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The Effectiveness of Digital Comics based Multicultural to Improve Social Care Character of Elementary School Students

Abstract

This study aimed to examine the effectiveness of multicultural-based digital comic media on the social care character of elementary school students. This study used a quantitative research approach with the type of Quasi Experiment. The trial involved 2 classes, namely IVA (control class) and IVB (experiment class) of Brajan State Elementary School, containing 20 students. The independent t-test shows a difference in social-caring character between students who use multicultural-based digital comic media during the learning process and those who do not use multicultural-based digital comic media, with a significance value (p) <0.05, which is 0.017. This study concludes that multicultural-based digital comic media is declared effective to be used to improve the social care character of grade IV elementary school students.

Keywords: *digital comic, multicultural, social care, elementary school*

Introduction

In education, students with superior rankings in class generally have broad knowledge and insights compared to other students. However, when referring to the goals of Indonesian education, superior knowledge is not enough. Thematic learning emphasises the development of affective aspects related to student attitudes (Erviana et al., 2020). Regarding attitude, character education can be instilled by applying the hidden curriculum to students. Learning objectives and character inculcation can be achieved optimally with the support of the hidden curriculum through student activities in and outside of learning.

Based on the initial needs analysis with homeroom teachers of grade IV elementary schools in the Jejeran group, teachers find it difficult to optimise character education because they cannot meet directly with students. Habits at school aimed at developing student character cannot be implemented because learning is carried out online. However, teachers have tried to continue to instil character in students by giving messages and advice when providing material or assignments, but teachers still cannot optimise character education.

As social creatures, humans need to care for others, especially in this age of globalisation. Elementary school students who are supposed to build social care from an early age have experienced various unfavourable experiences from their peers. It shows that the character value of social care is one of the tasks that must be implemented immediately in elementary schools (Ljubetic & Maglica, 2020). Moreover, parents must be able to act as substitutes for teachers to shape children's character properly.

The optimisation of comics in learning is not new in education, but various studies have proven that comics are quite effective in helping problems in learning. Therefore, the potential of comics in the education and training process emerges as a subject worthy of research (Marianthi et al., 2016). It is reinforced by a questionnaire of students who chose comics 67%, 28% chose picture storybooks, and 5% chose textbooks. The results of interviews with 12 fourth-grade students from Jejeran elementary schools show that 75% of students like comics, even 50% of students have comic collections at home.

Comics are a form of work in the form of cartoons that attempt to tell characters and act out a story in a sequence that is closely linked to images and designed to provide entertainment to students because comics in the form of cartoons can attract the attention of readers, especially students (Fahyuni et al., 2017; Noviana et al., 2019; Pongoh, 2022). Comics are considered interesting media because they have elements of character images, conversations, and storylines so that readers

can understand a certain topic through visuals. It is supported by comic elements in the form of images/illustrations, so the more illustrations presented, the more interesting it will be for students and easier to understand because the illustrations facilitate student understanding (Okwilagwe & Aghotor, 2018). The use of comics is also very supportive of the learning process because it can improve student literacy (Burke, 2012).

Based on the analysis of the problems and real conditions above, and considering the importance of improving the character of social care in a multicultural life that is very vulnerable to conflict, it can be concluded that students and teachers need innovation in learning. Therefore, this study aims to determine the effectiveness of digital comic media in improving the social care character of elementary school students.

Research Methodology

Type of the Study

This study uses a quantitative research approach with the type of Quasi Experiment. Experimental research determines whether or not there is an effect of "something" imposed on the subject under investigation. In other words, to determine whether there is a causal relationship (Zubair, 2022). The research design used in this study was Non-Equivalent Control Group Design with the following pattern.

Experiment Class	O_1	X_1	O_2
Control Class	O_4	X_2	O_4

Description:

O_1 = Experimental class initial social care scale
O_2 = Experimental class final social care scale
O_3 = Control class initial social care scale
O_4 = Control class final social care scale
X_1 = Treatment (learning using digital comics)
X_2 = Treatment (learning using slide presentation)

Figure 1. Non-Equivalent Control-Group Design

Participants

The trial involved two classes: IVA and IVB of Brajan State Elementary School, Wonokromo, Pleret, Bantul Regency, Yogyakarta Special Region. Class IVA of

Brajan State Elementary School, containing 20 students, was used as the control class, while class IVB of Brajan State Elementary School, containing 20 students, was used as the experimental class. The determination of the sample was done by random sampling. All sample classes used were equal based on the equality test using the data clustering test.

