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The Effect of Blended Learning Approach Using Teachmint Application on Students' Learning Outcomes and Digital Literacy on Buying and Selling Activities in Grade 4 Elementary School

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Abstract

The purpose of this study is to investigate the impact of the Teachmint application and the Blended Learning approach on the academic performance and digital literacy of fourth-grade elementary students concerning buying and selling-related topics. This research employs a quasi-experimental framework and an experimental design featuring a pretest-posttest control group. The focus of this study is on forty fourth-grade primary school students. Proportional random sampling was utilized for selection in this research. Data for this study was collected through a test. A t-test was the statistical method utilized to examine the data with SPSS version 26. Given that the significance value of 0. 000 is lower than the established significance threshold of 0. 05, the results of the t-test suggest that blended learning via the Teachmint application has a substantial effect on student performance. The results of the independent sample t-test also indicate that there is a significant enhancement in students' digital literacy when blended learning strategies are implemented. This conclusion is further corroborated by the t-test results, which show a value of 0. 042.

Keywords: *Learning Model, Learning Outcomes, Buying and Selling Activities*

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1. Introduction

In the realm of education, students are among the users of information. The information required by students exists not solely in printed form. The internet began offering information in an alternative format, specifically digital. Information is made available through various tools offered by the internet such as websites, blogs, or mailing lists. The task is quite simple to accomplish with the advancements in the internet and digital technology. This phenomenon brings up scientific reference sources that are available in digital form and can be accessed to get millions of useful information to complete school assignments. To achieve maximum learning outcomes in the process learning, digital literacy does not only require someone to use digital devices well, but you also have to understand everything that related to digital technology.

Information can be generated effortlessly and disseminated rapidly to users who require it. The result of this situation is a surplus of information, which can occasionally lead to challenges for users in retrieving the information they seek. To assist information users, digital literacy is essential for today's seekers of information. The existence of digital literacy makes it easier to implement the retrieval of learning outcomes or student grades through online media that follow the development of the times, gadgets or cellphones which are tools used by students in taking school exams today through applications or websites created by the school. With rapid technological advances, students who have good digital literacy will be better

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prepared to face future challenges. Affective digital literacy skills are one of the skills that can increase insight and knowledge in achieving the learning process optimally.

Information and communication technology has introduced new contributions and possibilities to the field of education. Limitations related to time and location are challenges that need to be addressed to enhance the efficiency of the educational process. One method to achieve this is through the Blended Learning approach. Learning that merges online education with in-person instruction is known as Blended Learning (Dwiyogo, 2012). The strategy of incorporating technology into the educational process makes learning more engaging, straightforward, manageable, and effective for Elementary School students.

In the current digital age, education needs to adjust to swift technological advancements. The blended learning model, which merges in-person and online education, has surfaced as a creative answer to enhance learning efficiency. This approach allows students to learn in a more flexible and interactive way, and provides them with the opportunity to develop digital literacy skills that are essential in the modern world. The Teachmint application is one of the platforms that supports the implementation of blended learning.

This application offers a variety of functions such as video conferencing, class management, and online assignment submission, which can help educators deliver lesson content in a more interactive and efficient way. In the context of grasping buying and selling activities. Student learning outcomes act as an important indicator of the success of the educational process. Research shows that the integration of technology in education can improve learning results.

Research on Blended Learning was performed by (Nurhaswinda, Kusuma, and Sumianto, 2023), indicating that implementing the Blended Learning model can enhance the academic performance of elementary school students. An alternative investigation into the Blended model (Putri and Nasution, 2023), which elevate student learning outcomes. According to a study conducted by (Nuraeni and Ainiyah, 2023), Blended Learning can improve learning resutls and foster students' skills and attitudes. The learning process by implementing a blended learning model as a substitute for conventional learning can improve student learning outcomes (Zahara, 2022). (Viriyani, 2022) said that blended learning, learning media, and learning motivation have a strong influence on student learning outcomes. (Binasdewi, 2023) in her research concluded that Blended Learning can improve students' digital literacy.

