



SULTAN IDRIS EDUCATION UNIVERSITY

UNIVERSITI
PENDIDIKAN
SULTAN IDRIS
اونڤرسيتي قنديديقن سلطان ادريس

FAKULTI
TEKNIKAL DAN
VOKASIONAL



AI-Assisted Academic Writing: A Step-by-Step Guide to Impactful Publications



Assoc. Prof. Dr. Mohamed Nor Azhari
Azman



THOMSON REUTERS

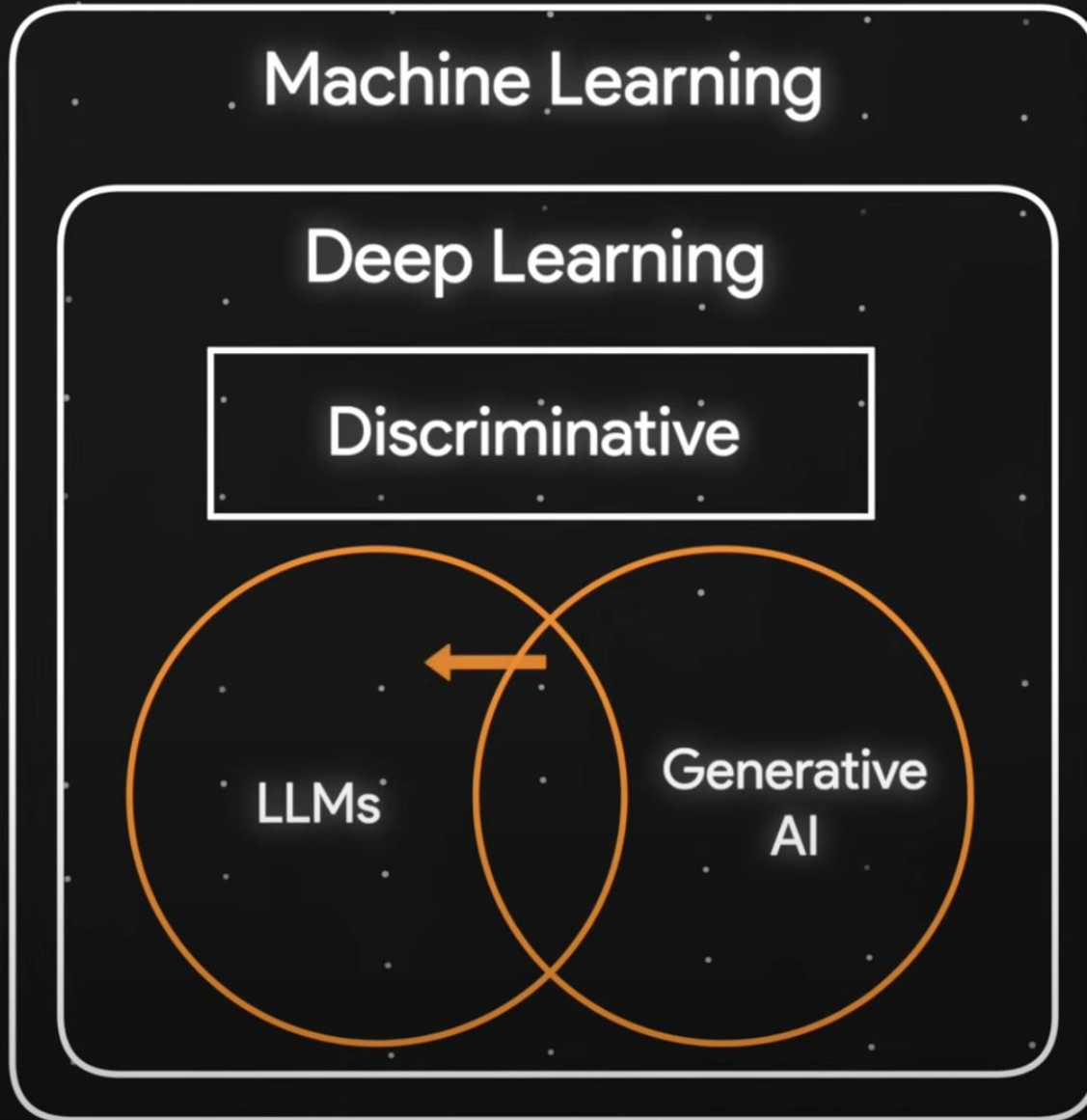
Scopus®

Google scholar



Clarivate
Analytics

ARTIFICIAL INTELLIGENCE

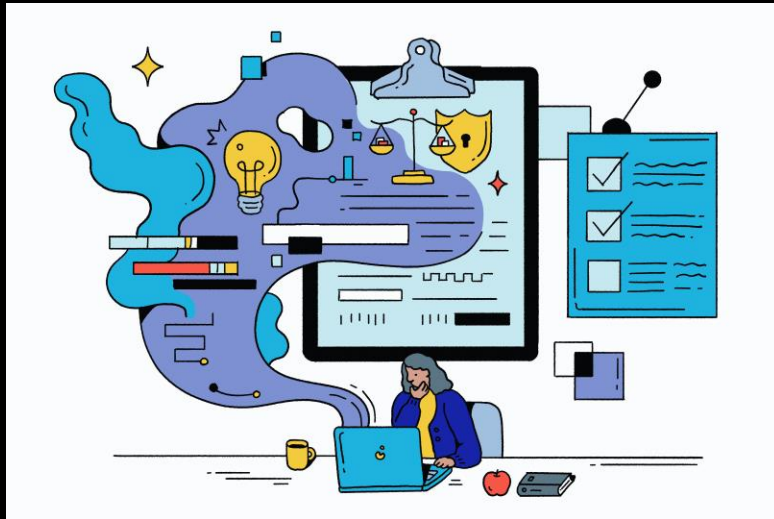


What Is Generative AI?