Instrument

The instrument used in this study is a self-assessment scale of students' social caring character. The self-assessment scale is used as the basis for data collection related to students' social care character. This scale will represent the assessment of students' social caring character in activities before and after using digital comic media. Both of these scales use a Likert scale. The following is a lattice of self-assessment scale guidelines for social care character in this study

Table 1. Self-assessment scale of social care character

No	Indicator	Total Items
1	Take an active role in relieving the burden of others who are experiencing difficulties	2
2	Happy to provide help to others	3
3	Abstain from abusive behaviour	3
4	Enjoys working in groups	2
5	Behave kindly to others	3
6	Mutual respect and honour	3
	Total	16

Data Analysis of Product Effectiveness

Before conducting the t-test, the first thing to do is the prerequisite test. The precondition test includes the normality and homogeneity tests. The data normality test used Shapiro Wilk analysis has a significance level >0.05. Meanwhile, the homogeneity used the F Test (Levene's Test) with a significance of >0.05.

The t-test used is an independent sample t-test. The hypothesis test aims to determine whether there is a difference in the social care character of students who do not use and use multicultural-based digital comic media products. The independent t-test uses the help of the SPSS version 26 application with the provision of a significance level of 0.05. The hypotheses in this test are as follows.

H$_0$: There is no significant difference in the social-caring character of students who use and do not use multicultural-based digital comics.

H$_a$: There is a significant difference in the social-caring character of students who use and do not use multicultural-based digital comics.

Terms: H$_0$ accepted if Sig > 0,05 or t$_{count}$ < t$_{table}$

H$_0$ rejected if Sig < 0,05 or t$_{count}$ > t$_{table}$

Results

Hypothesis Test results are obtained from the results of data from the self-assessment scale on student social care. Furthermore, the data were analysed with SPSS 26 for Windows. The first step before conducting hypothesis testing using the t test, which aims to determine the effectiveness of multicultural-based digital comic media, the data must go through a prerequisite test in the form of normality and homogeneity tests.

Precondition Test

The normality test of data on the students' social care character scale was carried out using the SPSS 26 program through the Shapiro-Wilk tests. The results of calculating data normality on students' social care character are presented in the following table.

Table 2. Normality Test Results

No	Group	Data	*Shapiro Wilk*	Condition	Description
1	Control	Pre-scale	Sig. 0,295	p>0,05	Normal
		Post-scale	Sig. 0,113	p>0,05	Normal
2	Experiment	Pre-scale	Sig. 0,966	p>0,05	Normal
		Post-scale	Sig. 0,267	p>0,05	Normal

Based on the results of the normality test of the social care character variable in the control and experimental classes, it is known that the sig. (2- tailed) in the Kolmogorov-Smirnov and Shapiro-Wilk tests is greater than 0.05. Thus, it can be concluded that the data on students' social care character on self-assessment is normally distributed. Meanwhile, the homogeneity test on social care is presented in the following table.

Table 3. Homogeneity Test Results of Social Care Self-Assessment

No	Data Type	Sig.	Condition	Term
1	Pre-scale	0,353	p>0,05	Normal
2	Post-scale	0,088	p>0,05	Normal

Based on this table, it can be seen that the significance value for pre-scale and post-scale data on the social care character of experimental and control class students is entirely >0.05. So it can be concluded that the data on students' social care for the experimental and control classes are homogeneous.

Independent Sample T-test

The independent t-test of students' social care character was conducted using the help of SPSS 26 for Windows with the independent-sample t test. The independent t-test was carried out to determine whether there was a significant difference in the social care character of students in the control and experimental classes. The hypothesis in this test is as follows:

H_0: There is no significant difference in social caring character between students who use and do not use comics.

H_a: There is a significant difference in the character of social care between students who use and do not use comics.

The next step can be concluded that H_0 is accepted if the Sig value>0.05 or the tcount value<ttable. H_0 is rejected if the Sig value is <0.05 or the tcount>ttable. The results of the independent t-test of the self-assessment scale on students' reading interest can be seen in the following table:

Table 4. Independent t-test results of Social Care Self-Assessment

No	Data	Group	Sig.	Keterangan
1	Pre-scale	Experiment and Control	0,134	H_0 accepted
2	Post-scale	Experiment and Control	0,017	H_0 rejected

Furthermore, the student's social care character self-assessment post-scale data shows that the Sig. (p) value is smaller than 0.05, namely 0.017, so H_0 is rejected. It means there is a significant difference in the character of social care between students who use and do not use multicultural-based digital comic media.