(Qoriah, 2023) explained that there are several reasons why the material on buying and selling activities in grade 4 elementary school in the science subject is used as research material, including: 1) In the Merdeka curriculum, the material on buying and selling activities has been included in the list that must be mastered by students, so it is important to study and evaluate, 2) The importance of buying and selling activities in everyday life, where children begin to be introduced to the concept of buying and selling and transacting with money, 3) where buying and selling activities can help children learn to manage money and transact with others, 4) The potential of the material on buying and selling activities creative thinking skills, where they can learn to count, analyze the price of goods, and make economic decisions, 5) The potential of the material on buying and selling activities as a means of introducing basic concepts in economics to children, such as supply and demand, price, and profit.

Given the importance of both components, this study aims to investigate how the Teachmint application and blended learning approach affect students' academic performance and digital literacy with regard to buying and selling activities in the fourth grade of elementary school. It is expected that this study will provide educators with new insights into developing more relevant and successful teaching methods.

2. Methods

This research utilizes a type of experimental study. Researchers apply experimental techniques to establish the impact of cause and effect between independent and dependent variables. The selected strategy is quantitative, integrating a Quasi-Experimental framework within the format of a Pretest-posttest control Group Design..*Design*are as follows:

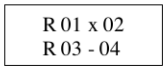

Figure 1. Research Design*Pretest-posttest control group design*

Information:
R = randomly selected for the experimental class and control class
X = given blended learning treatment
using teachmint application
01 = *pre test*experimental class
03 = *pre test*control class
02 = *post test*experimental class
04 = *post test*control class

The participants in this research were pupils from class 4A and 4B at SD Negeri Senduro 01, with each class consisting of 20 pupils. The findings of the homogeneity test are as follows:

Table 1. Results of the Homogeneity Test of Learning Outcomes

Test of Homogeneity of Variance

		Levene Statistics	df1	df2	Sig.
Learning outcomes	Based on Mean	.276	1	40	.602
	Based on Median	.254	1	40	.617
	Based on Median and with adjusted df	.254	1	39,533	.617
	Based on trimmed mean	.209	1	40	.650

Source: Data processed by SPSS version 26, 2025.

The outcomes is 0,602 it is the data is homogen.

Table 2. Homogeneity Test ResultsDigital Literacy

Test of Homogeneity of Variance

		Levene Statistics	df1	df2	Sig.
Total	Based on Mean	.253	1	38	.618
	Based on Median	.265	1	38	.609
	Based on Median and with adjusted df	.265	1	34,722	.610
	Based on trimmed mean	.246	1	38	.623

Source: Data processed by SPSS version 26, 2025.

The results of the homogeneity test showbased on mean value of 0.618 > 0.05 then the data declared homogeneous The primary technique for data collection is performed through learning outcome assessments. Additional supportive methods are implemented through techniques such as interviews, observations, and documentation. Once the data has been fully gathered, analysis is executed utilizing assistance of SPSS version 26. The research process was implemented with the following steps: (1) carry out observation activities at the school designated for the research, (2) identify and appropriately formulate problems, (3) perform preliminary studies and literature reviews, (4) formulate hypotheses, (5) select research subjects, (6) conduct normality and homogeneity tests on the experimental classes, (7) select experimental classes that will receive treatment, (8) develop testing instruments, (9) administer pretests to experimental classes, (10) conduct learning activities by providing treatment, (11) in experimental classes, specifically by applying a blended learning approach using the Teachmint application, (12) administer posttests on experimental classes, (13) perform data

analysis, (14) execute research hypothesis tests, (15) create discussions, (16) draw conclusions based on the conducted research results, and (17) compile research reports.

