

THE RELATIONSHIP BETWEEN TEACHER SELF-DEVELOPMENT AND SUCCESS IN IMPROVING STUDENT ACHIEVEMENT IN THE ERA OF INDEPENDENT CURRICULUM IMPLEMENTATION: QUALITATIVE STUDIES

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Abstract

In the context of Indonesia's independent curriculum implementation, this qualitative study investigated the connection between teacher self-improvement and student achievement success. Semi-organized interviews were directed with 50 Indonesian educators, and the information was analyzed using a topical examination. The discoveries recommend that instructor self-improvement influences the execution of the autonomous educational plan and understudy accomplishment. Time constraints, lack of resources, and motivation were identified as supporting or hindering teacher self-development. It was discovered that the leadership of a school plays a crucial role in encouraging teacher self-development. The study suggests that educators, school administrators, and educational policymakers should encourage and support teacher self-development to improve school teaching and learning. Both the effects of teacher self-development on other outcomes and the obstacles and facilitators to teacher self-development require additional research.

Keywords: Teacher self-development, Student achievement, Independent curriculum implementation, Qualitative study, Thematic analysis.

INTRODUCTION

Many nations, including Indonesia, have adopted independent curricula to promote more student-centered and interdisciplinary learning and improve student-

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learning outcomes (UNESCO, 2017; Tan, 2018). The Kurikulum 2013, a competency-based curriculum that aims to develop student's skills and competencies, was launched in 2013 by the Indonesian government (Ministry of Education and Culture, 2013). According to Suyanto (2018), the curriculum emphasizes student-centered learning, necessitating teachers' thorough comprehension of the material and ability to implement it effectively. However, research indicates that teachers' involvement in the implementation process is crucial to the success of curriculum implementation (Fullan, 2014; 2017).

Putting a new curriculum into place in education systems is frequently a complex process requiring teachers' involvement and dedication (Fullan, 2014). According to Suyanto (2018), the success of the Kurikulum 2013 in Indonesia's independent curriculum implementation is mainly dependent on teachers' ability to implement the curriculum effectively. Conversely, teachers must be adequately prepared or trained to implement a new curriculum (Munir, 2019) successfully. Teacher self-development is essential to implement any curriculum (Denton, 2021) successfully. According to Alkahtani & Alghamdi (2002), teachers who invest in their professional development can better meet the requirements of new curricula and deliver high-quality instruction to their students.

In recent years, there has been a growing interest in the connection between student achievement and teacher professional development. Effective teacher professional development has been shown in studies to impact student learning outcomes (Desimone, 2009) significantly. Additionally, higher levels of teacher efficacy, job satisfaction, and student achievement are all linked to teacher self-development, an essential component of teacher professional development (Karabulut & Demir, 2019). However, there is a need for additional research into the connection between teacher self-development and student achievement in the context of independent curriculum implementation in Indonesia, despite the growing body of research on the significance of teacher professional development. It is essential to investigate this relationship to provide insights into how teacher professional development initiatives can be designed and implemented more effectively in the Indonesian context, given the significance of teacher self-development in successfully implementing new curricula.

Additionally, teacher self-development and other factors like school leadership, resources, and support are critical to the success of independent curriculum implementation (OECD, 2019). Therefore, it is essential to investigate the intricate interactions between these elements and how they affect the successful performance of the independent curriculum in Indonesian schools. In conclusion, Indonesia's implementation of a separate curriculum has demonstrated how important teachers are to the success of curriculum implementation. However, there needs to be more research on the connection between teacher self-development and student achievement in this setting. As a result, this research aims to fill a void in the existing

body of knowledge by examining the connection between teacher self-development and achievement gains in student achievement during Indonesia's independent curriculum implementation.

In addition, research on the connection between educator self-advancement and understudy accomplishment concerning autonomous educational plan execution in Indonesia is restricted. The benefits and drawbacks of implementing the new curriculum have been the subject of research (Aulia, 2020; According to Harsono & Widodo (2019), and there is a need for additional research into the connection between teacher self-improvement and student achievement in this setting. As a result, this research aims to fill this void in the existing body of knowledge by investigating the connection between teacher self-development and the achievement of higher levels of student achievement during Indonesia's independent curriculum implementation.

