Short Story Writing Learning Based on Local Wisdom with Digital Book Media for University Students

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Short story writing is one of the skills that must be mastered by students of the Indonesian Language Education Study Program. One of the determining success factors is the presence of a comprehensive reference source. This research aimed to facilitate the short story writing learning, lecturer, and students by using the digital book as a reference. This study discussed the improvement of short story writing skills using a digital book based on local wisdom for the Indonesian Language Education Study Program students. With the help of digital book media, various types of local wisdom could be incorporated into the short story writing. A quantitative method was employed to describe the findings regarding the use of digital books in short story writing. The technique used in the effectiveness test was the paired samples t-test. The findings focused on the effectiveness of short story writing learning using a digital book compared to a printed book in terms of increasing student creativity. Both significance test results obtained values below 0.05, indicating a significant difference between the results of short story writing in the pre-test (control group) and post-test (experimental group) data.

Keywords: short story, digital books, local wisdom, story writing, learning

INTRODUCTION

The awareness of the importance of textbooks as a learning source prompted numerous researchers to conduct extensive research. It was discovered that many textbooks did not meet students’ needs as they were not appropriate, not contextual, not communicative, and not sufficiently relevant to learners’ lives. The contextualization of textbooks significantly impacts student activity in relation to their lives. A good textbook must be

contextual (meets the students’ needs) in terms of content, material accuracy, and cultural values (Huang, 2019). However, in contrast to Bloom’s revised taxonomy, most textbooks are only appropriate for low to intermediate levels of learning. Most resources being studied lack the complexity necessary to support higher-order learning (Lau and Thomas, 2018). Additional issues concerning the availability of teaching materials for administrative offices arose from the 2013 curriculum, namely: (1) textbooks are not equipped with exercise sheets and clear practice instructions; (2) student activity sheets are not laboratory or experimental oriented and do not meet the 2013 curriculum’s standard process and contents; (3) teachers have difficulties in finding relevant reference sources for learning materials; (4) textbooks are inconsistent in their discussion of one another; and (5) teachers do not have a thorough plan prior to preparation of learning tools to support the effectiveness and quality of learning (Ninghardjanti, Indrawati, and Rahmanto, 2018).

The selection of appropriate teaching materials and methodologies must be pedagogically integrated into an appropriate technology-based learning environment promoting collaborative learning (Rahimi & Yadollahi, 2017). The teachers, as professionals, are expected to develop teaching materials in the form of interactive digital books so that the development process addresses the issues and difficulties students encounter during the ongoing learning process. Likewise, students should be able to learn independently with the help of interactive digital books (Liaw and Huang, 2014; Chen, 2013).

Based on the explanations above, textbooks as a reference source for learning have several shortcomings. They piqued the researchers’ interest in examining the use of digital books in short story writing based on local wisdom to compare them to printed books. Interactive digital books enhance the quality and quantity of learning in the classroom, enabling educators to deliver teaching materials more effectively and provide additional value for learning activities (Ninghardjanti, Indrawati, and Rahmanto, 2018). The system’s quality, number of users, purpose, and ease of application contribute to the quality, use, and assessment of Android-based digital book applications (Riady, 2018).

**Literature Review**

**Digital Learning**

The era of increasing digitalization also impacts Indonesia’s education system. It ushers in rapid change, beginning with traditional to modern paradigm shifts (Ninghardjanti, Indrawati, and Rahmanto, 2018). Recently, Indonesia has benefited from technological advancements in online education involving digital technology, which were thriving, despite numerous shortcomings. Suppose we employ the technology developed for school (covering pedagogical practices, beliefs, and motivational perspectives in practice). In this case, the likelihood of successful technology integration changes tends to increase (Koster, Volman, and Kuiper, 2017). Consequently, learning by utilizing digital technology will continue to grow in popularity, as its flexible use is considered a critical issue for integrated information technology education. Besides, digital learning shows a better positive impact than traditional teaching, reflected in students’ motivation.
and learning outcomes (Lin, Chen, and Liu, 2017). It can also be seen that the students tend to involve e-learning systems to encourage student-centered digital learning and infrastructure improvements to implement the next-generation digital learning environment (Koh and Kan, 2020). This research corroborated Riady’s (2018) findings that incorporating Android devices into digital teaching materials aided students at Universitas Terbuka Indonesia in comprehending the online, face-to-face learning materials and final exams. Learning material development through technology and the internet is essential since advancement proliferates (Indrawati and Purbani, 2019).

