supported with contextualized reading and learning materials with pictures, which can aid in autonomous learning. This conclusion is corroborated by Ajoke's (2017) research, which found that who were taught with visual instructional materials performed better. who were taught using visual instructional resources did better than who were taught without them.

Teachers must assist and review their instructional materials in order to encourage them to enjoy and be engrossed in reading. It is important to improve a child's reading skills at an early age; in grade school, reading testing is done through a one-time reading evaluation.

2.4 What is the significance of Graphics' Contribution to Reading Comprehension?

Reading comprehension can be regarded as a cognitive process that involves the simultaneous extraction and construction of meaning through the interactive engagement with both verbal and visual texts. Durkin (1978) posits that the exchanges between the text and the reader are characterized by active and intentional thinking. The researcher acknowledges the presence of animated elements in texts, but for the purpose of this review, only static visuals that are integrated inside printed materials, whether in traditional or electronic format, were taken into account. Consequently, the study opted to omit computer simulations, narrated visuals, and images that solely relied on verbal labels. The researcher's focus is pragmatic in nature, as these writings are predominantly encountered by readers inside educational settings.

While graphics have the capacity to enhance readers' understanding (Carney & Levin, 2002; Hannus & Hyönä, 1999), and the ability to comprehend graphics contributes significantly to overall comprehension (Roberts et al., 2015), they also contribute to the complexity of textual material (Renkl & Scheiter, 2017). Consequently, readers engage in a cost-benefit analysis while interacting with graphics. Novice readers with developing decoding skills and limited cognitive capacities for other tasks may face significant expenses in accessing graphics. In contrast, individuals with automatic decoding abilities can benefit from the collaborative interaction between verbal and visual comprehension processes (Kirby, 1993).

Reid and Beveridge (1990) as well as Hannus and Hyönä (1999) provided empirical evidence in favor of the aforementioned hypothesis, demonstrating that the utilization of graphics had a positive impact on the learning outcomes of children with higher cognitive abilities, whereas it had a detrimental effect on the learning outcomes of children with lower cognitive abilities. Nevertheless, previous studies have indicated that the impact of graphics on reading comprehension is either restricted or non-existent (Brookshire et al., 2002; Schnotz & Bannert, 2003). In addition to the aforementioned complexity, other investigations have examined the influence of graphical representations on students' acquisition of knowledge. However, these studies did not include a control condition, such as the one employed by Schrader and Rapp (2016), hence precluding the ability to ascertain any cost-benefit analyses. Hence, the task of comparing findings across studies is arduous due to the presence of divergent definitions of learners' abilities and outcome measures. In order to ascertain existing knowledge and identify gaps in understanding, the discipline of literacy necessitates intensified endeavors to amalgamate research findings.

2.5 The Impact of Visual Elements on Comprehension of Written Texts

Enhancing mental representations by the incorporation of precise details. Furthermore, the utilization of graphics has the potential to induce learners to encode information in both visual and verbal formats, thereby mitigating cognitive overload and enhancing memory retention through the provision of dual paths to the same knowledge. An illustrative instance can be found in scientific literature, where a textual exposition accompanied by a visual representation elucidates the elemental composition of water as being comprised of hydrogen and oxygen. When afterwards examined, a reader may experience difficulty in recalling the exact phrasing of the text but may still possess the ability to mentally reconstruct the graphic, thus facilitating the retrieval of crucial information.

The assessment of Dual Coding Theory (DCT) has encompassed both young and adult learners, as evidenced by the work of Sadoski and Paivio (2013). Findings from these studies indicate that both age groups derive equivalent benefits from concreteness, while encountering difficulties with abstractness. In relation to the design of graphical representations, it has been suggested by the Dual Coding Theory (DCT) that the inclusion of mental imagery aids in the process of comprehension. Consequently, it is

hypothesized that the utilization of more realistic graphics, such as images, may enhance comprehension to a greater extent.

3. Methodology

3.1 Research Design

The quasi-experimental study design was adopted by the researcher, which is commonly used in educational settings. Using a quasi-experimental study approach, it is possible to determine if educational interventions have an effect on ' academic performance and conduct (Longva & Foss, 2018). Before and after the intervention, the ' interests in reading, readability and usefulness of the reading material were assessed using this approach. To further investigate this association, the descriptive correlational study method was utilized to examine the ' reading interests, the readability and usefulness of the CGBRM. This approach is appropriate due to the fact that it clearly identifies the variables and the underlying causal links that connect them (Seeram, 2019). Finally, a qualitative technique was also used by the researcher. Using a qualitative technique, researchers can investigate issues that are difficult, if not impossible, to investigate using more rigid quantitative methods (Roller & Lavrakas, 2015). For the readability, usefulness and evaluation of CGBRM, teachers-respondents' opinions and ideas were categorized and interpreted using this method.