Generative AI refers to artificial intelligence systems capable of generating text, images, code, or other data based on input prompts.

e.g. ChatGPT, Claude, Gemini, etc.

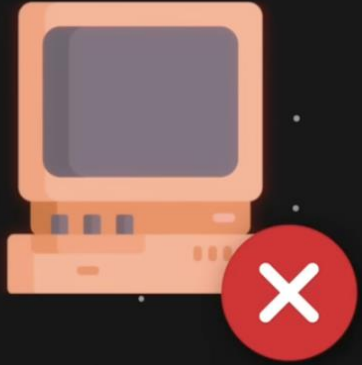
How It Works: Trained on large datasets using machine learning models (especially transformer-based architectures).



Introduction of Transformer models by Vaswani et al. ("Attention is All You Need").

Emergence of powerful models like GPT-3, GPT-4, Claude, and others.

Widespread integration in academic tools, publishers, and platforms.



Output



It's NOT GenAI:

1. Number
2. Classification (e.g. spam or not spam)
3. Probability



Output



It IS GenAI:

1. Natural language (text or speech)
2. Image
3. Audio

GENERATIVE AI MODEL TYPES

Text-to-text

Take natural language input and produce text output



Text-to-image

Trained on large set of images, and generate new images



Text-to-video

Can generate and edit videos



Text-to-3D

Can be used to produce gaming assets



Text-to-Task

Trained to perform a specific task
task models are trained to perform a



LARGE LANGUAGE MODELS (LLMS)

Pre-Trained

Fined-Tuned



text
classification



question
answering



document
summarization



text
generation



Model

Retail



Finance



Healthcare



Entertainment



Acknowledgment by Major Academic Publishers



Allows use of AI tools but requires disclosure if AI was used in manuscript preparation and AI tools cannot be listed as authors.



Taylor & Francis

Endorses responsible use of AI with full transparency. Authors must remain accountable for the content.



Encourages ethical AI use with declarations in the methods or acknowledgments section.



Supports AI writing assistance with clear acknowledgment of its role and limits.

WILEY

Permits AI tools for language polishing but not for content creation without supervision.



Encourages transparency in AI usage. Indexing standards remain human-centric with AI seen as a support tool, not a contributor.

AI for Research.

Using AI to ease academic writing



Scopus[®] AI
Trusted content. Powered by responsible AI.



Gemini

AI for Research.



JASP
A Fresh Way to Do Statistics



**GPT, Gemini, and Deepseek
Generative AI**



Statistics All in one Tools

A Fresh Way to Do Statistics

Scopus[®] AI

Bibliographic finder

Trusted content. Powered by responsible AI.



Title.
Abstract.
Introductions
Method
Findings
Discussions
Conclusions



Title.

ideas, formulate research questions, find gaps

Example, you want to investigate effectiveness of Gamification based learning.



A Fresh Way to Do Statistics

Scopus[®] AI

Trusted content. Powered by responsible AI.

Abstract.
Introductions
Method
Findings
Discussions
Conclusions



Elicit compiling a bunch of papers and makes fast brain-storming you

Title.

ideas, formulate research questions, find gaps

Example, you want to investigate effectiveness of Gamification based learning.