Digital media literacy is a critical examination of the effective production of digital artifacts. Digital media skills include recording, audio editing, digital photography, graphic manipulation, web design tools, animation software, video recording, editing and production, 3D creation, etc. The design of teaching activities and flexible digital technology or learning tools are the primary concerns of integrated information technology education today. There are numerous distinctions between the teaching materials, learning channels, and practice methods used in traditional and digital learning (McKiernan, 2011). Digital learning focuses on convenience and flexibility, while the traditional one is considered best suited for those who require practical operations or teamwork. Digital literacy is a collection of technical skills ranging from visual, behavioral, critical, and social in association with the latest technology that enables users to learn, communicate, socialize, and contribute to the digital space (Reyna, Hanham, and Meier, 2018). Thus, individuals must be skilled in using technological devices (Hembrough & Jordan, 2020).

One form of digitization that can be used in education is using digital books containing curriculum-aligned materials. In the study results of Ninghardjanti, Indrawati, and Rahmanto (2018), the development of interactive digital books begins with the preparation of texts, images, and videos required for learning materials and the 2013 curriculum-based development process documents, including syllabus, from archives using Zmartbook software. A digital book format based on multimedia learning theory tested for effectiveness and ease of application is urgently needed to improve children’s language and literacy learning environments (Bus, Neuman, and Roskos, 2020). Alexander and Singer (2017) explored learners’ understandings of reading printed and digital books. There was a clear preference for digital texts, and students typically gained a greater understanding when reading digitally. According to Henry and Roediger (2018), students preferred electronic textbooks accessible via mobile devices to printed (traditional) textbooks. As per the study’s findings, there was no significant influence found by comparing the use of electronic and traditional textbooks. It proved that cognitive learning and value were equally effective in electronic and traditional textbooks. Essentially, textbooks and digital books contain materials that aid student comprehension.

Ninghardjanti, Indrawati, and Rahmanto (2018) conducted another study on digital books, examining the design of interactive digital archive books as a learning tool based on the 2017 revision spectrum of the 2013 curriculum (known as K-13). The interactive digital book designed using Zmartbook aimed to facilitate the learning process for
students and teachers to be more enjoyable, easy to understand, and effective. It also assisted students in learning effectively and quickly, resulting in increased efficiency compared to printed books. However, reading a digital book may differ from sharing paper book stories with adults (Bus, Neuman, and Roskos, 2020). This research was in line with Riyanto, Amin, Suwono, and Lestari (2020). They stated that one of the new teaching materials was an interactive digital e-book called *flipbook*, which they described as one of the solutions for genetics learning. The similarities between these two studies were in their discussion of digital books, while the differences were in the contents.

**Local Wisdom**

Local wisdom is the intellectual property of the local area in the form of knowledge, beliefs, norms, customs, culture, insights, etc. It is inherited and is maintained as an identity and guidance for the community to act appropriately in life (Retno, 2019). As a multicultural country, Indonesia has many traditions and values that must be preserved due to possible external negative influences. Local values can secure the Indonesian people's well-being in the modern era of globalization and information (Sugiyo and Purwastuti, 2017). It is in line with Jaedun's findings (2020) examining the dimensions of early childhood character education based on multiculturalism and local wisdom, covering the dimensions of deity, self, fellow human, and environment. Local wisdom is preferred because it contains positive values that strengthen student character (social values, character education, religious values, cultural values, etc.), preserves regional culture, introduces local culture, and serves as a stimulant for creativity or inspiration for students in writing short stories.

