

CURRICULUM Viability and Professional Development as Predictors of Self-Efficacy among Junior High School TEACHERS

Ian C. Garde¹, Thelma O. Alderite, PhD²

¹Director-Office of the Student Affairs and Services, Ramon Magsaysay Memorial Colleges-Marbel, Inc.
icgardemac@gmail.com

²University of the Immaculate Conception, Davao City
talderite@uic.edu.ph

ABSTRACT

This study determined the significance of curriculum viability and professional development on self-efficacy among private junior high school teachers in the City of Koronadal, Province of South Cotabato. A quantitative research approach using a descriptive correlational design was utilized. Adapted and validated survey questionnaires were used to collect data from the respondents. The data were analyzed using Mean, Standard Deviation, Pearson's product-moment correlation, and multiple linear regression. The findings revealed that the levels of curriculum viability, professional development, and self-efficacy among private junior high school teachers were very high, with a strong, significant positive correlation among the three. Further, the regression model indicates that both curriculum viability and professional development significantly predicted teacher self-efficacy.

KEYWORDS: *curriculum viability, professional development, teacher self-efficacy, Philippines.*

INTRODUCTION

Self-efficacy refers to an individual's conviction in their capacity to attain certain objectives, and it is a significant component in understanding motivation and behavior, particularly in educational contexts (Bandura, 2019). Teachers with low self-efficacy tend to experience greater stress and reduced confidence in their abilities, leading them to avoid challenging situations and struggle with classroom management (Khan et al., 2015). They may face considerable obstacles in their careers, including difficulties in adjusting to innovative pedagogical approaches, which affect their capacity to meet the requirements of modern learners (Schleicher, 2018).

International research has emphasized that teachers in countries such as Japan and France exhibit low self-efficacy due to cultural norms and demanding educational systems (Klassen & Tze, 2014). Additionally, in countries like Turkey and Brazil, teachers have shown that low teacher self-efficacy hinders the implementation of curriculum viability, especially in STEM subjects (Usher & Pajares, 2008). Teacher self-efficacy is a global concern that significantly influences the successful implementation of quality education, with significant implications for both developed and developing countries. It has been noted that teachers' self-efficacy plays a pivotal role in successfully engaging students in the classroom, especially in under-resourced environments. This highlights the challenges teachers face, for which professional development initiatives are critical, underscoring the need for targeted strategies to address them (Woodcock et al., 2022).

In the Philippines, particularly in Aurora Province, many teachers face challenges related to self-efficacy, often due to inadequate resources and training opportunities for effective teaching within the K-12 curriculum (Barcelo, 2019). Additionally, a study shows that although most teachers exhibit high self-efficacy, some aspects of their teaching experience reveal moderate to low self-efficacy. Specifically, teachers report feeling less confident in managing challenging classroom behaviors, addressing disruptive students, and implementing new teaching strategies. These findings suggest that teachers' self-efficacy is not uniformly high across all teaching contexts, underscoring the need for support and development in areas where it is lacking (Sangcad & Abarquez, 2024). Similarly, this problem is seen in poor schools where teachers are deprived of necessary resources and assistance.

Similarly, in South Cotabato, for example, overcrowded classrooms and limited professional development exacerbate teachers' lack of confidence, resulting in low self-efficacy (Cerado & Cardenas, 2016). Teachers in these areas frequently encounter difficulties in curriculum implementation due to outdated materials, limited funding, and restrictive policies, all of which contribute to diminished self-efficacy (Fullan, 2016). The K-12 Basic Education Program in the Philippines is intended to meet national and international educational standards. However, challenges such as overcrowded classrooms, insufficient teacher training, and a lack of teaching materials, particularly in rural areas like South Cotabato, undermine its curriculum's viability. These factors affect teacher confidence and raise concerns about the broader implications of curriculum challenges on teacher self-esteem.

In Williams's (2020) study, curriculum viability was found to influence teachers' self-efficacy significantly. The teachers perceive the curriculum as manageable and aligned with their teaching goals, and their self-efficacy improved. They found that teacher self-efficacy was positively correlated with perceived curriculum viability, suggesting that teachers who view the curriculum as feasible and aligned with their instructional goals tend to feel more confident in their teaching abilities. Similarly, Hussain and Ali (2022) examined the impact of professional development on teachers' capacity to implement challenging curricula, finding that training programs designed to address curriculum-related challenges can significantly enhance teacher self-efficacy.