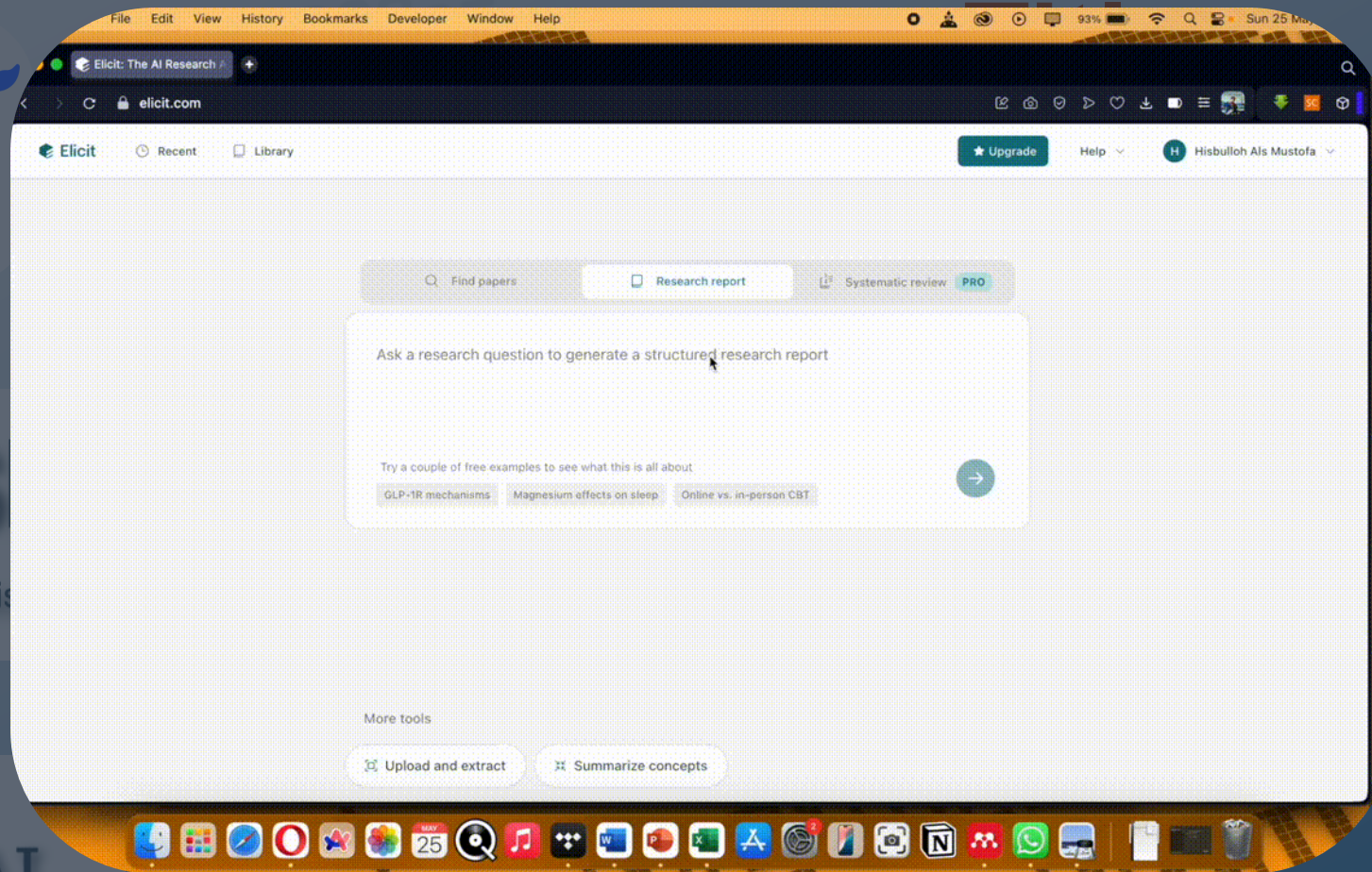
A Fresh Way to Do Statistics

Scopus[®] AI

Trusted content. Powered by responsible AI.

Abstract.
Introductions
Method
Findings
Discussions
Conclusions

Elicit demo



See The Result Example

Analyze research papers at superhuman speed

Automate time-consuming research tasks like summarizing papers,
extracting data, and synthesizing your findings.

Sign Up

TRUSTED BY RESEARCHERS AT



GOV.UK

Google

Stanford



THE WORLD BANK

NASA

Find papers

Research report

Systematic review PRO

bagaimana cara mengukur computational thinking skill calon guru sekolah dasar?

Evaluating question strength...

- Harus click **Research Report** bukan **Find Papers**

Transforming Education: AI, VR, and Adapt... ▴ ▾

● ● ● ● ● Research report View only ▾

Share



How have artificial intelligence, virtual reality, and adaptive learning platforms transformed educational technology implementation in academic institutions over the past five years?

Elicit is building and refining understanding of the research. Your report will become available once all steps are complete. We will email syurga7181@gmail.com when your report is ready (less than 10 minutes).

[Show less](#)

🔄 **Generate report** 8:12 elapsed (5 minutes estimated)

☰ Screened in 10 papers utilizing criteria

- Technology Focus
- Educational Setting
- Implementation Details
- Study Design
- Implementation Duration
- Stakeholder Involvement
- Transformation Evidence

🎯 Extracted 50 data points covering

- Study Design Type
- Research Methods and Data Collection Techniques
- Specific Educational Technologies Examined
- Implementation Context and Educational Setting
- Key Technological Impact and Learning Outcomes

Report

Status ↗



Gather papers

50 papers found



Screen papers

10 papers included



Extract data

50 data points extracted



Generate report

Summarizing findings

Chat ↗

Hang tight — you'll be able to chat with this report once it's generated

Apakah bentuk pembelajaran PGSD terkini di Indonesia berdasarkan pendidikan teknologi?

● Good research question. Consider adding these elements for better results:

Specificity

Comparative approach

Outcome focus



Bagaimana model pembelajaran berbasis teknologi di PGSD Indonesia dibandingkan dengan praktik internasional dalam pendidikan guru sekolah dasar?

● Good research question. Consider adding these elements for better results:

Specificity

Comparative approach

Outcome focus



Bagaimana implementasi teknologi pendidikan dalam kurikulum terkini program studi PGSD di perguruan tinggi Indonesia?

● Good research question. Consider adding these elements for better results:

Specificity

Comparative approach

Outcome focus



Sejauh mana penerapan teknologi pendidikan dalam kurikulum PGSD mempengaruhi kompetensi calon guru sekolah dasar di Indonesia?