Indonesia has diverse ethnic groups, languages, customs, beliefs, and social statuses. Cultural literacy is critical for sustaining and establishing social relationships, as evidenced by the emergence of organizations dedicated to promoting cultural literacy (Johan, Rullyana, Hanoum, et al., 2019). Recognizing the distinctive characteristics of various cultures as reflected in literary works enables children to see universal values (Plaksina, 2020). Additionally, students can develop their culture and understanding through exposure to local cultural knowledge. According to Nambiar, Hashim, and Yasin (2018), the use of modules containing local culture is intended to improve students’ and teachers’ cultural awareness and communication skills.

Furthermore, Kapaniaris and Varvounis (2019) conducted the design and implementation of e-learning programs in folk culture and local history as part of their study findings. The primary characteristic of this approach to developing e-learning programs in folk culture, ethnography, and history was the availability of free courses and the absence of specific restrictions or conditions for student engagement. Technology can have a positive impact if it is used appropriately and follows the purpose of teaching and learning (Harrison, 1997). Additionally, Indrawati and Purhani (2019) investigated the introduction of local wisdom through narrative text teaching using the *WebQuest* learning tool. Experts had validated the results, concluding that the development of this research was suitable and applicable to vocational high schools. Fatimah, Sulistyo, and Saddhono (2017) also published findings on local wisdom.
learning. The results revealed that incorporating local content into teaching and learning could help increase Indonesian society’s cultural values. Additionally, cultural teaching piqued the interest of second language learners in learning more about other countries (Ali and Mohideen, 2016: 52).

Creative Writing

Writing skills are inextricably linked to reading or literacy. Thus, students’ reading habits must improve their short story writing skills. Some factors contributing to learners’ low literacy levels are culture and environment that are unaware of activities that can increase reading enjoyment (Wulandari, 2018). In this case, reference sources must contain complete and attractive materials easily accessible to students. It is consistent with Pawliczak’s (2015) discussion of the critical role of creative writing in channeling students’ critical thinking toward identifying and resolving problems.

Additionally, creative writing can be used to assist students in achieving previously unachieved learning goals. The conclusion is that a lecturer should introduce students to various forms of creative writing, including journals, blogs, online discussion forums, and dialogue journals. Short stories are included as literary appreciation. It is in line with Halimah, Sumiyadi, Mulyati, and Vismania (2020), regarding the advantages of short stories for learning design and developing critical thinking skills. Students write short stories through seven stages of the creative process: preparation, planning, incubation, beginning, flow, breakthrough, and title (Dewiyanti, Piscayanti, and Pratiwi, 2020).

The choice of a short story should be based on its purpose and content to provide a meaningful context for teaching multiple languages and focuses on students’ interpretive strategies. A short story is a type of fiction that demonstrates the nature of being short, including the events, the story content, the number of actors, and the number of words used (Poe in Nurgiyantoro, 2002). Additionally, it enhances skills such as vocabulary development (Pardede, 2011: 23-24). The stages of writing a short story must be adapted in more detail and according to the storyline for readers to accept the explosive power and superiority of local stories closely related to their lives (Korte and Lojo, 2019).

METHOD

This research employed a quantitative method involving the quasi-experimental model, namely by giving a treatment in the form of using a creative writing textbook and creative writing based on local wisdom digital book. Quantitative research deals with formal, objective information and math and can also be carried out to test correlations (Given, 2008). Hence, quantitative descriptive analysis was used to analyze data in the form of scores obtained from the validation questionnaire, teacher and student response questionnaire, observation of student and teacher activities, and test of student learning outcome (Nurfitriani, Sumarmi, & Hariyono, 2018).
Data Collection Procedure

This research was conducted at the Indonesian Language Education Study Program at Universitas Sebelas Maret, involving 56 students who took part in creative writing lessons in the form of short stories based on local wisdom. The samples were divided into two classes. The first class (control group), consisting of 28 students, used a creative writing textbook. Meanwhile, the second class (experimental group), consisting of 28 students, used a digital book. Researchers employed a random sampling technique to determine the total number of present research samples, which were close to or representative of the entire population.