In Indonesia's independent curriculum implementation era, this qualitative study investigates the connection between teacher self-development and success in increasing student achievement. The study will look at how teachers think self-improvement is essential and how that affects how well they can use the new curriculum. The study will also discuss the challenges and opportunities of teacher self-development in the context of independent curriculum implementation.

In the era of Indonesia's independent curriculum implementation, this study investigates the connection between teacher self-development and success in increasing student achievement. The study was guided by the following research questions to achieve this goal; 1) In the context of independent curriculum implementation, how do Indonesian teachers view the significance of self-improvement?. 2) How much do Indonesian teachers participate in self-improvement activities, and how does this affect their use of the independent curriculum?. 3) What variables support or ruin educator self-advancement about free educational program execution in Indonesia?. 4) In the context of Indonesia's independent curriculum implementation, what is the relationship between teacher self-development and student achievement?. 5) These research questions were formulated based on the gaps identified in the literature review regarding the limited research on the relationship between teacher self-development and student achievement in the context of independent curriculum implementation in Indonesia.

In addition, these inquiries align with the current trends and issues that confront Indonesia's educational system, such as the requirement for more efficient professional development programs for teachers to support the independent curriculum's implementation (OECD, 2019). The theoretical framework of self-efficacy theory, which asserts that teachers' self-beliefs and participation in self-development activities are crucial determinants of their effectiveness in the classroom, serves as a foundation for the research questions.

For many stakeholders, the significance of the study on the connection between teacher self-development and student achievement improvement in the era of independent curriculum implementation is crucial. Day and Gu (2010) conducted a study that emphasized the significance of teacher professional development for raising student achievement. The review features the urgent job of educator information, abilities, and mentalities in forming homeroom instructing and learning quality. The study's findings suggest that teacher self-development should be supported by ongoing professional development tailored to teachers' needs. Darling-Hammond et al. conducted a second study (2017) emphasizing the significance of continuing professional development for teachers and teacher preparation in raising student achievement. The study's findings indicate that classroom management techniques, content knowledge, and pedagogical skills should be the primary focus of teacher professional development programs. The study also emphasizes the significance of coaching, mentoring, and collaborative learning in fostering teacher self-development.

A third report by Fullan and Langworthy (2014) underscores the significance of educator authority in driving instructive change and further developing understudy accomplishment. According to the study's findings, teacher leadership can be crucial in encouraging self-improvement and fostering a culture of continuous improvement. In addition, the study emphasizes the significance of cultivating strong relationships between educators, school administrators, and policymakers to encourage teacher professional development. In conclusion, these and other studies' crucial citations support the importance of the survey on the relationship between teacher self-development and success in improving student achievement in the era of independent curriculum implementation. This study's findings highlight the importance of ongoing professional learning and collaboration to support teacher self-development, improve student learning outcomes, and have practical implications for education policy and practice.

The following are some key terms that can be defined about the connection between teacher self-development and student achieving success in the independent curriculum era: Teacher self-development: "Teacher self-development is the process of acquiring and enhancing the knowledge, skills, and attitudes needed to improve teaching and student learning outcomes" (Guskey & Yoon, 2009); 1) Student achievement: "Student achievement refers to the level of knowledge, skills, and abilities that students have attained at a particular point in time or after a specific period of instruction" (Reeves, 2008); 2) Independent curriculum implementation: "Independent curriculum implementation refers to the process of schools and teachers developing their curriculum based on local and national goals, rather than following a pre-designed or mandated curriculum" (Earl & Fullan, 2003); 3) Relationship between teacher self-development and student achievement: "The relationship between teacher self-development and student achievement refers to the connection between the professional growth of teachers and their students' academic success. It suggests

that when teachers engage in ongoing learning and development, they are better equipped to meet the needs of their students, leading to improved learning outcomes" (Guskey, 2002).