● Good research question. Consider adding these elements for better results:

Specificity

Comparative approach

Outcome focus



JUNE 3, 2025

Sejauh mana penerapan teknologi pendidikan dalam kurikulum PGSD mempengaruhi kompetensi calon guru sekolah dasar di Indonesia?

Penggunaan teknologi pendidikan yang terencana dalam program PGSD terbukti meningkatkan kompetensi mengajar esensial calon guru SD di Indonesia, mencakup literasi digital, TPACK, dan keterampilan abad ke-21.

ABSTRACT

Five studies on PGSD programs in Indonesia report that integrating educational technology into the curriculum is linked to improvements in key teaching competencies. * For example, Cintang and Fajriyah (2018) report that a project-based YouTube video approach enhanced digital literacy and 21st-century skills—such as collaboration, communication, and critical thinking—among 150 pre-service elementary teachers. * Similarly, Nurfidah (2021) shows that using digital presentation tools in an Indonesian language course improved Technological Pedagogical and Content Knowledge (TPACK), with notable gains in content organization and slide design among 30 candidates. * Dewi et al. (2024) document that TPACK-based lesson planning with PowerPoint, Quizizz, and YouTube yielded sufficiently good levels in content, pedagogical, and technological knowledge for 42 pre-service teachers, while Listiaji and Subhan (2021) together with Tresnawati et al. (2024) describe improvements in ICT competence and broader digital literacy through varied approaches. *

Key competency improvements appear in the following areas:

1. Digital literacy: enhanced ability to access, evaluate, and manage digital information. *
2. TPACK development: measurable gains in integrating content, pedagogy, and technology. *
3. 21st-century teaching skills: improved collaboration, communication, and creative problem-solving. *

The studies collectively indicate that structured and intentional use of digital tools—ranging from project-based learning and presentation techniques to comprehensive TPACK frameworks—supports the development of competencies essential to elementary school teaching in a technology-rich environment. *

Report

Status

✓

Gather papers
50 papers found

Details ↗

✓

Screen papers
5 papers included

Details ↗

✓

Extract data
30 data points extracted

Details ↗

✓

Generate report

Save PDF

▼

Chat

Ask anything about the report or its underlying data

→



Title.

Abstract.

Introductions

The Indonesian education landscape is currently undergoing a significant transformation, driven largely by rapid technological advancement. The paradigm of education, once centered on rote memorization and teacher-centered instruction, is gradually shifting toward more student-centered and technology-integrated learning environments. This shift is in alignment with global educational trends that emphasize the integration of digital tools to foster higher-order thinking skills, creativity, and independent learning. In the context of Indonesia, such transformation is not merely a pedagogical choice but a necessity, as it seeks to enhance the quality of education and address persistent learning challenges.

Despite numerous reforms, the effectiveness of the Indonesian education system remains a pressing concern, as evidenced by the most recent Programme for International Student Assessment (PISA) results. The 2022 PISA report indicated that Indonesian students scored significantly below the OECD average in reading, mathematics, and science. Specifically, cognitive learning outcomes—defined as the acquisition of knowledge and intellectual skills—remain alarmingly low. These results underscore a systemic issue: the inability of conventional classroom instruction to adequately develop students' cognitive competencies, particularly in science education.

Method

Findings

Discussions

Conclusions



**Generative AI (Chat GPT,
Gemini, or deepseek)
Generate the text body**



**Scopus AI will find citation
for you**



**Title.
Abstract.**

Introductions

The Indonesian education landscape is currently undergoing a significant transformation, driven largely by rapid technological advancement. The paradigm of education, once centered on rote memorization and teacher-centered instruction, is gradually shifting toward more student-centered and technology-integrated learning environments. This shift is in alignment with global educational trends that emphasize the integration of digital tools to foster higher-order thinking skills, creativity, and independent learning. In the context of Indonesia, such transformation is not merely a pedagogical choice but a necessity, as it seeks to enhance the quality of education and address persistent learning challenges (Azman, 2025).

Despite numerous reforms, the effectiveness of the Indonesian education system remains a pressing concern, as evidenced by the most recent Programme for International Student Assessment (PISA) results. The 2022 PISA report indicated that Indonesian students scored significantly below the OECD average in reading, mathematics, and science. Specifically, cognitive learning outcomes—defined as the acquisition of knowledge and intellectual skills—remain alarmingly low. These results underscore a systemic issue: the inability of conventional classroom instruction to adequately develop students' cognitive competencies, particularly in science education.

**Method
Findings
Discussions
Conclusions**

The Prompt.

Give a Role

Give a context

Give a definition

You're a researcher, you want to make a paper titled "the effectiveness of the gamified scratch science game to improve student learning outcome" you need to write an introduction for this article. there are several things you need to pay attention to:

1. Definitions of scratch is the coding block based apps platform that allows you to make educational games
2. the learning outcome in question is only cognitive learning outcomes, not affective and psychomotor then make sure you pay attention to the following outline when compiling introductions
 1. start with the paradigm of Indonesian education, the shift in the paradigm of education due to technology, its implications for the learning level.
 2. describe the research problem, you can start from the latest PISA Indonesia score results, then narrow the problem to the level of learning in the classroom.
 3. how the role of technology, especially the development of gamification, interactive games, and serious games can be a solution to the problem, discuss by paying attention to theories related to gamification.
 4. explain the gap that this research might fill and the state of the art in the current scientific debate.

