Jurnal Pembelajaran Bahasa dan Sastra
Volume 5, Nomor 6, November 2026
DOI: https://doi.org/10.55909/jpbs.v5i6.1930

https://pembahas.dialeks.id/index.php/jp
p-ISSN : 2809-5367
e-ISSN : 2809-6355

The Influence of Digital Literacy Instruction Based on the Analysis of Educational News on Critical Reading Skills

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ABSTRACT
The development of information technology requires students to have the ability to critically evaluate and process digital information. This study aims to analyze the effect of digital literacy learning based on educational news analysis on the critical reading skills of eleventh-grade students at SMAN 3 Bangkalan. This quantitative study employed a pre-experimental design (one-group pretest-posttest design) involving a sample of 20 students selected through purposive sampling. The measurement of critical reading skills covered six indicators: understanding news content, identifying main ideas, distinguishing facts from opinions, analyzing arguments, evaluating information credibility, and drawing evidence-based conclusions. The results showed an increase in the average score from 53.80% (pretest) to 63.70% (posttest), with an average difference of 9.90 percentage points. The Paired Samples t-Test results showed a t-value of 8.057 with a significance level of less than 0.001. These results indicate a statistically significant difference in students' critical reading skills before and after the implementation of digital literacy learning based on educational news analysis. Furthermore, the effect size calculation using Cohen's d yielded a value of 1.80, which falls into the large effect category. Therefore, digital literacy learning based on educational news analysis has a strong positive effect on improving students' critical reading skills.

Keywords: digital literacy, educational news analysis, critical reading skills

Pengaruh Pembelajaran Literasi Digital Berbasis Analisis Berita Pendidikan terhadap Kemampuan Membaca Kritis

ABSTRAK
Perkembangan teknologi informasi menuntut siswa memiliki kemampuan mengevaluasi dan mengolah informasi digital secara kritis. Penelitian ini bertujuan untuk menganalisis pengaruh pembelajaran literasi digital berbasis analisis berita pendidikan terhadap kemampuan membaca kritis siswa kelas XI SMAN 3 Bangkalan. Penelitian kuantitatif ini menggunakan desain *pre-experimental* (*one-group pretest-posttest design*) dengan sampel 20 siswa yang dipilih melalui teknik *purposive sampling*. Pengukuran kemampuan membaca kritis mencakup enam indikator: memahami isi berita, menemukan gagasan utama, membedakan fakta dan opini, menganalisis argumentasi, mengevaluasi kredibilitas informasi, dan menarik kesimpulan berdasarkan bukti. Hasil penelitian menunjukkan peningkatan rata-rata skor dari 53,80% (*pretest*) menjadi 63,70% (*posttest*), dengan selisih rata-rata 9,90 poin persentase. Hasil uji Paired Samples t-Test menunjukkan nilai t hitung sebesar 8,057 dengan nilai signifikansi kurang dari 0,001. Hasil tersebut menunjukkan bahwa terdapat perbedaan yang signifikan antara kemampuan membaca kritis siswa sebelum dan sesudah diterapkannya pembelajaran literasi digital berbasis analisis berita pendidikan. Selain itu, hasil perhitungan effect size menggunakan Cohen's d memperoleh nilai 1,80 yang termasuk dalam kategori efek besar. Dengan demikian, pembelajaran literasi digital berbasis analisis berita pendidikan memberikan pengaruh positif yang kuat terhadap peningkatan kemampuan membaca kritis siswa.

Kata kunci: literasi digital, analisis berita pendidikan, membaca kritis

Submitted
05/11/2026

Accepted
13/11/2026

Published
21/11/2026

Citation	Rohman, A., Laksono, K., & Amri, M. (2026). The Influence of Digital Literacy Instruction Based on the Analysis of Educational News on Critical Reading Skills. *Jurnal Pembelajaran Bahasa dan Sastra, Volume 5, Nomor 6, November 2026, 5291-5296*. DOI: https://doi.org/10.55909/jpbs.v5i6.1930

Publisher
Raja Zulkarnain Education Foundation

https://pembahas.dialeks.id/index.php/jp
p-ISSN : 2809-5367
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INTRODUCTION

The development of information and communication technology (ICT) has brought about fundamental changes in the educational landscape, particularly in how students acquire, access, and process information. The emergence of various digital platforms, online news portals, and social media has expanded the accessibility of learning materials well beyond the confines of classrooms and conventional printed textbooks. However, this ease of access does not automatically correlate with a student's ability to select and verify the accuracy of information. Without a critical mindset, an overabundance of information can potentially lead to exposure to data manipulation, biased opinions, and even false information (hoaxes).