Meanwhile, Zhou et al. (2023) noted that professional development is significant and essential for enhancing instructors' self-efficacy. Targeted training programs directly related to teachers' daily instructional needs help improve their self-efficacy in managing challenging classroom environments. Additionally, in the study by Woodcock and Hardy (2023), it was found that teachers who participate in professional development aligned with their specific instructional needs are more likely to implement innovative teaching strategies and approaches, thereby improving their self-efficacy.

While the existing literature addresses aspects of teacher self-efficacy, a significant gap remains in understanding how curriculum viability and professional development concurrently predict self-efficacy in private secondary education. Current studies tend to examine these variables in isolation or within a limited scope. For instance, Kabaoglu (2015) used a correlational survey of elementary mathematics teachers from public schools in Ankara, Turkey, to establish that self-efficacy predicts curriculum implementation. Conversely, Williams (2020) employed a mixed-methods design across various disciplines but noted that significant gaps still exist regarding the specific challenges of curriculum implementation and their relationship to teacher efficacy. While these studies provide useful insights, they generally use narrower bivariate analyses or focus on specific respondent groups. This leaves a critical gap in understanding how multiple institutional predictors interact within a private school ecosystem and how curriculum challenges directly affect teachers' confidence. This study focused on the professional development and curriculum challenges, and their impact on teachers' confidence, in private junior high schools. The factors that impact teachers' self-efficacy include curriculum challenges and teacher training. The researchers aimed to identify these factors so that practical solutions to improve education, especially in disadvantaged areas, could be developed.

Statement of the Problem

This study determined the significance of curriculum viability and professional development on self-efficacy among Private Junior High school teachers in the City of Koronadal, South Cotabato. Specifically, it sought answers to the following questions:

1. What is the level of curriculum viability, professional development, and self-efficacy of private junior high school teachers in the City of Koronadal, South Cotabato?
2. Is there a significant relationship between curriculum viability and self-efficacy, and professional development and self-efficacy?
3. Do curriculum viability and professional development significantly influence self-efficacy?

METHODS

Research Design. This quantitative study employed a descriptive correlational design to examine the curricular viability and professional development as predictors of self-efficacy among private junior high school teachers. The descriptive design was employed to measure the levels of curriculum viability, professional development, and self-efficacy among private junior high school teachers in the City of Koronadal, South Cotabato. Using validated, standardized survey instruments, the researcher collected numerical data representing teachers' self-reported assessments across three variables, analyzed descriptive statistics to determine central tendencies and variability, and examined relationships between observable, measurable variables using correlational and regression analyses without manipulation.

This research design is appropriate, as it aligns with the research objectives of measuring and understanding the relationships among curriculum viability, professional development, and self-efficacy among Private Junior High School teachers in the City of Koronadal, South Cotabato. This was employed to investigate the relationships between curriculum viability and self-efficacy, and between professional development and self-efficacy among Private Junior High School teachers in the City of Koronadal, South Cotabato. Specifically, Pearson Product-Moment Correlation Coefficients were calculated to determine the strength and direction of the relationships. At the same time, multiple linear regression was used to assess the extent to which curriculum viability and professional development jointly influence teachers' self-efficacy in Private Junior High Schools.

Research Locale. The study was conducted in the three private junior high schools in the City of Koronadal, South Cotabato. The schools involved in this study were selected based on their similar characteristics, including the school type, student demographics, and access to technological resources. The respondents in this study were 152 full-time private junior high school teachers who had been teaching for 1 year or more, regardless of gender or rank. Moreover, stratified random sampling was employed in this study to ensure proportional representation.

Research Instruments. To gather the data, this study used a validated survey questionnaire, which was also subjected to a reliability test. The validators' comments and suggestions were then incorporated into the final version of the survey questionnaire.

The first part of the survey questionnaire evaluated the first independent variable, curriculum viability. This questionnaire was adapted from the Curriculum Viability Scale originally developed by Khan et al. (2021). This 25-item 5-point Likert scale aims to evaluate the curriculum's viability as experienced by teachers across six domains: Educational Program, Disciplinary Cultures, Social Interaction, Institutional Policies, Communication Practices, and Faculty Involvement.