RESEARCH METHOD

Methodology and design of the Quantitative, qualitative, or mixed methods research designs can be used to investigate the connection between teacher self-improvement and achievement gains in the independent curriculum era. Using surveys, questionnaires, or standardized tests, numerical data are gathered quantitatively. This method may make correlations between teacher self-development and student achievement easier. A study by Akiba et al., (2014) for instance examined the connection between mathematics student achievement and teacher professional development using a quantitative method. According to the study, teacher professional development improved student achievement. Through interviews, observations, or case studies, non-numerical data are gathered qualitatively. This method can assist in comprehending the intricate factors that influence teacher self-development and student achievement. For instance, Tschanen-Moran and Barr (2004) used a qualitative approach to investigate the connection between student achievement and teacher self-efficacy. The investigation discovered that educator self-viability was an area of strength for an understudy accomplishment.

We used a mixed-methods approach to better collect quantitative and qualitative data from comprehending the connection between teacher self-development and student achievement. Take, for instance, a study by Yoon et al. (2007) that examined the impact of teacher professional development on mathematics achievement among students using a mixed-methods approach. The study found that combining quantitative and qualitative data made comprehending the complicated connection between student achievement and teacher professional development easier. The research questions, data availability, and resources should all be considered when selecting a method for examining the connection between teacher self-development and student achievement improvement in the independent curriculum era.

Participants and sampling

Teachers with prior experience teaching under the independent curriculum system made up the sample for this study. The example included male and female educators from different instructive levels, like rudimentary, center, and secondary school. Additionally, teachers who had participated in self-development programs to enhance their knowledge and abilities were included in the sample. A purposive examining strategy was utilized to choose members for this review. A non-probability sampling method, "purposive sampling," entails selecting study participants who meet particular criteria (Palinkas et al., 2015). The researcher used the sampling method to select participants with relevant experience and knowledge of the independent curriculum system. According to Krejcie & Morgan (1970), the required precision level, the population's variability, and the study's research question should all be taken into consideration when determining the sample size. The example size should be

sufficiently enormous to guarantee the legitimacy and unwavering quality of the review's discoveries while being commonsense regarding time and assets. The researchers contacted school administrators to obtain their permission to conduct the study and get their assistance in recruiting participants. Informed consent was obtained from all members before they were remembered for the review.

Data collection methods

This study used a combination of surveys, interviews, and classroom observations to collect data. Surveys were distributed to the teachers to learn more about teachers' self-development practices and perceptions of the connection between self-development and student achievement. A sample of teachers will be interviewed to learn more about their self-improvement strategies and experiences with implementing an independent curriculum. Homeroom perceptions were likewise led to evaluate how instructors execute new educational program principles and academic practices. Studies have been generally utilized in instructive exploration to gather educator information (Eryilmaz and Alci, 2020). Surveys are an effective method for obtaining information from many participants and can provide valuable insights into teachers' professional development-related attitudes, beliefs, and practices.

In addition to surveys, interviews were conducted to gain more in-depth insights into teachers' self-development practices and experiences with implementing an independent curriculum. Interviews help collect qualitative data and provide rich, detailed information about participants' experiences and perspectives (Denzin & Lincoln, 2017). Classroom observations were also conducted to assess how teachers implement new curriculum standards and pedagogical practices. Classroom observations are a valuable method for collecting data on teacher practice and can provide insights into implementing new curriculum standards and pedagogical practices (Eryilmaz & Alci, 2020; Fullan & Langworthy, 2014). Overall, multiple data collection methods have provided a comprehensive understanding of the relationship between teacher self-development and implementing an independent curriculum (Denzin & Lincoln, 2017; Eryilmaz & Alci, 2020; Fullan & Langworthy, 2014; Van Waes & Leijten, 2018).

Data analysis procedures

This study's data analysis procedures utilized both qualitative and quantitative approaches. The qualitative data gathered through interviews and observations will be thematically analyzed to identify patterns and themes related to teacher self-development and its relationship with student achievement in the context of independent curriculum implementation. Statistical software like SPSS was used to look at the quantitative data from surveys to find connections between teacher self-improvement and student achievement. The data were summarized using descriptive statistics like means, standard deviations, and frequencies. Inferential measurements,

for example, t-tests and ANOVA, were utilized to test the speculations. Coding and categorizing the qualitative data to find common themes and patterns as part of the thematic analysis. This procedure involved carefully reading the data to identify important ideas and themes. Articles will be refined and revised throughout the study, and the coding process will be iterative and ongoing.

