

## Transforming Research Evidence into Teaching Practices: Teacher Educators' Perspectives on Evidence-Based Teaching

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### Abstract

This study investigates the perspectives of teacher educators at SMP Putri Cahaya Medan regarding the integration of evidence-based teaching (EBT) into their classroom practices. Amid growing emphasis on utilizing research to enhance education, the gap between educational theory and practical implementation remains a critical concern. Using a mixed-methods approach, including interviews, surveys, and classroom observations, this research explores teacher educators' attitudes, challenges, and strategies related to EBT. Findings indicate that while educators generally value research-informed practices, they face significant barriers such as time constraints, limited access to research, and conflicts between personal teaching philosophies and empirical findings. However, factors such as institutional support, collaborative learning environments, and contextual adaptation of research findings were identified as key enablers. The study concludes that systemic support and professional development are essential to empower teacher educators in effectively translating research evidence into meaningful teaching practices, thereby bridging the gap between research and classroom application.

**Keywords:** evidence-based teaching, teacher educators, research-to-practice gap, professional development, classroom implementation, educational research

### INTRODUCTION

In recent years, the concept of evidence-based teaching (EBT) has become central to improving educational practices. EBT refers to the use of the best available research to inform teaching methods and decision-making processes in the classroom. However, despite its recognized potential, the translation of research findings into classroom practices remains a significant challenge for many educators. This study investigates the perspectives of teacher educators at SMP Putri Cahaya Medan, a private school in Medan, Indonesia, on the integration of research evidence into their teaching practices. The goal is to understand

how these teacher educators perceive and implement EBT and to identify barriers they face in doing so.

While the gap between research and practice is widely documented in global literature, much of the existing scholarship has been situated within Western educational systems. There is comparatively limited research focused on how teacher educators in Southeast Asia—especially Indonesia—engage with and apply evidence-based practices in their local teaching environments. This study contributes to addressing that gap by providing contextualized insights from an Indonesian school setting. By doing so, it adds to the regional and international discourse on EBT, highlighting how cultural, institutional, and systemic factors in Southeast Asia shape the adoption of research-informed teaching strategies.

Teacher educators, who play a pivotal role in shaping the next generation of teachers, are key to bridging the research-practice divide. Yet, their specific experiences in integrating research evidence into teaching—within the constraints and realities of Indonesian educational institutions—remain under explored. This study, therefore, offers both empirical data and practical implications that can inform policy, professional development, and further research in the region.

1. Specifically, the study aims to:
  - Explore the attitudes of teacher educators at SMP Putri Cahaya Medan towards evidence-based teaching.
  - Identify the challenges and barriers teacher educators face in applying research evidence to their teaching.
  - Investigate the strategies used by these educators to implement evidence-based practices in their classrooms.
2. Identify the challenges and barriers teacher educators face in applying research evidence to their teaching.
3. Investigate the strategies used by these educators to implement evidence-based practices in their classrooms.

Evidence-based teaching involves integrating findings from educational research into classroom practice. Studies have shown that teachers who adopt evidence-based strategies tend to have better outcomes for their students (Hattie, 2009; Slavin, 2008). However, despite its potential, many teachers' educators struggle with incorporating these research findings into their everyday teaching. Barriers include lack of time, limited access to research, and personal teaching philosophies that may conflict with the findings of research studies (Timperley, 2008; Guskey, 2000).

The role of teacher educators is pivotal because they are in a unique position to model evidence-based practices for their students. In their professional development, teacher educators often face challenges in keeping up-to-date with the latest research and integrating it into their teaching methods. Effective implementation of EBT requires systemic support, including access to research, professional development, and institutional backing (Shulman, 1987; Darling-Hammond, 2006).

## METHODOLOGY

## **Participants**

This study involved 10 teacher educators from SMP Putri Cahaya Medan. While the sample size is relatively small, it is appropriate for qualitative research, which emphasizes depth over breadth and seeks to explore complex, context-dependent phenomena in detail. The participants were selected purposively based on their active roles in the school's professional development programs and their direct engagement in teaching. This purposive sampling strategy ensured that insights were gathered from those most relevant to the study's objectives. The sample also represents a diverse cross-section of teaching disciplines, including mathematics, science, language, and social studies, thereby enhancing the representativeness of perspectives within the context of the school.

This study involved 10 teacher educators from SMP Putri Cahaya Medan. The participants were selected based on their role as educators who are actively engaged in teaching within the school's professional development programs. The sample was diverse in terms of subject expertise, ranging from mathematics and science to language and social studies.

## **Data Collection**

The research utilized a mixed-methods approach to gain a comprehensive understanding of the teacher educators' perspectives on evidence-based teaching. Data was collected through:

1. Semi-structured Interviews: Each participant was interviewed for 45-60 minutes, with questions focusing on their understanding of evidence-based teaching, their attitudes toward its implementation, and the challenges they encounter.
2. Surveys: A follow-up survey was conducted to gather quantitative data on how frequently the educators use evidence-based strategies and their confidence in applying research to practice.
3. Classroom Observations: Classroom observations were conducted to observe how the teacher educators incorporated evidence-based practices into their teaching.