The second part of the questionnaire evaluated the second independent variable, which is professional development. This was adapted from the Professional Development Questionnaire of Teachers developed by Ayyoobi et al. (2015). This 47-item tool evaluates teacher professional development and identifies eight domains: Thematic Knowledge, Learning Environment, Cooperation, Educational Technology, Research Base, Educational Planning, Evaluation, and Development of Human Resources.

The third part of the survey questionnaire evaluated teachers' self-efficacy and was adapted from the study by Klassen et al. (2009) titled "Teachers' Sense of Self-Efficacy Scale (TSSES)." The scale consists of 12 items and measures three domains: Instructional Strategies, Student Engagement, and Classroom Management.

Table 1
Reliability of the instrument

Items	Cronbach's Alpha	No. of items	Internal Consistency
Curriculum Viability	0.858	25	Good
Professional Development	0.946	47	Excellent
Self-Efficacy	0.923	12	Excellent

Ethical Statement

This study was submitted to the Research Ethics Committee of the University of the Immaculate Conception. Upon careful consideration, the study was deemed ethically sound and received ethical clearance.

RESULTS and DISCUSSIONS

This portion covers the presentation, analysis, and interpretation of data in the sequence specified by the statement of the specific questions in Chapter 1.

**Level of Curriculum Viability
of Private Junior High School Teachers**

Table 2
Response on the level of curriculum viability among private junior high school teachers

Indicators	Category Mean	Curriculum Viability Level	Interpretation
Educational Program	4.64	Very High	Always Evident
Disciplinary Cultures	4.71	Very High	Always Evident
Social Interaction	4.55	Very High	Always Evident
Institutional Policies	4.42	Very High	Always Evident
Communication Practices	4.49	Very High	Always Evident
Faculty Involvement	4.54	Very High	Always Evident
Average	4.54	Very High	Always Evident

Table 2 shows the level of curriculum viability experienced by junior high school teachers, with an overall mean of 4.54, indicating very high levels. This shows that curriculum viability is always evident in the teaching and learning process. It implies that the curriculum structure, practices, and policies

are consistently perceived as supportive and effectively implemented. Further, a very high level of curriculum viability is essential for teachers to tailor the learning content to student needs and institutional goals. Additionally, the overall standard deviation is 0.35, which is less than 1, indicating that the respondents' ratings are clustered around the mean and suggesting consistent perceptions.

This finding supports the argument made by Chuene and Teane (2024) that strong curriculum implementation is tied to sufficient resources, administrative support, and teacher collaboration. Further, the result confirms what Nevenglosky et al. (2019) found: high curriculum viability is aligned with structured processes and support mechanisms that facilitate teaching efficiency. Similarly, Reyes and Aspa (2020) argued that when teachers are supported through institutional policies and professional development, improvements in curriculum viability lead to stronger instructional outcomes. Similarly, it confirms Priestley and Drew's (2019) observation that shifting disciplinary cultures toward more dynamic teaching methods increases teacher agency. Moreover, the study highlights that a very high level of curriculum viability is achieved when disciplinary culture encourages innovation and teacher autonomy. In addition, the result of the level of curriculum viability slightly differs from the study by Abendaño et al. (2023), which revealed that a high level of teaching competencies among the teachers implies that they possess the important skills, knowledge, and beliefs to deliver effective instruction to the students and create a meaningful learning process. The very high level of curriculum viability observed in this study reflects Educational Change Theory (Fullan, 2007), which highlights how strong institutional support, clear policies, and professional development enable teachers to implement and adapt the curriculum effectively. As a result, this enhances teachers' self-efficacy, as described by Social Cognitive Theory (Bandura, 1997), enabling them to confidently innovate and tailor instruction to meet student and institutional needs.