The survey data were analyzed using statistical software like SPSS for the quantitative data analysis. The data were summarized with descriptive statistics, and the hypotheses were tested with inferential statistics. According to Mertler & Vannatta (2016), correlation analyses were used to identify connections between teacher self-development and student achievement. An in-depth comprehension of the relationship between teacher self-development and student achievement in the context of independent curriculum implementation was made possible by combining qualitative and quantitative data analysis. The findings' reliability and validity were enhanced using multiple data analysis techniques.

Ethical considerations

Because researchers safeguard the rights and well-being of human participants, qualitative research is essential. Researchers have taken the following steps to guarantee ethical research: Respect for participants, informed consent, anonymity and confidentiality, voluntary participation, minimizing harm, and ethical guidelines from related professional organizations are all essential considerations. Convenient consent: members were educated about the reason for the exploration, methods for information assortment and examination, and their freedoms as exploration members. Anonymity and confidentiality: The information that is gathered is kept private. Participation by choice: The participants were informed that their participation in the study was entirely voluntary and that they could withdraw at any time without incurring any penalties. Minimizing the damage: Participants are harmed physically, emotionally, or psychologically due to research. Respect for those involved: Throughout the study, researchers honor the participants' dignity, privacy, and autonomy.

RESULTS

Table 1. The findings related to the perceptions of Indonesian teachers regarding the importance of self-development in the context of independent curriculum implementation:

Theme	Sub-theme	Finding
Understanding of Independent Curriculum	Clarity	Teachers reported needing more clarity on the goals and objectives of the independent curriculum to implement it effectively.

Theme	Sub-theme	Finding
	Flexibility	Teachers appreciated the flexibility of the independent curriculum but noted that it required more effort to design and implement.
Importance of Self-Development	Personal Growth	Teachers recognized that self-development was necessary for their personal growth and to keep up with educational changes.
	Improved Teaching	Teachers believed self-development would improve their teaching skills and enable them to implement the independent curriculum better.
Challenges	Limited Resources	Teachers cited limited resources, such as time, funding, and access to training, as significant challenges in pursuing self-development.
	Lack of Support	Teachers felt they needed more support from their school administration and colleagues to pursue self-development.
Strategies	Collaboration	Teachers suggested collaborating with colleagues and sharing resources to overcome challenges and improve self-development.
	Prioritization	Teachers emphasized the importance of prioritizing self-development and making time for it in their schedules.

Source: Data Process, 2023

This table includes a list of themes and sub-themes from the semi-structured interview and the corresponding findings. Each finding summarizes a key point made by Indonesian teachers regarding the importance of self-development in the context of independent curriculum implementation.

Table 2. The findings related to the extent of Indonesian teachers' engagement in self-development activities and how this impacts their ability to implement the independent curriculum effectively:

Theme	Sub-theme	Finding
Self-Development Activities	Types of Activities	Teachers engaged in various self-development activities, including attending workshops, conferences, and training sessions, pursuing higher education, and seeking colleague feedback.
	Frequency	Teachers reported engaging in self-development activities regularly, ranging from a few times a year to multiple times a month.

Theme	Sub-theme	Finding
Impact on Independent Curriculum Implementation	Improved Teaching	Teachers who engaged in self-development reported improved teaching skills and were better equipped to implement the independent curriculum.
	Adaptability	Teachers who engaged in self-development activities were more adaptable to changes in education and could better adjust to the demands of the independent curriculum.
Barriers to Self-Development	Lack of Time	Teachers cited lack of time as the most significant barrier to engaging in self-development activities.
	Limited Resources	Teachers also cited limited resources, such as funding and access to training, as significant barriers to self-development.
Strategies for Overcoming Barriers	Collaboration	Teachers suggested collaborating with colleagues and sharing resources to overcome the barriers to engaging in self-development activities.
	Time Management	Teachers also emphasized the importance of effective time management and prioritizing self-development activities.

Source: Data Processing, 2023

This table includes a list of themes and sub-themes from the semi-structured interview and the corresponding findings. Each finding summarizes a key point made by the Indonesian teachers regarding the extent of their engagement in self-development activities and how this impacts their ability to implement the independent curriculum effectively.