Write using an academic style and tone and assuming that the reader audience is from academic circles, prevent not using passive words.

Give an outline

Give the writing style

See The Result Example

Title.
Abstract.

Method
Finding
Discussions
Conclusions

Find Quality Citations

The screenshot displays the Scopus AI web interface. At the top, the browser address bar shows the URL www.scopus.com/search/form.uri. Below the address bar, the page header includes the Scopus logo and navigation links: Search, Sources, SciVal, and a user profile icon labeled 'P1'. The main content area is titled 'Start exploring' and features a horizontal menu with options: Documents, Authors, Researcher Discovery, Organizations, and Scopus AI (which is highlighted with a 'New' badge). A toggle switch for 'Temporary conversation' is located below the menu. The text 'Explore topics and discover relevant references since 2003' is displayed above a search input field. The input field contains the placeholder text 'What would you like to learn more about?' and a search button with a right-pointing arrow. Below the input field, there is a link for 'Show conversation history'. The 'Conversation examples' section lists three sample queries: 'What impact do microplastic pollutants have on marine biodiversity in coastal regions?', 'How can international cooperation be improved to effectively address global climate change?', and 'How does chronic sleep deprivation affect cognitive decline in aging populations?'. The bottom of the image shows a macOS-style dock with various application icons.

Brought to you by Universitas Gadjah Mada

Scopus

Search Sources SciVal P1

Start exploring

Documents Authors Researcher Discovery Organizations Scopus AI ^{New}

Temporary conversation ☐

Explore topics and discover relevant references since 2003

What would you like to learn more about?

Show conversation history

Conversation examples

- ↳ What impact do microplastic pollutants have on marine biodiversity in coastal regions?
- ↳ How can international cooperation be improved to effectively address global climate change?
- ↳ How does chronic sleep deprivation affect cognitive decline in aging populations?



Title.

Abstract.

Introductions.

Method

Research Design

This study employed a quasi-experimental research design with a nonequivalent control group pretest-posttest structure. This design was selected to examine the effectiveness of a gamified Scratch-based science learning tool in improving students' cognitive learning outcomes. Two groups were involved in the study: an experimental group that received science instruction through the gamified Scratch game, and a control group that received conventional science instruction. Both groups were given a pretest prior to the intervention and a posttest after the intervention to measure changes in cognitive learning outcomes. The use of a quasi-experimental approach was deemed appropriate due to the constraints in randomly assigning students to groups, as the research was conducted within existing classroom settings.

Instrument

The research instrument consisted of a cognitive achievement test developed based on Bloom's revised taxonomy, specifically targeting the cognitive domains of remembering, understanding, applying, analyzing, and evaluating....

Findings

Discussions

Conclusions

THE PROMPT

Give a detail

Follow up chat...

then create a method section for the article, I will use the quasi-experimental method using equivalent control pre and post design.

create based on this outline

1. research design
2. Instrument, create based on bloom's taxonomy.
3. Population and Sample, use kirjie and morgan statistics by determining the population of 5th grade elementary school students in kodus district as many as 200 people.
4. use descriptive analysis, N-Gain, and T-Test

Give an outline

See The Result Example

Title.

Abstract.

Introduction.

Method

Findings

Discussions

Conclusions



Title.
Abstract.
Introductions.
Method

Findings

Data analysis is done easily using Jasp software

Discussions
Conclusions

Contoh Prompt:

- <https://chatgpt.com/share/683fc4ca-b898-8006-ac99-1a92451da3bd>
- <https://g.co/gemini/share/f7f13d87a488>
- <https://g.co/gemini/share/5f8436c67ec7>

Sumber Rujukan Benar

- Mohon kamu sediakan link sumber rujukan daripada penerbit jurnal berimpak tinggi seperti Elsevier, Taylor and Francis, Sage, Wiley, Springer Nature, Emerald, Plos One dan MDPI dalam penulisan jurnal tadi.

Mohon kamu sediakan link sumber rujukan daripada penerbit jurnal berimpak tinggi seperti Elsevier, Taylor and Francis, Sage, Wiley, Springer Nature, Emerald, Plos One dalam penulisan jurnal tadi.

Berikut adalah beberapa sumber rujukan dari jurnal berimpak tinggi yang relevan dengan topik "Sejauh Mana Penerapan Teknologi Pendidikan dalam Kurikulum PGSD Mempengaruhi Kompetensi Calon Guru Sekolah Dasar di Indonesia":

Sumber Rujukan dari Jurnal Berimpak Tinggi

1. Springer Nature

- **Judul:** *Technology integration in teacher education: challenges and adaptations in the post-pandemic era*
- **Ringkasan:** Artikel ini membahas tantangan dan adaptasi dalam integrasi teknologi dalam pendidikan guru pasca pandemi, dengan fokus pada konteks negara berkembang.
- **Tautan:** link.springer.com link.springer.com +1

2. SpringerOpen

- **Judul:** *How does technology challenge teacher education?*
- **Ringkasan:** Studi ini mengeksplorasi tantangan yang dihadapi dalam pendidikan guru terkait integrasi teknologi, termasuk kompetensi pedagogis dan teknis calon guru.
- **Tautan:** educationaltechnologyjournal.springeropen.com educationaltechnologyjournal.springeropen.com

3. MDPI (Multidisciplinary Digital Publishing Institute)

- **Judul:** *Educational Transformation Through Emerging Technologies: Critical Review of Scientific Impact on Learning*
- **Ringkasan:** Artikel ini meninjau dampak teknologi baru dalam pendidikan dan pentingnya model TPACK dalam pelatihan guru.