3. Results And Discussion

Data examination employed to address the problem statement in This research utilizes the t-test. The information assessed in this research comprises the pretest scores acquired following the provision of treatment to class 4. Normality evaluations are:

Table 3. Results of the Normality Test of Learning Outcomes

Tests of Normality

	Learning outcomes	Kolmogorov-Smirnova		
		Statistics	df	Sig.
Learning outcomes	*Pretest*Experiment	.178	23	.132
	Posttest Experiment	.153	23	.200
	*Pretest*Control	.177	22	.052
	*Posttest*Control	.182	22	.057

a. Lilliefors Significance Correction

Source: Data processed by SPSS version 26, 2025.

The findings from the data normality assessment employing the Kolmogorov Smirnov test indicated a significance value for all data > 0. 05, the data is normal.

Table 4. Results of Digital Literacy Normality Test

Tests of Normality

	CLASS	Kolmogorov-Smirnova			Shapiro Wilk		
		Statistics	df	Sig.	Statistics	df	Sig.
TOTAL	Experiment	.140	20	.200*	.945	20	.297
	Control	.110	20	.200*	.958	20	.497

*. This is a lower bound of the quasy significance.

a. Lilliefors Significance Correction

Source: Data processed by SPSS version 26, 2025.

The p-value obtained tabel is 0,200 this is called data is normal. Subsequently, computation using SPSS version 26. The outcomes:

Table 5. t-Test ResultsLearning outcomes

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
Learning outcomes	Equal variances assumed	.276	.602	5,803	40	.000
	Equal variances not assumed			5,803	38,664	.000

Source: Data processed by SPSS version 26, 2025.

In the outcomes of the partial t-test, it is evident that the t-test results indicate a significance value of 0. 000, which is below the predetermined significance value of 0. 05; hence, it can be inferred that the hypothesis is verified. As a result, the Blended Learning method utilizing the Teachmint application has a notable impact on student learning outcomes.

Table 5. t-Test ResultsDigital Literacy

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
TOTAL	Equal variances assumed	.253	.618	2.109	38	.042
	Equal variances not assumed			2.109	36,693	.042

Source: Data processed by SPSS version 26, 2025.

Indicate that results from the t-test show a significance value of 0. 042. Consequently, Blended Learning method that employs the Teachmint application signifikan on students' digital literacy. a nonequivalent control group design, indicating that the information collected for both sample groups is categorized into pretest and posttest data. To ascertain the outcomes of the research, it is important to compare the pretest and posttest results of both groups, along with evaluating the normal gain of each group. Gain calculation:

Table 6. Gain Test Results

Information	Experiment	Control
Mean	59.83	16.41
Conclusion	Quite Effective	Ineffective

Source: Data processed by SPSS version 26, 2025.

Assessment of student scores in the experimental group is overall quite effective (59. 83), whereas in the control group, the gain test value resides in the ineffective range (16. 41). It is clear that the experimental group shows greater advancement in understanding when contrasted with the control group. The influence of the Blended Learning model can be evaluated by analyzing the learning outcome data collected from students after their treatment (posttest). final learning independence (posttest) using parametric statistical methods and independent sample t-tests to determine if the Blended Learning approach impacted the learning outcomes and digital literacy of grade IV students. Students in the experimental class recorded an average score of 75. 86, while students in the control class achieved an average score of 54. 77; It is evident that the posttest results for students in the experimental class.

In this study, it is clear that the Blended Learning model is effective in producing enhancements in student learning outcomes, thus underscoring the model's effectiveness. Blended Learning represents a type of distance learning model that educators can employ for instructional activities to foster a new learning environment by offering convenience for students via remote education. Blended Learning promotes a more active, creative, and enjoyable learning experience, as students can revisit the material that has already been covered with various references in the form of videos, articles, or PPTs made available through the e-learning platform. The benefits of Blended Learning include its suitability for delivering instructional content conditionally anytime and anywhere, allowing learning to take place

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independently without the presence of a teacher by studying the material or completing assignments on the designated application. Learning becomes more effective and efficient as students find it easier to access educational resources.