3.2 Respondents and Sampling Procedure

The study was conducted in Saudi Arabia during the third trimester of the school year 2022-2023 upon the approval of the school authorities. Students were the respondents in this study that suits them particularly in assessing the effectiveness of graphic novel. There were five students participated and five teachers for the evaluation part of the reading material. The convenience sampling method was used to select the respondents. When members of a target population who meet certain practical criteria, like being easily accessible, nearby geographically, available at a specific time, or willing to participate in the study are included in the study, it is known as convenience sampling (Etikan et al., 2016). The gathered data were statistically analyzed and evaluated. In particular, mean, frequency and standard deviation were employed in describing the reading interests of the students, readability for both students and teachers, usefulness and evaluation of the reading material.

3.3 Data Collection

The data gathering was divided into three phases: planning stage, implementation stage and evaluation stage. The phases were separated by the data collection for this study's methodology.

3.3.1 Phase 1. Planning Stage

The planning stage covered the initial adaptation of the contextualized graphic novel, "The Kind Old Woman and the Cow", The researcher specified the steps of ADDIE model as follows: First, the researcher analyze the content of the adopted graphic novel, its genre, language features and appropriateness for the student respondents. Second, Design. Here, the researcher specified the goal and objectives of the reading material. Third, the development, after the first and second steps have already done, the researcher developed all the things needed in utilization of the reading material. Fourth is the Implementation. The researcher asked permission together with the consent letter to the school principal, adviser, parents and guardian of the respondents, after that, the researcher finally administered the reading material to the student respondents. Lastly, Evaluation. This part shows the evaluated level of the reading interest, level of readability in using the CGBRM, CGBRM readability for teachers, usefulness of CGBRM and the

evaluation of the teacher respondents on the aims and approaches, organization, language content, and practical consideration of the developed CGBRM.

3.3.2 Phase 2. Implementation Stage

This phase contained the process of the data collection. After the authorities granted the permission, the researcher immediately administered the instrument to the respondents. The researcher also provided reading interests questionnaire to assess their level of attitude towards reading, they were given 10 minutes to answer the questions. After that, the researcher utilized the intervention, CGBRM guided the respondents in reading the story.

3.3.3 Phase 3. Evaluation Stage

The researcher distributed the evaluation sheets to the teachers to assess the readability of the reading material used. Their comments and suggestions were gathered regarding the CGBRM. Lastly, with the help of a statistician, the collected data was tabulated, organized cleaned, and statistically analyzed. The researcher complied with the

3.4 Data Analysis

To score and understand the obtained data, descriptive statistics were employed, which include the frequency, mean, and standard deviation. The following point scale was used to examine the level of the reading interest; 5-Very True of Me; 4-True of Me; 3-Undecided; 2-Not True of Me; 1-Not at All. Simultaneously, the following scale was utilized to examine and interpret the participants' level of readability in using the CGBRM, following the adoption of the CGBRM, the material's readability for students was 3.5 on average, suggesting that it is highly legible for children's reading. The material's readability for instructors was 3.37 on average after the implementation of the CGBRM, indicating that it is highly legible for teaching youngsters to read. After using the CGBRM, the material's readability for teachers averaged 80.6, indicating that it is useful for teaching children to read. The CGBRM was rated high in terms of aims and approaches and moderate in terms of organization, language content, and practical consideration, obtaining means of 2.92 for aims and approaches, 2.13 for organization, 2.3 for language content, and 2.45 for practical consideration. Finally, thematic analysis was utilized to analyze qualitative data, such as the teacher-respondents' comments and suggestions on the CGBRM. It is possible to use Thematic Analysis to look for patterns in a data set and then analyze the significance of those patterns. In doing so, it reveals the most important aspects of the incident under inquiry. Once all the data has been analyzed, a list of meaning constellations should be compiled (Braun & Clarke, 2012).