Data Analysis Using Jasp

data effectivity* (/Users/hisbul/Documents/MY PAPER/bu lka)

	Pretest_con	Posttest_con	pretest_exp	posttest_exp
1	35	50	65	80
2	65	65	45	85
3	40	65	40	90
4	45	60	55	85
5	50	75	50	75
6	45	60	45	70
7	35	60	30	65
8	55	50	60	75
9	55	60	45	85
10	30	75	50	80
11	40	60	40	75
12	60	60	65	80
13	40	65	55	75
14	60	65	60	80
15	45	65	50	65
16	50	65	40	60
17	60	65	60	70
18	35	50	60	65
19	55	65	55	90
20	40	50	50	75
21	65	65	45	70

AI Writing Tools



Grammarly

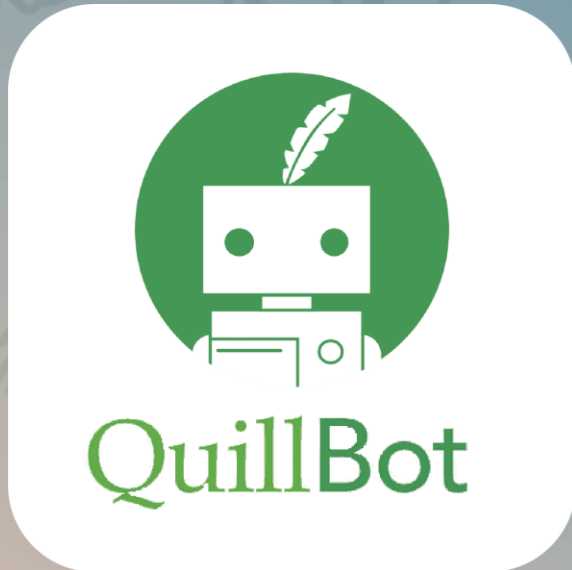
Main Functions:

- Checks grammar, spelling, and punctuation.
- Offers suggestions for writing style and clarity.
- Plagiarism detection (premium version).

Usage:

- Helps with writing emails, essays, reports, and academic articles.
- Available on Word, browsers, and mobile devices.

AI Writing Tools



QuillBot

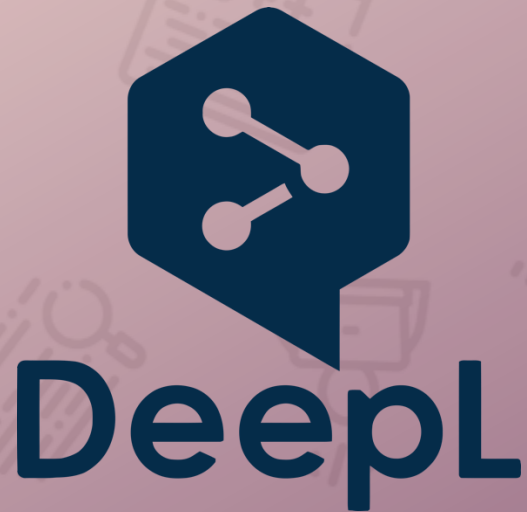
Main Functions:

- Automatic paraphrasing with various writing modes (standard, formal, creative, etc.).
- Text summarization tool.
- Grammar checker and other writing tools.

Usage:

- Helps rewrite sentences to sound more natural or diverse.
- Useful for avoiding plagiarism and improving writing style.

AI Writing Tools



DeepL

Main Functions:

- High-quality translation of text.
- Understands sentence context, not just word-for-word.
- Supports many languages.

Usage:

- Translates academic or business documents with natural results.
- Useful for students and multilingual writers.



Scopus

 Search [Lists](#)

Start exploring

Documents Authors Researcher Discovery Organizations **Scopus AI** New

Explore topics and discover relevant references since 2003

Sejauh mana penerapan teknologi pendidikan dalam kurikulum PGSD mempengaruhi kompetensi calon guru sekolah dasar di Indonesia?

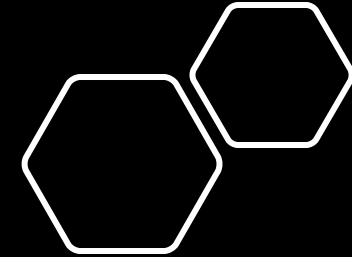


Conversation history

[Sign in](#) or [create account](#) to save and revisit your conversations.

Conversation examples

- ↳ What impact do microplastic pollutants have on marine biodiversity in coastal regions?
- ↳ How can international cooperation be improved to effectively address global climate change?
- ↳ How does chronic sleep deprivation affect cognitive decline in aging populations?





Conversation history

[Sign in](#) or [create account](#) to save and revisit your conversations.

Sejauh mana penerapan teknologi pendidikan dalam kurikulum PGSD mempengaruhi kompetensi calon guru sekolah dasar di Indonesia?