Discussion

The results of the independent t test, the data of the student's social care character self-assessment post-scale, show that the Sig. (p) value is smaller than 0.05, namely 0.017, so H_0 is rejected. It means that there is a significant difference in social-caring character between students who use and do not use multicultural-based digital comic media. Multicultural-based digital comics present stories inspired by the state of online learning during the pandemic implemented in various elementary schools in Indonesia. Digital comics carry stories that contain the cultivation of moral values in order to support character education. Character education aims to develop, strengthen, facilitate positive behaviours and minimise or correct negative behaviours of students. One of the character values important to strengthen to minimise students' negative behaviour is the character of social care (Akcanca, 2020). The unity of parents, schools, teachers and students is important to find the right strategy based on student characteristics (Purnomo et al., 2022).

Multicultural education should be optimised since the elementary school level considering that in this phase, students have begun to be taught about the importance of equality and mutual respect for differences (Malecki et al., 2000; Naparan & Gadong, 2021; Rychly & Graves, 2012; Yang et al., 2010). Multicultural education is a concept that recognises the importance of diversity in the environment of students and their families to realise equality and social justice in education (Gollnick et al., 2013). Schools are the vehicle for students to understand the importance of multiculturalism education. Multiculturalism occurs naturally in schools because school conditions have different ethnic backgrounds, religions, cultures, ethnicities and social statuses, so the school environment is very influential in developing students' social attitudes (Anggito et al., 2022). Efforts to train students to have a good social spirit can start with learning in the classroom.

Learning that integrates moral messages about the importance of maintaining unity in diversity is still limited to verbal advice. In fact, learning is more easily accepted if students do not feel constrained or intimidated. Comics have their own charm in conveying easily understood advice that does not seem patronising. Comic media is widely used for character education because the images and stories inserted through character figures help make it easier to build student character. In addition to not seeming patronising, comics can make it easier for students to remember learning points. Comics as visual-based media can facilitate understanding, strengthen memory, and foster student interest (Berlian et al., 2021).

Digital comic media contains stories that contain social care values. The character of social care is very important for students as early as possible. Social care is

an attitude and action that always wants to help other people and communities in need (Bock et al., 2001; Pierson & Glaeser, 2007). Social care is an act of concern for the surrounding social environment to make students move to help others in need (Careemdeen et al., 2021). So, this character needs to be instilled in elementary school students through thematic learning. Thematic learning emphasises the development of affective aspects related to student attitudes (Erviana et al., 2020). Teachers can provide meaningful activities for students by applying multicultural-based digital comic learning media.

The results obtained after learning activities using multicultural-based digital comic media show that students' social care character can increase. It can be seen from the average value of the student's social care character self-assessment post-scale, which increased (Komalasari et al., 2018; Komalasari & Saripudin, 2019). In addition, the results of hypothesis testing also show a significant increase and difference in the character of social care before and after the use of digital comic media. It is also supported because comics have elements in the form of images/ illustrations presented, making it more interesting and easier to understand because the illustrations facilitate student understanding (Okwilagwe & Aghotor, 2018). In addition, comic stories that are simple and interesting to read and contain moral values and social values can shape children's character

The primary school level is a crucial early stage to start communicating and connecting with society so that it is expected to be able to answer the challenges of 21st-century skills. Therefore, teachers need to utilise modern technology in preparing the communication process for meaningful learning for students. Multicultural-based digital comics that contain social care values can be inserted into learning activities (Ali & Frederickson, 2006; Łaba, 2015). Learning activities are a communication process, so delivering messages must be created through learning activities and exchanging messages and information between teachers and students.

Hoffman argues that although comics are a medium consisting of images and text, they contain deep messages (Aulia & Wuryandani, 2019). In addition to increasing children's high-level thinking, educational comics can also present learning and instil character values in children. The subject matter can be presented through comic media, and character values can also be instilled with illustrated messages easily understood by elementary school students. When viewed from a positive perspective, reading comics can also help develop children's imagination (Cimermanová, 2015). Comics can provide models that can be used to shape students' personalities. Good character values will guide a person to behave well in his daily life. Students have a high social spirit; it will be easier to socialise and more

appreciated. Therefore, the use of multicultural-based digital comic media can be used as a means of instilling social care characters during learning in elementary schools.

Conclusions

Multicultural-based digital comic media is declared effective in improving the social care character of fourth-grade elementary school students. The results of the independent t-test (unpaired) show that there is a difference in social-caring character between students who use multicultural-based digital comic media during the learning process and do not use multicultural-based digital comic media, with a significance value (p) <0.05, which is 0.017. Therefore, it can be concluded that multicultural-based digital comic media is effectively used to improve the social care character of grade IV elementary school students.

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