In the context of Indonesian language education, digital literacy is closely intertwined with critical reading skills. Digital literacy is not merely the operational ability to use technical devices; rather, it is an intellectual competence to access, comprehend, evaluate, and utilize digital information in a rational and responsible manner (Gulo et al., 2026). Meanwhile, critical reading requires readers to go beyond grasping explicit meanings—it entails analyzing arguments, testing the validity of evidence, distinguishing between facts and opinions, and assessing the credibility of sources (Arifah et al., 2024).

Educational news serves as a highly relevant resource for teaching critical reading through the lens of digital literacy. Such news covers real-world issues pertinent to students' lives—ranging from curriculum policies and developments in educational technology to the dynamics of school life. By analyzing digital educational news, students are trained to engage directly with reputable texts, examine supporting evidence, and draw rational conclusions.

Previous research has demonstrated the effectiveness of integrating news media and digital literacy into the learning process. Arifah et al. (2024) found that a digital literacy model—which employs critical reading of news texts (including hoaxes) via the SQ3R technique—achieved a validity rating of 89% and elicited a positive response from students. Meanwhile, Amelia et al. (2024) demonstrates a significant relationship between social media usage, critical thinking, and students' critical reading skills.

Based on this background, the research questions for this study are: (1) What is the level of critical reading ability among grade XI students at SMAN 3 Bangkalan prior to the implementation of digital literacy instruction based on the analysis of educational news?; (2) What is the level of critical reading ability among grade XI students at SMAN 3 Bangkalan following the implementation of digital literacy instruction based on the analysis of educational news?; and (3) Is there a significant effect of implementing digital literacy instruction based on the analysis of educational news on the critical reading ability of grade XI students at SMAN 3 Bangkalan?

In line with these research questions, this study was conducted to empirically examine the effect of digital literacy instruction—based on the analysis of educational news—on the critical reading ability of grade XI students at SMAN 3 Bangkalan.

METHOD

This study employs a quantitative approach, specifically a pre-experimental research design in the form of a one-group pretest-posttest design. This design involves measuring the subjects' initial ability before the intervention (pretest), administering the intervention (treatment), and subsequently measuring the subjects' ability again after the intervention (posttest).

The research population consists of all eleventh-grade students at SMAN 3 Bangkalan for the 2026/2027 academic year. Sampling was conducted using a purposive sampling technique, based on recommendations from the Indonesian language teacher and the suitability of the instructional material, resulting in a sample group of 20 students from one class.

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p-ISSN : 2809-5367
e-ISSN : 2809-6355

The primary instrument is an essay-based critical reading test, which measures six (6) key indicators:

1) Understanding the content of news
2) Identifying the main idea
3) Distinguishing between facts and opinions
4) Analyzing arguments
5) Evaluating the credibility of information
6) Drawing conclusions based on evidence

Each indicator is assessed using an analytic scoring rubric with a range of 1–4, for a maximum total score of 24. Raw scores are then converted to a 0–100 scale using the following formula: "Score" = ("Obtained score" / "Maximum score") × 100

The content validity of the instrument was verified through expert judgment, involving specialists in Indonesian language instruction and educational evaluation.

Data processing involved the following stages: Descriptive Statistics: Calculating the mean, median, standard deviation, and the minimum and maximum scores.

Normality Test: Applying the Shapiro-Wilk test to the score differences (posttest - pretest). Hypothesis Testing: Using a Paired Samples t-Test with a significance level of a = 0.05. Effect Size Analysis: Calculated using Cohen's formula.

RESULTS

1. Description of Pretest and Posttest Scores

Based on measurements taken from 20 students, there was an improvement in critical reading ability scores following the implementation of digital literacy instruction centered on the analysis of educational news. A summary of the descriptive statistics is presented in Table 1.