4. Results and Discussion

The purpose of this section is to define the CGBRM utilized in this study by the researcher. The researcher adopted the reading material which can be used as an effective instructional material for young learners. The Contextualized Graphic-Based Reading Materials (CGBRM) is a type of reading material with graphics that could help the enhance their reading skills and comprehension. The material has different features that would help readers to be engaged more in reading. It is filled with graphics including colorful illustrations and reader-friendly texts. Additionally, the content of the material is contextualized so that the reader would be familiar of what he/she is reading. To ensure the comprehension of the young readers, the material uses strategies such as questions and comprehension check. Lastly, in case that the readers do not know the meaning of unfamiliar words, the material also includes unlocking of difficulty which helps readers to widen their vocabulary.

The purpose of this section is to determine the reading interest in utilizing the CGBRM.

4.1 Table 1. levels of reading interest in using the CGBRM

In response to the first research question, the levels of reading interest of the five respondents who took part in the study are depicted in the following table. The ' levels of reading interest resulted in a mean of 3.48, indicating that they had a "high" interest for reading following the implementation of the CGBRM. This might indicate that the contextualized reading and learning materials with graphics provided to the youngsters increased their desire to read and learn more. Readers who read e-books that had delicate images, captivating narrations, and animations had higher levels of motivation and engagement, according to Kao et al. (2016).

Statements	Mean	Standard Deviation	Descriptive Interpretation
Q1. I learn more from reading than most in the class.	4.4	0.55	Very High
Q2. If a book is interesting, I don't care how hard it is to read	2.6	0.89	Low
Q3. If the teacher discusses something interesting, I might read more about it.	4.2	0.45	Very High
Q4. I like mysteries.	2	0.71	Low
Q5. It is very important to me to be a good reader.	5	0	Very High
Q6. In comparison to other activities I do, it is very important to me to be a good reader.	4	0.71	High
Q7. I don't like reading something when the words are too difficult.	2.4	1.34	Low
Q8. I do as little schoolwork as possible in reading.	4.2	0.45	Very High
Q9. I visit the bookstore often with my family.	1.6	0.89	Very Low
Q10. I am willing to work hard to read better than my friends.	4.4	0.55	Very High
Grand Mean	3.48	0.19	High

Legends:

5-Very True of Me   2-Not True of Me

4-True of Me   1-Not at All

3-Undecided

The goal of this part is to figure out and understand CGBRM's reading level for students.

4.2 Table 2. Level of CGBRM readability

Regarding the second study question, the level of readability of CGBRM for is presented in table 2. Following the adoption of the CGBRM, the material's readability for students was 3.5 on average, suggesting that it is highly legible for children's reading. This might signify that the children's contextualized reading and learning materials with visuals are adequate and suitable for their meaningful reading experiences. This finding is similar to that of Bastidas Ibañez (2021) who discovered that the majority of students opted to read graphic novels from printed resources. Furthermore, stated that the percentage of unfamiliar terms in reading texts should be minimal, and that they spend 1-2 hours each day reading the content.

Statements	Mean	Standard Deviation	Descriptive Interpretation
1. I can read the texts clearly.	3.6	0.55	Very High
2. I can understand the language used in the book.	3	0	High
3. I can read the book with ease.	3.2	0.45	High
4. I learned while reading the book.	3.8	0.45	Very High

5. I understood the lesson of the story.	4	0	Very High
6. The letters are big for me to read it.	3.4	0.55	High
Grand Mean	3.5	0.12	High

Legends:

4-Strongly Agree   2-Disagree

3-Agree   1-Strongly Disagree

The goal of this part is to figure out and understand CGBRM's reading level for teachers.

4.3 Table 3. Level of readability of CGBRM for teachers

In terms of the third question of the study, Table 3 shows the degree of readability of CGBRM for teachers. The material's readability for instructors was 3.37 on average after the implementation of the CGBRM, indicating that it is highly legible for teaching youngsters to read. This might indicate that the contextualized reading and learning materials with visuals are acceptable and appropriate for teaching reading so that children can have meaningful reading experiences. This study is comparable to that of Sukma et al. (2017), who revealed that literacy media with graphical drawings has been shown to improve ' enjoyment of reading and writing. This piques students' interest in reading information, allowing them to better comprehend the topic.

Statements	Mean	Standard Deviation	Descriptive Interpretation
1. The layout is clear.	3.8	0.45	Very High
2. The language used is at the right level for learners' current English ability.	3	0	High
3. The reading passages and associated activities are suitable for learners' levels and interests.	3	0	High
4. There is a sufficient range of engaging, level appropriate reading material.	3.4	0.55	High
5. The reading passages encourage meaningful language use.	3.6	0.55	Very High
6. The font size and type used in the material is appropriate for learners.	3.4	0.55	High
Grand Mean	3.37	0.27	High

Legends: 4-Strongly Agree 3-Agree 2-Disagree 1-Strongly Disagree

The purpose of this section is to determine and comprehend CGBRM's utility.