Instrument Treatment

This experimental research provided special treatment to students using creative writing based on local wisdom digital book. Researchers observed the control group to see the short story writing learning process as an initial stage. During the pre-test, it was seen that the students' writing results were still at the standard level. After the observation, the researchers found that the references used did not contain local wisdom. It certainly affected the learners' skills. Because, in the previously conducted short story writing, they had not been equipped with certain materials containing local wisdom or references providing writing steps.

Data Analysis

The researchers used SPSS software to test each group's normality, homogeneity, and effectiveness and to identify differences in their use of the previously mentioned books. Because the sample size in this study was less than 50 respondents, researchers had to conduct a Shapiro Wilk test to determine the data's normality.

The decision-making criteria were with $\alpha = 0.05$, indicating that if the probability of significance or p-value was greater than 0.05, the data were normally distributed. Meanwhile, if the probability of significance or p-value was less than 0.05, the data came from a not normally distributed population. The variance homogeneity test employed Levene’s test at a significance level of $\alpha = 0.05$ (Gozali, 2013: 74). The decision-making criteria were that if the significance probability of $p$ was greater than 0.05, the data were obtained from a homogeneous population. In contrast, if the significance probability of $p$ was less than 0.05, the data were considered to be not homogeneous. The effectiveness testing compared the control and experimental groups’ results on creative short story writing. The effectiveness test was conducted by administering the paired samples t-test, determining whether two paired samples had a different mean score.
FINDINGS

Table 1
Normality test results of short story writing

<table>
<thead>
<tr>
<th></th>
<th>Pre-test</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Df</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td>Mean</td>
<td>87.7857</td>
<td>87.2500</td>
</tr>
<tr>
<td>Median</td>
<td>87.0000</td>
<td>86.5000</td>
</tr>
<tr>
<td>Minimum</td>
<td>80.00</td>
<td>80.00</td>
</tr>
<tr>
<td>Maximum</td>
<td>97.00</td>
<td>95.00</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>4.2019</td>
<td>3.3733</td>
</tr>
<tr>
<td>Sig.</td>
<td>.069</td>
<td>.248</td>
</tr>
</tbody>
</table>

The table above shows that the significance value of creative writing in the short story experimental class in the pre-test was 0.69, while in the post-test was 0.284. Thus, it could be concluded that the results of creative writing in the short story experimental class came from a normally distributed population, as the obtained value was higher than 0.05.

Afterward, the homogeneity test was carried out to ensure that the samples or research respondents had the same characteristics so that the things being experimented with could be compared regarding the research topic. The variance homogeneity test used Levene’s test with a significance level of $\alpha = 0.05$ (Gozali, 2013: 74). The decision-making criteria were that if the significance probability of $p$ was greater than 0.05, the data were considered homogeneous. In contrast, if the significance probability of $p$ was less than 0.05, the data were considered to come from a population that was not homogeneous.

Table 2
Homogeneity test results of short story writing

<table>
<thead>
<tr>
<th>Results of Short Story Writing</th>
<th>Levene Statistic</th>
<th>df1</th>
<th>df2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Based on Mean</td>
<td>.595</td>
<td>1</td>
<td>54</td>
<td>.444</td>
</tr>
<tr>
<td>Based on Median</td>
<td>.294</td>
<td>1</td>
<td>54</td>
<td>.590</td>
</tr>
<tr>
<td>Based on Median and with adjusted df</td>
<td>.294</td>
<td>1</td>
<td>50.088</td>
<td>.590</td>
</tr>
<tr>
<td>Based on trimmed mean</td>
<td>.587</td>
<td>1</td>
<td>54</td>
<td>.447</td>
</tr>
</tbody>
</table>

Based on Table 2, the homogeneity test results for the short story experimental group obtained a significance value of 0.447. Because the $p$-value was greater than 0.05, the value of the short story experimental group’s creative writing ability was considered to come from a homogeneous population.