Table 1
Descriptive Statistical Results for Pretest and Posttest

Descrptive Statistics	Pretest (%)	Posttest (%)	Difference / Change
Sample Size (N)	20	20	-
Mean (Average)	53,8	63,7	plus 9,90 poin persentase
Median	53,5	63,5	plus 10
Standard Deviation	5,01	7,78	2,77
Minimum Score	45	51	plus 6
Maximum Score	63	75	plus 12

The average critical reading ability of the students increased by 9.90 percentage points, from 53.80% in the pretest to 63.70% in the posttest. All students (100%) showed an increase in their individual scores, with the highest gain being 19 percentage points and the lowest being 1 percentage point.

2. Data Normality Test

The Shapiro-Wilk normality test performed on the score differences (posttest - pretest) yielded a statistic of 0.966, with a significance value of p = 0.659. Since p > 0.05, it can be concluded that the score differences are normally distributed, thereby satisfying the assumptions for parametric testing.

3. Hypothesis Testing and Effect Size

Hypothesis testing for the difference, conducted using a Paired Samples t-Test, is presented in Table 2.

Jurnal Pembelajaran Bahasa dan Sastra
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Table 2
Results of the Paired Samples t-Test and Effect Size

Parameter	Value
Sample Size (N)	20
Mean Difference (D)	9,9
Standard Deviation of the Difference (sD)	5,5
Calculated t (t-statistic)	8,057
Degrees of Freedom (df)	19
Sig. (2-tailed)	<0,001
Cohen's d_z	1,80 (major effects category)

The analysis results show a calculated t-value of 8.057, with a significance level of $p < 0.001$. Since $p < 0.05$, the null hypothesis (H0) is rejected, and the research hypothesis (Ha) is accepted. This confirms a significant difference in students' critical reading abilities before and after the instructional intervention. The effect size calculation yields a Cohen's dz of 1.80. Based on Cohen's interpretation standards ($d > 0.8$), this value indicates that the implementation of digital literacy instruction—centered on the analysis of educational news—has a very strong (large) impact on improving the critical reading skills of the students in the study group.

DISCUSSION

The improvement in students' critical reading abilities can be understood through the synthesis of digital literacy activities and the processing of news texts. At the pretest stage, the students' average critical reading score was 53.80%. This limitation was primarily reflected in the students' difficulty in distinguishing between the opinions of sources and objective facts, as well as in evaluating the credibility of news sources.

The implementation of digital literacy instruction based on educational news provides a systematic framework (scaffolding) that guides students through several critical stages:

1. Access and Text Comprehension: Students are trained to locate and read educational news in its entirety to identify the main ideas and content comprehensively.
2. Deconstruction of Information: Students are encouraged to break down sentences to differentiate between claims/opinions and factual data.
3. Argument Analysis and Credibility Evaluation: Students evaluate the logical soundness of the author's or source's arguments, examine the media outlet's track record, and compare the content against reliable secondary sources.
4. Synthesis and Conclusion: Students formulate their own conclusions based on the factual evidence discovered within the text.

The use of educational news topics also enhances the meaningfulness of the learning process. Because the issues raised are closely related to their learning environment (such as the curriculum, school facilities, and educational technology), students are more motivated to examine the content of the texts in depth.

CONCLUSION

Based on the data analysis and discussion, the following conclusions are drawn:

1. The critical reading ability of 11th-grade students at SMAN 3 Bangkalan, prior to the implementation of digital literacy instruction based on the analysis of educational news, stood at an average of 53.80%.

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p-ISSN : 2809-5367
e-ISSN : 2809-6355

2. Following the implementation of the instruction, the students' critical reading ability increased to an average of 63.70% (an increase of 9.90 percentage points).
3. There is a significant effect of implementing digital literacy instruction based on the analysis of educational news on students' critical reading ability ($t = 8.057$; $p < 0.001$). An effect size of $dz = 1.80$ indicates that this intervention has a substantial impact on improving students' critical reading skills.