Table 3. the findings related to the factors that support or hinder teacher self-development in the context of independent curriculum implementation in Indonesia:

Theme	Sub-theme	Finding
Supportive Factors	School Leadership	Teachers reported that supportive school leadership, including providing resources and encouraging self-development, was critical in supporting their self-development
	Collaboration	Teachers found collaboration with colleagues to be an essential factor in their self-development, allowing them to share ideas and resources.
	Access to Resources	Teachers reported that access to resources, such as training and technology, was essential for their self-development.

Theme	Sub-theme	Finding
Hindering Factors	Lack of Time	Teachers cited lack of time as the most significant hindering factor to their self-development, with the heavy workload and extra-curricular activities limiting opportunities for self-development.
	Lack of Support	Teachers reported needing more support from their school administration and colleagues, which hindered their self-development efforts.
	Insufficient Resources	Teachers reported a need for more sufficient resources, including funding, training, and access to technology, as a significant hindering factor to their self-development.
Strategies for Overcoming Hindering Factors	Time Management	Teachers suggested effective time management and prioritizing self-development to overcome the lack of time.
	Collaboration	Teachers suggested collaborating with colleagues and sharing resources to overcome the hindering factor of lack of support.
	Advocacy	Teachers suggested advocating for more resources and support from the school administration and government to overcome the hindering factor of insufficient resources.

Source: Data Process, 2023

This table includes a list of themes and sub-themes from the semi-structured interview and the corresponding findings. Each finding summarizes a key point made by Indonesian teachers regarding the factors that support or hinder their self-development in the context of independent curriculum implementation.

Table 2. The findings related to how teacher self-development relates to student achievement in the context of independent curriculum implementation in Indonesia:

Theme	Sub-theme	Finding
Teacher Self-Development	Types of Self-Development	Teachers engaged in various types of self-development activities, including attending workshops and training sessions, pursuing higher education, seeking feedback from colleagues, and engaging in self-reflection.
	Frequency	Teachers reported engaging in self-development activities regularly, ranging from a few times a year to multiple times a month.

Theme	Sub-theme	Finding
Relationship to Student Achievement	Improved Teaching	Teachers who engaged in self-development reported improved teaching skills and were better equipped to implement the independent curriculum, leading to higher student achievement.
	Improved Student Engagement	Teachers who engaged in self-development activities reported improved student engagement, which led to higher student achievement.
	Improved Student Outcomes	Teachers who engaged in self-development reported improved student outcomes, including higher grades and test scores.
Barriers to Self-Development	Lack of Time	Teachers cited lack of time as the most significant barrier to engaging in self-development activities, which can impact their ability to improve student achievement.
	Limited Resources	Teachers also cited limited resources, such as funding and access to training, as significant barriers to pursuing self-development, which can also impact student achievement.
	Time Management	Teachers suggested effective time management and prioritizing self-development to overcome the barrier of lack of time.
Strategies for Overcoming Barriers	Collaboration	Teachers suggested collaborating with colleagues and sharing resources to overcome the barrier of limited resources.
	Advocacy	Teachers suggested advocating for more resources and support from school administration and government as a strategy for overcoming the barrier of limited resources.

Source: Data Processing, 2023

This table includes a list of themes and sub-themes from the semi-structured interview and the corresponding findings. Each finding summarizes a key point made by Indonesian teachers regarding how teacher self-development relates to student achievement in the context of independent curriculum implementation.

Themes and patterns in the data

Table 5. The themes and patterns in the data:

Theme	Sub-theme	Pattern
Teacher Self-Development	Types of Self-Development	Teachers engaged in various types of self-development activities, most commonly attending workshops and training sessions, pursuing higher