4.4 Table 4. Level of usefulness of CGBRM

As for the fourth research question, Table 4 indicates teacher-respondents' assessments of the CGB-usefulness RM's in the classroom. After using the CGBRM, the material's readability for teachers averaged 80.6, indicating that it is useful for teaching children to read. This might imply that the teacher's position as a facilitator is supported with contextualized reading and learning materials with pictures, which can aid in autonomous learning. This conclusion is corroborated by Ajoke's (2017) research, which found that who were taught with visual instructional materials performed better. who were taught using visual instructional resources did better than who were taught without them.

Statements	Mean	Standard Deviation	Descriptive Interpretation
1. The use of the reading material makes learning more efficient	78	16.81	Useful
2. The reading material can be used according to the allocation of learning time	77.6	14.1	Useful

3. The reading material supports the role of the teacher as a facilitator	81	15.17	Very Useful
4. The reading material reduces the workload of the teacher to explain material repeatedly	78	13.51	Useful
5. The reading material can help in independent learning	84	5.48	Very Useful
6. The reading material can improve the disaster knowledge competence of	85	7.07	Very Useful
Grand Mean	80.6	10.96	Useful

Legends:

81-100 -Very Useful   21-40 -Less Useful

61-80 -Useful   0-21 -Not Useful

41-60 -Quite Useful

4.5 Table 5. Evaluation of the teachers and experts of the CGBRM

Concerning the fifth study question, Table 5 presents the evaluation of the teacher respondents on the aims and approaches, organization, language content, and practical consideration of the developed CGBRM. The table reflects that the CGBRM was rated high in terms of aims and approaches and moderate in terms of organization, language content, and practical consideration, obtaining means of 2.92 for aims and approaches, 2.13 for organization, 2.3 for language content, and 2.45 for practical consideration.

The findings suggest that 1) CGBRM is well-suited to the learning-teaching scenario and covers the majority (if not all) of what is required, implying that the material is a valuable resource for both and lecturers. 2) The information is organized for both learners and instructors. 3) The content includes the essential grammatical points for each level, taking into account the demands of the. 4) The entire package is reasonably priced, and the supplies are readily available.

	Mean	SD	Interpretation
Aims and Approaches	2.92	0.41	High
Organization	2.13	0.84	Moderate
Language Content	2.3	0.51	Moderate
Practical Consideration	2.45	0.54	Moderate
Total	2.45	0.48	Moderate

Legends:

4-Strongly Agree

3-Agree

2-Disagree

1-Strongly Disagree

4.6 Summary of the Findings

The levels of reading interest resulted in a mean of 3.48, indicating that they had a "high" interest for reading following the implementation of the CGBRM. Following the adoption of the CGBRM, the material's readability for students was 3.5 on average, suggesting that it is highly legible for children's reading. The material's readability for instructors was 3.37 on average after the implementation of the CGBRM, indicating that it is highly legible for teaching youngsters to read. After using the CGBRM, the material's readability for teachers averaged 80.6, indicating that it is useful for teaching children to

read. The CGBRM was rated high in terms of aims and approaches and moderate in terms of organization, language content, and practical consideration, obtaining means of 2.92 for aims and approaches, 2.13 for organization, 2.3 for language content, and 2.45 for practical consideration.

5. Conclusion

As can be seen in results and discussion of the study, it is concluded that contextualized graphic novel is effective enough and is useful in the teaching-learning scenario. The general opinions and suggestions made by the teacher-evaluators are used to identify areas for development and enhancement of the instructional materials. Some areas needed improvement, according to the teacher-evaluators: the content of the story must be suited to the graphics and questions; the follow up questions should relate from the story; the material cost good but not lasting; the font style should be in alphabet; the material should have the corner for vocabulary words for emphasis of unfamiliar words.

6. Recommendations

It is recommended that teachers should consider the use of CGBRM in developing reading skills and comprehension. Language teachers should utilize the usage of contextualized graphic novels that will suit to the context of the readers. The head teachers and school principal should assist teachers in developing contextualized graphic novels that is appropriate to the readers. For the future researchers, it is suggested to continue testing the effectiveness of contextualized graphic novel to further strengthen the established assumptions and finding of this study.

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