[Show Copilot steps](#)

Summary

Impact of Educational Technology Implementation on the Competence of Prospective Primary School Teachers in Indonesia

The integration of educational technology into the curriculum for Primary School Teacher Education (PGSD) in Indonesia has shown significant potential in enhancing the competencies of prospective primary school teachers. Here are the key findings based on the provided abstracts:

Digital Competence Development

- Digital Competence:** The development of digital competence is crucial for teachers to meet the demands of 21st-century education. Research indicates that structured training programs, such as the SMART steps (Selection, Management, Actualization, Reflection, and Training Assessment), can effectively improve digital competence among primary school teachers [1](#). This structured approach ensures that teachers are well-prepared to integrate technology into their teaching practices.
- ICT Utilization:** Despite the importance of ICT, many primary school teachers in Indonesia have not fully utilized these technologies in their teaching. Only a small percentage (32%) of teachers possess good pedagogic competence and effectively use ICT in their classrooms [2](#). This highlights a gap that needs to be addressed through targeted training and curriculum adjustments.

Pedagogical Competence and Technology Integration

- Pedagogical Competence:** The integration of technology into the curriculum can enhance pedagogical competence. For instance, the use of Augmented Reality (AR) in STEAM education has been shown to motivate future teachers and improve their competencies in digital literacy and technical skills [3](#). This suggests that incorporating innovative technologies can make learning more engaging and effective.
- E-Learning Impact:** E-learning has positively impacted student activities and learning outcomes. Studies show that e-learning courses in the PGSD program have equipped students with the skills to develop and use various digital platforms effectively, even in underdeveloped areas [4](#). This indicates that e-learning can bridge the gap in technological literacy among prospective teachers.

References

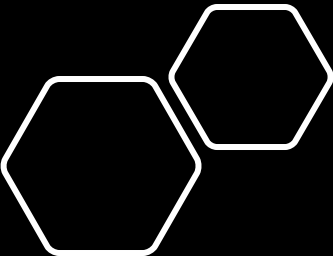
Reference 1
SMART for the Improvement of Primary School Teachers' Digital Competence in the 21st Century: An Action Research Study
[Syahid A.A.](#), [Herry Hernawan A.](#), [Dewi L.](#)
International Journal of Learning, Teaching and Educational Research [1](#)
2023

Reference 2
ICT competences of primary school teachers
[Syahid A.A.](#), [Sunarya D.T.](#), [Sudin A.](#), (...), [Karlina D.A.](#)
Journal of Physics: Conference Series [1](#) 2019

Reference 3
Enhancing STEAM Education with AR: A Primary Education Teacher Training Study
[Guncaga J.](#), [Korenova L.](#), [Severini E.](#)
Proceedings of the European Conference on e-Learning, ECEL [1](#)
2024

[Show all 6 references](#)

Foundational documents



Challenges and Recommendations

- **Challenges:** Several challenges hinder the effective use of educational technology, including limited facilities, lack of ready-made educational software, and a demanding curriculum [5](#). Additionally, there is a need for better cooperation between educational institutions to support technology integration [6](#).
- **Recommendations:** To overcome these challenges, it is recommended to:
 - **Enhance Training Programs:** Implement comprehensive training programs that focus on digital competence and pedagogical skills [1](#) [2](#).
 - **Curriculum Adjustments:** Revise the curriculum to include more technology-focused courses and practical applications [4](#).
 - **Support and Resources:** Provide adequate resources and support for teachers to integrate technology into their teaching practices effectively [5](#) [6](#).

Conclusion

The implementation of educational technology in the PGSD curriculum has the potential to significantly improve the competencies of prospective primary school teachers in Indonesia. However, to fully realize this potential, it is essential to address the existing challenges through targeted training, curriculum adjustments, and adequate support and resources. By doing so, future teachers will be better equipped to meet the demands of modern education and enhance student learning outcomes.



Expanded summary



Insights at a glance



Concept Map



Topic Experts



Emerging Themes

Go deeper



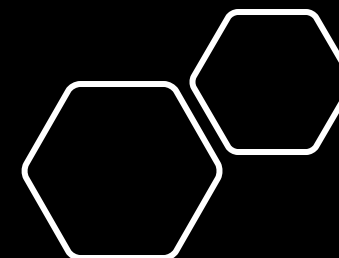
What are the specific educational technology tools integrated into the PGSD curriculum for prospective elementary school teachers in Indonesia?



How do the competencies of prospective elementary school teachers in Indonesia change after the integration of educational technology in the PGSD curriculum?



What are the challenges and opportunities associated with implementing educational technology in the PGSD curriculum?



technology into their teaching practices effectively [5](#) [6](#).

Conclusion

The implementation of educational technology in the PGSD curriculum has the potential to significantly improve the competencies of prospective primary school teachers in Indonesia. However, to fully realize this potential, it is essential to address the existing challenges through targeted training, curriculum adjustments, and adequate support and resources. By doing so, future teachers will be better equipped to meet the demands of modern education and enhance student learning outcomes.