The results of this investigation imply that Blended Learning has a positive effect on students' digital literacy. Throughout the intervention, students come to realize that digital technology can be used to support learning activities. When students initially engaged with digital technology merely for leisure activities such as gaming, social media, and watching movies, they are now starting to adjust to learning via technology. Students are already accustomed to gadgets, and the degree of digital literacy skills among students is quite high, as evidenced since online learning commenced. Students have also utilized the internet based on learning requirements and possess the ability to locate valuable and accurate information. Blended Learning can enhance motivation so that the enthusiasm for participating in the online learning process can boost students' digital literacy. Blended Learning offers extensive insights into the knowledge acquired because students are able to leverage digital technology in seeking educational resources.

Blended Learning impacts students' digital literacy. During the intervention, students learn that digital technology can be employed to enhance learning activities. While students have previously used technology solely for entertainment purposes such as gaming, social media, and watching movies, they are now beginning to adapt to learning through technology. Literacy is a crucial concept to introduce to children beginning at the elementary school level. A culture of literacy will aid in enhancing children's reading abilities. Furthermore, a literacy culture can nurture critical thinking skills through the texts that have been engaged with. An individual with strong digital literacy can be considered capable of effectively utilizing advanced digital technology to facilitate the educational process. Teaching digital literacy along with ethical considerations in elementary schools is essential to prevent bullying, addiction to games, and poor time management.

Blended Learning can inspire enthusiasm for engaging in the online learning process, enhance digital literacy, create ample discussion opportunities, cultivate soft skills, refresh the digital literacy movement, and boost the capacity for interaction simultaneously without being constrained by distance and space. This Blended Learning model is deemed effective in developing and maximizing each student's skills as it promotes creativity, critical thinking, and independence among students. Implementing the Blended Learning model fosters students' familiarity with conducting digital literacy activities since students take on greater independence in learning and processing information. Based on the examination of theory, pertinent research, and the findings Blended Learning model utilizing the Teachmint application affects students' learning outcomes and digital literacy.

4. Conclusion

The results is indicate that the digital literacy and academic performance of fourth-grade students at SD Negeri 01 Senduro regarding buying and selling activities are influenced by the use of the Temint application in the Blended Learning model. This is shown by the posttest results that students obtained after receiving a therapy. Teachers can optimize the basic potential space of their students. With the facilities and resources at hand, the learning process must be optimized. For scholars wishing to conduct further research, it might be a vital resource. These findings can be used as a roadmap and the starting point for further studies by other academics with related interests.

Bibliography

Ajeffrey, L.M. Milne, J, Suddaby. J.&Higgins, "*Blended Learning*: *How Teachers Balance The Blend Of Online And Classroom Components",* Journal Of Information Technology Education : Research., Vol. 13, 2014

Bawden, D. (2008). Origins And Concepts Of Digital Literacy. *Digital Literacies: Concepts, Policies And Practices*, *30*(2008), 17-32.

Charles D. Dziuban, Joel L. Hartman, Pasty D. Moskal, 2004. *"Blended Learning". Research Bulletin*. Vol. 7, No. 1. March, 2004, 30.

Febriani, Meli. "Ipas Dalam Pendekatan Konstruktivisme (Studi Kasus Budaya Melayu Jambi)". Aksara : Jurnal Ilmu Pendidikan Non Formal. Volume 7 Nomor 1 (Januari 2021) : 63

Fauzi, F., Wulandari, W., & Aprilia, S. (2021). Sistem Informasi Penjualan Produk Berbasis Web Pada Chanel Distro Pringsewu. Jurnal Tam (Technology Acceptance Model), 4, 41-47.

Fitriyani, Y. 2020. "*Motivasi Belajar Mahasiswa Pada Pembelajaran Daring Selama Pandemik Covid-19*". Jurnal Kependidikan, Volume 2, Nomor 6.

Gilster, P. (1997). Digital Literacy. *Seoul Heanaem*.

Karim, D. A., Pattiruhu, C. M., & Chin, J. (2024). The Role Of Education In Promoting Gender Equality In Modern Society. *Msj: Majority Science Journal*, *2*(4), 94-102.