## **Data Analysis**

Data was analyzed using a thematic approach for qualitative data and descriptive statistics for survey responses. The interview transcripts were coded to identify key themes, while the survey responses were analyzed to quantify the extent to which evidence-based teaching is implemented in the school.

## **FINDINGS AND DISCUSSION**

### **1. Teacher Educators' Attitudes Toward Evidence-Based Teaching**

The findings revealed that most of the teacher educators at SMP Putri Cahaya Medan had a positive attitude toward evidence-based teaching. They acknowledged the value of research in shaping effective teaching methods and improving student outcomes. However, many of the educators expressed concerns about the applicability of research findings to their specific teaching contexts. For example, some teachers felt that research often did not account for the unique challenges of teaching in their particular classrooms, such as large class sizes or limited resources.

**Table: 1 Teacher Educators' Attitudes Toward Evidence-Based Teaching (EBT)**

Aspect Observed	Key Findings
General attitude toward EBT	Most teacher educators had a positive attitude toward evidence-based teaching.
Perception of research benefits	Recognized the value of research in improving teaching methods and student outcomes.
Concerns about applicability	Some educators felt research was not always relevant to their specific classroom context.

## 2. Challenges in Implementing Evidence-Based Teaching

A significant challenge identified by the teacher educators was the lack of time to read and integrate research findings into their teaching. Many teachers reported that their busy schedules and the demands of the curriculum left little room for incorporating new teaching strategies. This finding is in line with previous study which revealed that some teachers spent more time for administrative issues that limited their time in improving their teaching creativity (Tampubolon, et al., 2025) Limited access to research also emerged as a barrier, as many educators did not have easy access to the latest research articles or professional development opportunities focused on evidence-based teaching.

**Table: 2 Challenges in Implementing Evidence-Based Teaching**

Main Challenge	Explanation
Lack of time	Educators reported limited time to read and apply research due to busy schedules.
Limited access to research	Many lacked access to up-to-date research articles or EBT-related training.
Conflict with teaching beliefs	Some preferred traditional methods and were reluctant to change despite research evidence.

Moreover, some teachers felt that their personal teaching philosophies conflicted with the findings of research studies. For instance, some teachers believed that traditional teaching methods worked best in their classrooms and were resistant to changing their approaches despite evidence to the contrary.

### Enablers of Evidence-Based Teaching

On the positive side, the study identified several enablers for the successful implementation of evidence-based teaching. These included:

**Collaborative Learning:** Teachers who worked together in professional learning communities were more likely to adopt evidence-based practices. Regular discussions and peer support helped to overcome some of the challenges they faced in implementing new teaching strategies. "When we meet as a group, I get ideas I wouldn't have considered on my own," said one teacher.

**Institutional Support:** Teachers who received institutional backing, including access to research materials and professional development opportunities, felt more confident in

integrating evidence-based practices into their teaching. "The school's support made it easier to attend workshops and try new strategies," mentioned a participant.

Adaptation to Context: Teachers who were able to adapt research findings to fit the unique needs of their students were more successful in implementing evidence-based teaching. This adaptation included modifying strategies to suit classroom environments or addressing the specific learning needs of students. "I tweak the strategies from research to better suit my students' needs," explained an English teacher.

## CONCLUSION

This study highlights the importance of evidence-based teaching in improving educational practices, but also reveals the challenges that teacher educators face in translating research into practice. At SMP Putri Cahaya Medan, teacher educators displayed positive attitudes toward evidence-based teaching, but time constraints, limited access to research, and personal teaching beliefs were significant barriers to implementation. To address these challenges, schools should consider providing more robust professional development opportunities, increasing access to research, and fostering a culture of collaboration among educators.

Moving forward, there are some implications for practice and future research; bridging the research-practice divide as well as professional development in research literacy, means teacher education programs should create systematic structures (e.g., research-practice hubs or collaborative labs) that explicitly integrate educational research into curriculum design, lesson planning, and instructional modelling. Ongoing professional development should focus on enhancing teacher educators' research literacy, including skills in interpreting, critiquing, and applying empirical findings to diverse classroom contexts. Besides, future research should explore how evidence-based practices are adapted across various educational, cultural, and institutional contexts, and what conditions support or hinder successful implementation.