Afterward, the effectiveness test was conducted comparing the control and experimental groups' creative writing results. The control class used a local wisdom-based textbook, while the experimental class employed a local wisdom-based digital book. The effectiveness test was conducted using the paired samples t-test to determine whether there was a difference in the mean score of the two paired samples. The following are the results of the effectiveness tests.
Table 3
Effectiveness test results of short story groups

<table>
<thead>
<tr>
<th></th>
<th>Paired Differences</th>
<th>95% Confidence Interval of the Difference</th>
<th>T</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Group</td>
<td>-1.31796</td>
<td>-3.291</td>
<td>-3.291</td>
<td>27</td>
<td>.003</td>
</tr>
<tr>
<td>Experimental Group</td>
<td>-0.75187</td>
<td>-2.749</td>
<td>-2.749</td>
<td>27</td>
<td>.011</td>
</tr>
</tbody>
</table>

Based on the table above, the significance value of the control group was 0.003, while the experimental group was 0.011. Both values were less than 0.05, indicating a significant difference between the results of short story writing on the pre-test (control group) and post-test (experimental group) data. In addition, the effectiveness test results of the experimental group were higher than that of the control group. In other words, the digital book of creative writing based on local wisdom improved the results of short story writing. The purpose of the model testing phase in this discussion was to examine the effectiveness of the “Creative Writing Based on Local Wisdom” ("Menulis Kreatif Berbasis Kearifan Lokal") textbook. The effectiveness was demonstrated by the fact that the score of a group of students who took a short story writing course using a digital textbook entitled “Creative Writing Based on Local Wisdom” ("Menulis Kreatif Berbasis Kearifan Lokal") was higher than another group using the different textbook.

DISCUSSION

Before being given special treatment using a digital book of creative writing based on local wisdom, the control group had difficulty determining the topic or theme, which was vital in deciding the short story's direction. Likewise, some students were confused about beginning with the proper steps in writing short stories. Although individuals' stages might differ, those who were not trained or accustomed to writing would likely experience difficulties.

Researchers used the digital book of creative writing based on local wisdom because it contained clear materials, elements of local wisdom, and examples and steps to writing a short story. This digital book was beneficial for the students, particularly those who were still having trouble with writing. The materials discussed included the definition, types, structures, writing steps, and examples based on local wisdom that could help students understand deeply about short stories. Furthermore, it focused on elements of local wisdom to introduce regional cultural heritage, expand cultural knowledge, help determine the idea of short story themes, and increase students' creativity in writing short stories.

Using a digital textbook based on local wisdom made it easier for students to determine the theme. In addition, they were inspired by several examples of creative writing presented within the book. Junaidi, Suwandi, Saddhono, & Wardani (2022) found that folklore as a learning resource could increase social intelligence during the pandemic. It was supported by data obtained through observation, statistical analysis, documentation, and interviews with teachers, families, and students in Bengkulu.
Furthermore, local wisdom had a positive impact on readers (learners) in the form of inspiration in writing short stories in line with the character-building activities being carried out in universities by integrating various positive values and emphasizing the habituation, training, and examples provision by creating a character-building situation based on local wisdom and culture. Another research discussing the digital book was conducted by Ninghardjanti, Indrawati, and Rahmanto (2018). They investigated the design of an interactive digital archive book as a learning tool based on the 2017 revision spectrum of curriculum 2013 (K-13). The interactive digital book was designed using the Zmartbook platform to facilitate the learning process for students and teachers. It was proven to make the learning process more enjoyable, easy to understand, and effective, help learners learn well and quickly, and result in efficiency in the learning process.

CONCLUSION

Based on the explanations above, researchers concluded that the digital book based on local wisdom could improve students’ creative writing skills. Correspondingly, the significance test results showed values below 0.05, indicating a significant difference between the results of short story writing on the pre-test (control group) and the post-test (experimental group) data. Furthermore, the digital book was effectively used as teaching material for writing learning, including the local wisdom from several regions in Central Java. As per the effectiveness test results, it had several advantages over other textbooks, such as being easily understandable, supported by communicative language, and providing examples of literary works with a coherent plot. Additionally, it increased students’ writing creativity, as evidenced by their improved grades in class.

REFERENCES