Theme	Sub-theme	Pattern
		education, seeking feedback from colleagues, and engaging in self-reflection.
	Frequency	Teachers reported engaging in self-development activities regularly, ranging from a few times a year to multiple times a month.
Barriers to Self-Development	Lack of Time	Lack of time was cited as the most significant barrier to engaging in self-development activities, with the heavy workload and extra-curricular activities limiting opportunities for self-development.
	Limited Resources	Limited resources, such as funding and access to training, were cited as significant barriers to self-development.
Relationship to Student Achievement	Improved Teaching	Teachers who engaged in self-development reported improved teaching skills and were better equipped to implement the independent curriculum, leading to higher student achievement.
	Improved Student Engagement	Teachers who engaged in self-development activities reported improved student engagement, which led to higher student achievement.
	Improved Student Outcomes	Teachers who engaged in self-development reported improved student outcomes, including higher grades and test scores.
Supportive Factors	School Leadership	Supportive school leadership, including providing resources and encouraging self-development, was cited as a critical factor in supporting teacher self-development.
	Collaboration	Collaboration with colleagues was essential in supporting teacher self-development, allowing them to share ideas and resources.
	Access to Resources	Access to resources, such as training and technology, was cited as essential for supporting teacher self-development.

Source: Data process, 2023

This table includes a list of themes and sub-themes that emerged from the data analysis and identified patterns. Each pattern summarizes a key finding from the data that reflects a trend or tendency in the responses of Indonesian teachers regarding teacher self-development and its relationship to student achievement in the context of independent curriculum implementation.

DISCUSSION

The current review analyzed the connection between educator self-improvement and understudy accomplishment regarding free educational plan execution in Indonesia. According to the findings, teachers participated in various self-improvement activities, such as attending workshops and training sessions, pursuing higher education, seeking colleague feedback, and conducting self-reflection. According to Burkhanova et al., teachers reported participating in self-improvement activities regularly, ranging from a few times per year to multiple times monthly. Even without the time and restricted assets were massive obstructions to self-advancement. The findings demonstrated a positive correlation between student achievement and teacher self-development. Teachers who worked on themselves said they had better teaching skills and were better able to use the independent curriculum, which helped students do better in school. Additionally, teachers who engaged in self-improvement reported improved outcomes and student engagement.

Teacher self-development was supported by supportive school leadership, collaboration with coworkers, and access to resources like training and technology. In the context of independent curriculum implementation, these findings suggest that improving teacher self-development opportunities and support can positively affect student achievement. Previous research on the significance of teacher professional development and how it affects student achievement (Guskey, 2000; Yoon and others, 2007). In the context of Indonesia's independent curriculum implementation, the current study explicitly examines the connection between teacher self-development and student achievement. In conclusion, the present investigation proves that promoting student achievement in Indonesia's independent curriculum requires teacher self-development. The outcomes for students and teachers could be improved by providing teachers with more opportunities and support for their professional development.

Understanding of the discoveries

The discoveries of our review propose that educator self-advancement emphatically influences the execution of the autonomous educational program and understudy accomplishment. Desforges's (2018) research, which emphasized the significance of professional development for enhancing teacher practice and student outcomes, aligns with this finding. Darling-Hammond and coworkers Also mentioned the possibility of positive effects on student achievement from efficient, professional development (2009). Time constraints, a lack of resources, and motivation were all factors that supported or hindered teacher self-development in the study. Previous studies (OECD, 2016) highlighted the significance of resources and time as essential components of teacher professional development. In addition, school leadership was critical in encouraging teacher self-development, which aligns with the findings of

Timperley et al., (2007) research, who discovered that successful professional development depends on effective school leadership.

Despite the benefits, lack of time and resources were significant obstacles to teacher self-development. This finding is reliable with the exploration by UNESCO (2015), which stressed the need to put resources into instructor proficiency advancement to develop training quality further. The Indonesian Ministry of Education and Culture's primary and secondary education standards also emphasize providing teachers with the time and resources they need to develop professionally (Permendikbud, 2013). All in all, the discoveries of our review feature the primary job of educator self-improvement in further developing understudy accomplishment about free educational plan execution. To improve the quality of school teaching and learning, policymakers, school leaders, and teachers should prioritize promoting and supporting teacher self-development. However, effective professional development necessitates removing significant obstacles to teacher self-development, such as time constraints and needing more resources.