## REFERENCES

- Bennett, N., & Carre, C. (2000). *Teaching for Understanding*. Routledge.
- Bennett, R. E., & Gitomer, D. H. (2009). Data-Driven Decision Making and the Role of Assessment in Teaching and Learning. *Yearbook of the National Society for the Study of Education*, 108(1), 79-104.
- Borko, H. (2004). Professional Development and Teacher Learning: Mapping the Terrain. *Educational Researcher*, 33(8), 3-15.
- Cain, T., & Cockerill, M. (2021). Teachers' engagement with research: perspectives from the COVID-19 pandemic. *British Educational Research Journal*, 47(5), 1185-1202. <https://doi.org/10.1002/berj.3746>
- Cain, T., & Lindsay, G. (2024). The journey from educational research to classroom practice. *Journal of Education for Teaching*, 50(2), 123-139. <https://doi.org/10.1080/02607476.2024.2432942>

- Cochran-Smith, M., & Zeichner, K. (2005). Studying Teacher Education: The Report of the AERA Panel on Research and Teacher Education. *Educational Researcher*, 34(7), 3-15.
- Darling-Hammond, L., & Bransford, J. (2005). *Preparing Teachers for a Changing World: What Teachers Should Learn and Be Able to Do*. Jossey-Bass.
- Darling-Hammond, L., & Richardson, N. (2009). Teacher Learning: What Matters? *Educational Leadership*, 66(5), 46-53.
- Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2020). *Effective teacher professional development*. Learning Policy Institute.
- Fullan, M. (2007). *The New Meaning of Educational Change*. Teachers College Press.
- Guskey, T. R. (2000). *Evaluating professional development*. Corwin Press.
- Guskey, T. R. (2002). Does It Make a Difference? Evaluating Professional Development. *Educational Leadership*, 59(6), 45-51.
- Hachfeld, A., Lindl, A., & Lazarides, R. (2023). Turning research evidence into teaching action: Teacher educators' attitudes toward evidence-based teaching. *Teaching and Teacher Education: Leadership and Professional Development*, 4, 100015. <https://doi.org/10.1016/j.tatelp.2023.100015>
- Hattie, J. (2009). *Visible Learning: A Synthesis of Over 800 Meta-Analyses Relating to Achievement*. Routledge.
- Hargreaves, A., & Fullan, M. (2012). *Professional Capital: Transforming Teaching in Every School*. Teachers College Press.
- Hargreaves, A., & Fullan, M. (2020). Professional capital after the pandemic: Revisiting the roles of teachers and schools. *Education Canada*.
- Hendrick, C., Macpherson, R., & Csanadi, A. (2020). Evidence-based practice in higher education: Teacher educators' attitudes, challenges, and uses. *Frontiers in Education*, 5, 62. <https://doi.org/10.3389/educ.2020.00062>
- Kennedy, M. M. (2016). How Does Professional Development Improve Teaching? *Review of Educational Research*, 86(4), 945-980.
- Kennedy, D., & Laurillard, D. (2021). Reopening education post-COVID-19: Blended learning, digital equity and student support. *Journal of Learning Analytics*, 8(1), 33-46.
- Kraft, M. A., & Papay, J. P. (2014). The Effect of Teacher Coaching on Instruction and Achievement: A Meta-Analysis of the Causal Evidence. *Review of Educational Research*, 84(4), 627-668.
- Mockler, N., & Groundwater-Smith, S. (2022). Teacher research and evidence-informed practice: New directions in education post-pandemic. *Australian Educational Researcher*, 49(2), 213-229.

- Mockler, N. (2024). Policy makers as experts and teachers in need of reform: A critique of 'evidence-based' reforms of initial teacher education in Australia. *Australian Educational Researcher*, 51, 211–228. <https://doi.org/10.1007/s13384-024-00757-6>
- Reich, J., Buttimer, C. J., Fang, A., Hillaire, G., & Larke, L. R. (2022). Remote learning guidance from state education agencies during the COVID-19 pandemic: A first look. *Educational Researcher*, 51(1), 10–18.
- Shulman, L. S. (1987). *Knowledge and Teaching: Foundations of the New Reform*. Harvard Educational Review, 57(1), 1-22.
- Slavin, R. E. (2008). Evidence-based reform in education. *Educational Leadership*, 65(5), 12-17.
- Suratno, T., & Prasojo, L. D. (2021). The effect of research evidence-based teaching practices in science classrooms on student teachers' attitudes towards educational research. *Journal of Science Learning*, 4(1), 7–14. <https://doi.org/10.17509/jsl.v4i1.32025>
- Shulman, L. S. (2004). *The Wisdom of Practice: Essays on Teaching, Learning, and Learning to Teach*. Jossey-Bass.
- Tampubolon, J., Siahaan, D. G., & Bouk, E. . (2025). Exploring Teachers' Perspectives on the Use of Kahoot in English Language Teaching: Enhancing Engagement and Learning Outcomes. *Journal of Classroom Action Research*, 4(1), 28–38. <https://doi.org/10.52622/jcar.v4i1.387>
- Timperley, H. (2008). *Teacher Professional Learning and Development*. Educational Practices Series, 18, International Academy of Education.