References

Foundational documents

Expanded summary

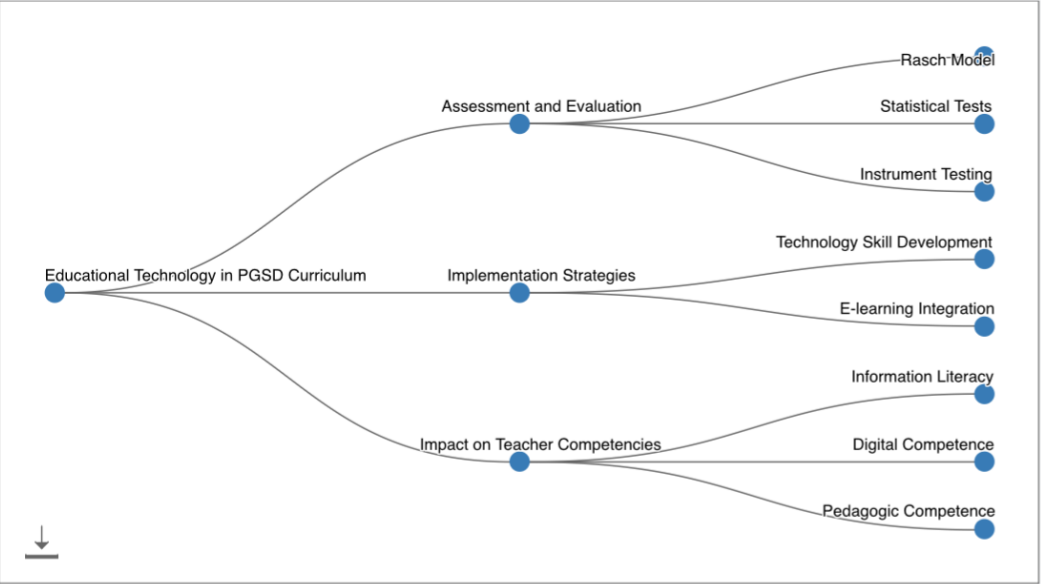
Insights at a glance

- 📖 Concept Map
- 👤 Topic Experts
- 💡 Emerging Themes

Go deeper

- ↳ What are the specific educational technology tools integrated into the PGSD curriculum for prospective elementary school teachers in Indonesia?
- ↳ How do the competencies of prospective elementary school teachers in Indonesia change after the integration of educational technology in the PGSD curriculum?
- ↳ What are the challenges and opportunities associated with implementing educational technology in the PGSD curriculum for prospective elementary school teachers in Indonesia?

Concept Map



Thank you for your feedback.

- imersif dapat meningkatkan hasil belajar dan keterlibatan siswa dalam pembelajaran matematika [7](#).
- **Pembelajaran Hibrida:** Model pembelajaran hibrida berbasis Teknologi Pedagogi dan Pengetahuan Konten (TPACK) dapat meningkatkan keterampilan berpikir komputasional siswa secara valid, praktis, dan efektif [8](#).

Secara keseluruhan, penerapan teknologi pendidikan dalam kurikulum PGSD di Indonesia memiliki potensi besar untuk meningkatkan kompetensi calon guru sekolah dasar, terutama dalam hal kompetensi digital dan pedagogik. Namun, tantangan seperti keterbatasan infrastruktur dan kebutuhan pelatihan yang berkelanjutan perlu diatasi untuk mencapai hasil yang optimal.



References	✓
Foundational documents	✗
Expanded summary	✓

Insights at a glance

- 📖 Concept Map
- 👥 Topic Experts
- 💡 Emerging Themes

Go deeper

- ↳ What are the specific educational technology tools integrated into the PGSD curriculum for prospective elementary school teachers in Indonesia?
- ↳ How do the competencies of prospective elementary school teachers in Indonesia change with the integration of educational technology in the PGSD curriculum?
- ↳ What are the challenges and opportunities associated with implementing educational technology in the PGSD curriculum for prospective elementary school teachers in Indonesia?

Integration of Artificial Intelligence in Educational Practices Consistent Theme

The integration of artificial intelligence (AI) in educational practices has been a consistent theme, reflecting steady interest and ongoing research. This theme encompasses the use of AI to enhance teaching methodologies, personalize learning experiences, and improve educational outcomes. The consistent presence of this theme indicates its established importance and potential for continued impact in the field of educational technology.

[Show references](#)

Potential Hypotheses:

- [AI-driven personalized learning can significantly improve student engagement and academic performance in primary education](#)
- [The integration of AI in teacher training programs can enhance the effectiveness of teaching methods and curriculum delivery](#)

Technology-Enhanced Learning Environments Consistent Theme

The development and implementation of technology-enhanced learning environments have been a consistent focus in educational research. This theme includes the use of digital tools, augmented reality, and other advanced technologies to create interactive and immersive learning experiences. The consistent interest in this area highlights its critical role in modernizing education and improving learning outcomes.

[Show references](#)

Potential Hypotheses:

- [Augmented reality can enhance student understanding and retention of complex concepts in primary education](#)
- [Technology-enhanced learning environments can bridge the gap between theoretical knowledge and practical application in teacher training programs](#)

Flipped Learning and Digital Laboratories Novel Theme

The novel theme of flipped learning and digital laboratories has emerged as a significant area of interest. This theme explores the impact of flipped classroom models and the use of digital laboratories on student engagement and learning outcomes. The novelty of this theme suggests a growing recognition of the benefits of these innovative educational approaches.

[Show references](#)



Terima Kasih