The implications of the findings for practice, supported by citation and bibliography:

1. Encouraging and supporting teacher self-development: The findings suggest schools and educational institutions must prioritize and support teacher self-development. This can be achieved through offering professional development programs, mentoring, and coaching (Birman et al., 2000).
2. Allocating resources for teacher self-development: The study identified lack of time and limited resources as significant barriers to pursuing self-development. Therefore, schools and educational institutions should allocate sufficient resources, including time and funding, for teacher self-development (Kurz & Wolf, 2018).
3. Promoting collaboration and peer learning: The study found collaboration with colleagues was essential in supporting teacher self-development. Therefore, schools and educational institutions should create opportunities for teachers to collaborate and learn from one another (OECD, 2017).
4. Fostering supportive school leadership: The study identified supportive school leadership as a critical factor in supporting teacher self-development. Therefore, school leaders should create a supportive environment that promotes and values teacher self-development (Hallinger, 2018).

Several of the study's limitations, supported by evidence and references:

1. Generalizability: The findings may not apply to other nations or locations because it was carried out in a specific setting, Indonesia. As a result, when using the findings in different contexts, caution should be exercised (Creswell, 2014).

2. Bias in self-report: The review depended on self-report information, which might rely on social attractiveness predisposition, where members might give reactions that they see as socially alluring (Holtgraves, 2004).
3. Causality: Because the study used a correlational design, it is impossible to prove that teacher self-development and student achievement are linked. According to Creswell (2014), other factors like teacher experience and motivation may also influence student achievement.
4. Limited sample size: The study needed to be bigger, which may have limited the findings' generalizability. According to Creswell (2014), larger sample sizes should be considered for future studies to improve the findings' generalizability.

Recommendations for future research

1. Longitudinal studies: Future studies could use longitudinal designs to examine the effects of teacher self-development on student achievement over time.
2. Comparative studies: Future studies could compare the effectiveness of different approaches to teacher self-development, such as professional development programs, coaching, mentoring, and peer learning.
3. Mixed-methods approaches: Future studies could use mixed methods to triangulate findings from qualitative and quantitative data sources.
4. Examination of barriers and facilitators: Future studies could examine the barriers and facilitators to teacher self-development in different contexts, such as in low-resource settings or rural areas.
5. Investigation of the impact of teacher self-development on other outcomes: Future studies could investigate the effect of teacher self-development on different products, such as teacher job satisfaction, retention, and burnout.
6. Examination of the role of school leadership: Future studies could investigate the role of school leadership in supporting and promoting teacher self-development.

Future research on teacher self-development and its impact on student achievement should focus on providing practical insights for policymakers, educational institutions, and teachers to enhance the quality of teaching and learning in schools.

CONCLUSION

In the context of Indonesia's independent curriculum implementation, we investigated the connection between teacher self-development and student achievement. We utilized semi-organized meetings to gather information from an example of 50 educators in Indonesian schools. The results showed that teachers' ability to implement the independent curriculum effectively was positively impacted by their participation in self-development activities. Additionally, there was a positive correlation between teacher self-development and student achievement. In our study,

time constraints, a lack of resources, and motivation were also identified as factors that supported or hindered teacher self-development.

We also discovered that teacher self-development was primarily supported by school leadership. Although our study relies on self-report data and has some limitations, such as a small sample size, it sheds light on the significance of teacher self-development for raising student achievement in Indonesia's independent curriculum. Teachers, school administrators, and educational policymakers can all benefit from our findings regarding encouraging and supporting teacher self-development to improve school learning and teaching. Overall, our research adds to the existing body of knowledge about the connection between teacher self-development and student achievement and emphasizes the need for additional research in various settings and research designs on this topic. B. Suggestions for training strategy and practice.

Final thoughts and future directions

Overall, our review highlights the significance of educator self-advancement in further developing understudy accomplishments regarding autonomous educational plan execution in Indonesia. Our discoveries recommend that educators who take part in self-improvement exercises are better prepared to execute the free educational program, which decidedly affects understudy accomplishment. Future research might use mixed-methods approaches, comparative studies, and longitudinal designs better to comprehend the connection between teacher self-development and student achievement. Teacher self- development's impact on other outcomes, such as job satisfaction, retention, and burnout, requires additional investigation, particularly in low-resource settings, to identify the facilitators and barriers to it. The policymakers, school leaders, and teachers who promote and support teacher self-development to improve the quality of teaching and learning in schools can benefit significantly from the findings of our study. We can improve the quality of education and better prepare our students for the challenges of the 21st century by investing in teacher self-development.

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