Level of Professional Development among

Private Junior High School Teachers

Table 3
Response on the level of professional development among private junior high school teachers

Indicators	Category Mean	Professional Development Level	Interpretation
Thematic Knowledge	4.61	Very High	Always Observed
Learning Environment	4.67	Very High	Always Observed
Cooperation	4.56	Very High	Always Observed
Educational Technology	4.59	Very High	Always Observed
Research Base	3.94	High	Always Observed
Educational Planning	4.60	Very High	Always Observed
Evaluation	4.53	Very High	Always Observed
Development of Human Resources	4.47	Very High	Always Observed
Average	4.51	Very High	Always Observed

Table 3 shows the level of professional development among private junior high school teachers, with an overall mean of 4.51, indicating very high levels. It indicates that respondents consistently and meaningfully experience professional development activities. The professional development has a standard deviation of 0.40, indicating that the respondents' ratings are not very dispersed from the mean.

This finding aligns with Gutierrez's (2020) study, which found that sustained, contextually grounded professional development is essential for empowering teachers. Similarly, the result supports the claim of Montebon and Orleans (2022), who highlighted the positive effects of a strong professional development culture on teaching confidence and instructional effectiveness. Moreover, it differs somewhat from the findings of Darling-Hammond et al. (2017), who reported a high level of professional development. This suggests that while professional development positively impacted teaching practices, the effects were moderate to high, depending on various factors.

Level of Self-Efficacy among Private

Junior High School Teachers

Table 3 presents the level of self-efficacy among private junior high school teachers, with an overall mean of 4.56 and a standard deviation of 0.43, indicating a very high level. This suggests that teachers feel highly confident in their ability to implement effective instructional strategies, manage classroom behavior, and engage students meaningfully in learning. A very high level of self-efficacy implies that teachers are motivated and capable of maintaining high performance standards in the classroom.

Table 4
Response on the level of self-efficacy among private junior high school teachers

Indicators	Category Mean	Self-Efficacy Level	Interpretation
Instructional Strategies	4.58	Very High	Always Manifested
Student Engagement	4.52	Very High	Always Manifested
Classroom Management	4.57	Very High	Always Manifested
Average	4.56	Very High	Always Manifested

This supports Bandura's (1997) Theory that individuals with strong self-efficacy are resilient, proactive, and adaptable in facing challenges. Tschannen-Moran and Hoy (2001) likewise noted that teachers with high self-efficacy tend to set higher goals, persist through difficulties, and create environments that maximize student achievement.

Additionally, the study by Agormedah et al. (2022) found a high level of teachers' self-efficacy, with teachers more likely to adopt diverse teaching approaches, demonstrating confidence in their ability to manage classrooms effectively and engage students in various ways. Furthermore, the findings align somewhat with those of Orakcı et al. (2022), in which teachers demonstrated a high level of self-efficacy, strongly believing in their ability to manage classrooms, engage students, and implement instructional strategies that promote student learning.

Significance of the Relationship of Curriculum Viability,

Professional Development and Self-Efficacy of Teachers

Table 5
Significance of Relationship of Curriculum Viability, Professional Development, and Self-Efficacy of Teachers

Variables	r	p - value	Remarks
Curriculum Viability and Self-Efficacy	0.654	0.00	Significant
Professional Development and Self-Efficacy	0.745	0.00	Significant

Shown in Table 5 is the correlation between curriculum viability. The development of self-efficacy among private junior high school teachers. The results reveal a strong positive correlation between curriculum viability and self-efficacy ($r = 0.654$, $p < 0.05$). This indicates that when the curriculum is perceived as viable, meaning it can be effectively implemented in the actual school setting, teachers tend to feel more confident and capable in delivering instruction.

The correlation between curriculum viability and self-efficacy supports the findings of Tschannen-Moran and Hoy (2001), who emphasize that teachers feel more confident and effective when institutional structures, such as curriculum content and implementation, are well-established and coherent. Furthermore, this aligns with the study by Gordon et al. (2023), which found that resource constraints, inadequate administrative support, and insufficient professional development undermine teachers' self-efficacy in successfully implementing the new curricula. This suggests that curriculum viability is not merely about curriculum design but also about resources, institutional support, and teacher development.

Likewise, a strong positive correlation exists between professional development and self-efficacy ($r = 0.745$, $p < 0.05$), suggesting that teachers who engage in continuous professional development opportunities tend to demonstrate higher levels of self-efficacy in their instructional practice. This finding confirms the study of Baysal & Mutlu (2021), who found that professional development programs significantly enhance teachers' confidence in their teaching abilities.