Komari, K., Dewanto, D., Santosa, T. A., Susanto, Y. N., & Rachmaningsih, D. M. (2023). The Influence Of The Blended Learning Model On Students Digital Learning: Meta-Analysis. *Edumaspul: Jurnal Pendidikan*, *7*(2), 2696-2704.

Hardilia, W., Wahyudi, I. M. I., Juhara, B. G. A., & Sari, R. J. (2023). Implementasi Metode Belajar Edu-Fun Sebagai Sarana Penyampaian Materi Bahasa Inggris Pada Siswa Kelas Empat Hingga Kelas Enam Di Sekolah Dasar Negeri 1 Baru Desa Adat Pinge. *Msj: Majority Science Journal*, *1*(1), 08-14.

Hidayah, A. A., & Setiawan, D. L. (2024). Pengaruh Penerapan Media Pembelajaran Berbasis Aplikasi Teachmint Terhadap Hasil Belajar Siswa Di Kelas Xi Dkv Pada Mata Pelajaran Fotografi Digital Di Smk Pgri Ciawigebang. *Indo-Mathedu Intellectuals Journal*, *5*(4), 4937-4947.

Izzah, A. N., & Setiawan, D. (2023). Penggunaan Media Pop Up Book Sebagai Media Belajar Yang Menyenangkan Di Rumah Dalam Inovasi Pembelajaran Sd Kelas Rendah. *Sinar Dunia: Jurnal Riset Sosial Humaniora Dan Ilmu Pendidikan*, *2*(3), 86-92.

Mahendra, I. W. E., Jayantika, I. G. N. A. T., Sumandya, I. W., Suarni, N. M., Ariawati, N. W., Sugiharni, G. A. D., & Divayana, D. G. H. (2020). Design Of Digital Test Using Wondershare In Supporting The Blended Learning With Kelase Platform. *Universal Journal Of Educational Research*, *8*(3), 953-959.

Mardiana, M., Ganda, N., & Karlimah, K. (2021). Pengaruh Metode Role Playing Dalam Pembelajaran Ipas Tentang Kegiatan Jual Beli Untuk Meningkatkan Hasil Belajar Siswa Sekolah Dasar. *Pedadidaktika: Jurnal Ilmiah Pendidikan Guru Sekolah Dasar*, *8*(1), 72-76

Mustakim. 2020. Efektivitas Pembelajaran Daring Menggunakan Media Online Selama Pandemi Covid-19 Pada Mata Pelajaran Matematika. Al Asma: *Journal Of Islamic Education* Vol. 2, No. 1.

1. Nugraha, Mohammad Fahmi. Budi Hendrawan Dkk. 2020. *Pengantar Pendidikan Dan Pembelajaran Di Sekolah Dasar.* Tasikmalaya : Edu Publisher.

Pradnyana, P.B, M. C. (2023). *Pengaruh Pembelajaran Berbasis Masalah Terhadap Motivasi Belajar Dan Prestasi Belajar Matematika Siswa Kelas Iv Sd*. Jurnal Pendidikan Dasar, Vol. 3.

Rambe, Nora Indrayana,Mara Judan Rambey Dan Sabri. "*Penerapan Pendekatan Jigsaw Untuk Meningkatkan Hasil Belajar Siswa Materi Gaya Dan Gerak Kelas Iv Sd Negeri No. 200402 Sabungan Jae*". Jurnal Imiah Pendidikan Dasar (Jipdas) Vol. 3 No. 2 (Mei 2023) : 432

Sugiyono. (2014). *Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif, Dan R&D.* Bandung: Alfabeta

Selirowangi, N. B., Aisyah, N., & Rohmah, L. (2024). Penerapan Pendekatan Problem Based Learning Untuk Meningkatkan Higher Order Thinking Skills (Hots). *Edukasia: Jurnal Pendidikan Dan Pembelajaran*, *5*(1), 31-40.

Yuliani, Meda, Dkk. 2020. *Pembelajaran Daring Untuk Pendidikan*: Teori Dan Penerapan. Medan: Yayasan Kita Menulis

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