REFERENCES

Amelia, D., Suryaman, M., & Sudiati. (2024). The Relationship between Social Media Use and Critical Thinking Ability on Critical Reading Skills among University Students. *Jurnal Penelitian Ilmu Pendidikan, 17*(1), 13–22. https://doi.org/10.21831/jpip.v17i1.91012

Anisa, A. R., Ipungkarti, A. A., & Saffanah, K. N. (2022). Pengaruh Kurangnya Literasi serta Kemampuan dalam Berpikir Kritis yang Masih Rendah dalam Pendidikan di Indonesia. *Current Research in Education: Conference Series Journal, 1*(1). https://ejournal.upi.edu/index.php/crecs/article/view/32685

Arifah, Z. N., Oshmany, M. I., Rahmawati, D. P., Priatna, D. D., Satria, R., & Kusmayati, N. B. (2024). Digital Literacy Model Through Critical Reading of Hoax News Texts with SQ3R Technique. *Suar Betang, 19*(1), 103–113. https://doi.org/10.26499/surbet.v19i1.14670

Coiro, J. (2021). Toward a Multifaceted Heuristic of Digital Reading to Inform Assessment, Research, Practice, and Policy. *Reading Research Quarterly, 56*(1), 9–31. https://doi.org/10.1002/rrq.302

Fauziah, A., & Rahman, A. S. (2024). Pentingnya Kemampuan Membaca Kritis di Era Informasi Digital. Cendikia: Jurnal Pendidikan dan Pengajaran. *Cendikia: Jurnal Pendidikan dan Pengajaran, 2*(4), 35–39. https://doi.org/10.572349/cendikia.v2i4.1182

Gulo, T., Gulo, M., Sarumaha, C. A., Gulo, L. A., & Hia, L. (2026). Pengaruh Literasi Digital terhadap Kemampuan Membaca Kritis Siswa. *Ta'ehao: Jurnal Ilmiah Pendidikan Bahasa dan Sastra Indonesia, 4*(2), 241–257. https://doi.org/10.56207/to.v4i2.797

Ikaningrum, R. E., & Sarwanti, S. (2021). Students' Digital Literacy in Online Reading Class: A Critical Reflection on English Language Learners. *Leksema: Jurnal Bahasa dan Sastra, 6*(1), 1–12. https://doi.org/10.22515/ljbs.v6i1.2939

Lalira, J. E., & Warouw, M. P. (2026). Critical Digital Literacy Enacted by Indonesian First-Year Undergraduates: A Corpus-Assisted Study. *Reading & Writing, 17*(1), Article a700. https://doi.org/10.4102/rw.v17i1.700

Nuphanudin, Firmansyah, F., Azzahra, M. T., & Choirunnisa, D. E. (2026). Critical Reading Meets Digital Literacy: Understanding Scientific Works in a Transformative Age. *Buletin Edukasi Indonesia, 5*(2), 153–163. https://doi.org/10.56741/IISTR.bei.001869

Nurviana, S., Putri, N. A. P., & Rachman, I. F. (2024). Hubungan antara Literasi Digital dan Kemampuan Berpikir Kritis dalam Membaca Berita Online. *Cendikia: Jurnal Pendidikan dan Pengajaran, 2*(5), 391–398. https://doi.org/10.572349/cendikia.v2i5.1570

Setyawati, N., Maspuroh, U., & Rosalina, S. (2021). Pengaruh Literasi Digital terhadap Pemahaman Bacaan Cerpen pada Kalangan Remaja Pengguna Media Sosial Aktif. *Jurnal Pendidikan Bahasa dan Sastra Indonesia Undiksha, 11*(4). https://doi.org/10.23887/jjpbs.v11i4.40124

Jurnal Pembelajaran Bahasa dan Sastra
Volume 5, Nomor 6, November 2026
DOI: https://doi.org/10.55909/jpbs.v5i6.1930

Tarigan, H. G. (2008). *Membaca sebagai Suatu Keterampilan Berbahasa.* Bandung: Angkasa.

Tyas, D. K., & Wahyuni, R. T. (2012). Hubungan Kemampuan Menulis Teks Berita Pendidikan dengan Kemampuan Berbicara pada Siswa Kelas X Sekolah Menengah Atas Negeri 4 Sintang Tahun Pelajaran 2012/2013. *VOX Edukasi, 3*(2), 82–92.

Wiguna, M. Z., & Alimin, A. A. (2025). Pengaruh Modul Konten Mikro terhadap Keterampilan Membaca Kritis Siswa SMA: Studi Quasi-Eksperimen. *PRASI, 20*(2), 333–348. https://doi.org/10.23887/prasi.v20i02.101726

Wijayanti, A., Rahmawati, Y., & Khatimah, K. (2026). The Correlation between Digital Literacy and English Reading Comprehension among Senior High School Students. *Edukasi: Jurnal Pendidikan, 24*(1), 17–32. https://doi.org/10.31571/edukasi.v24i1.10470