This also confirms Tyler's (1949) theory, which states that a curriculum aligned with teaching practices leads to improved instructional outcomes and

higher professional confidence. This further supports Fullan (2016), who argued that teacher development and self-efficacy are strongly intertwined – when teachers feel they are improving professionally, they are more likely to feel empowered in the classroom. Furthermore, Agormedah et al. (2022) noted that professional development can significantly increase teachers' self-efficacy, which improves student engagement and academic performance.

**Significance of the Influence of Curriculum Viability
and Professional Development on the Self-Efficacy
of Private Junior High School Teachers**

Table 6
*Significance of the Influence of Curriculum Viability and Professional
Development on the Self-Efficacy of Private Junior High School Teachers*

Individual Predictors		Standardized Coefficient Beta	T	p-value	Remarks
Curriculum Viability		0.267	2.79	.002	Significant
Teaching Efficacy		0.632	7.37	.000	Significant
Combined Influence of the Predictors					
R	0.760				
R ²	0.577				
F	105				
p	0.00				Significant

Table 5 presents the significant influences of curriculum viability and professional development on the self-efficacy of private junior high school teachers. Individually, both variables emerged as statistically significant predictors. Specifically, curriculum viability significantly influenced teacher self-efficacy ($\beta = 0.267$, $t = 2.79$, $p < 0.05$). This suggests that curriculum viability positively affects teachers' perceived ability to perform their instructional responsibilities. This result is consistent with Tyler's (1949) Framework, which emphasizes that a curriculum designed with clarity and purpose enhances instructional alignment and educator confidence. It also supports the findings of Reyes and Aspa (2020), who stressed that viable curricula must be adaptable and supported by institutional policies to boost teacher self-efficacy. Meanwhile, professional development demonstrated a stronger, highly significant influence ($\beta = 0.632$, $t = 7.37$, $p < 0.05$). Among the

two predictors, professional development emerged as the most influential, as evidenced by its higher standardized beta and t-value. This suggests that opportunities for professional development are crucial for strengthening teachers' self-belief in their instructional strategies, their capacity to foster student involvement, and their proficiency in managing the classroom environment. This finding validates Bandura's (1997) Social Cognitive Theory, particularly the idea that mastery experiences gained through professional development significantly enhance a person's belief in their competence. Fullan (2016) also asserted that professional development is among the most powerful levers for driving teacher growth and instructional transformation.

The standardized beta of 0.632 for professional development indicates that it is the strongest predictor of self-efficacy among the variables considered. The higher β -value suggests that for every one-unit increase in professional development, teachers' self-efficacy is expected to increase by 0.632 units.

In terms of combined influence, the holistic model yielded an R^2 value of 0.577, with $F=105$ and $p< 0.05$, suggesting that approximately 57.70% of the variance in self-efficacy can be explained by curriculum viability and professional development. This high explanatory power indicates that these two elements are substantial contributors to building teacher self-efficacy in private junior high schools. The remaining 42.30% of the variance could be attributed to other factors not covered in this study, such as teaching experience, school climate, leadership support, and personal motivation.

The result showing the combined influence of curriculum viability and professional development to the self-efficacy of private junior high school teachers validates the claim of Tschannen-Moran and Hoy (2001) that teacher self-efficacy is a function of both internal beliefs and external supports. When the curriculum and professional development are strategically aligned, teachers are more empowered to perform at their best.

CONCLUSION

The findings of this study revealed that private Junior High School teachers demonstrated very high levels of curriculum viability, professional development, and self-efficacy. These outcomes reflect the presence of supportive institutional mechanisms and well-structured curricular environments that promote coherence across subjects, transparent evaluation practices, and inclusive decision-making. Such conditions empowered teachers to engage in meaningful lesson planning, effective communication, and active curricular participation—fostering a context of pedagogical alignment and faculty involvement. Professional development was also found to be strong, characterized by continuous opportunities for growth, strategy implementation, and instructional innovation. Teachers reported being well-equipped in lesson planning, assessment, and resource integration, all of which contributed to improved learning outcomes. However, the relatively lower rating in the research base dimension suggests a need for expanded engagement in scholarly activities to further enhance professional learning. Still, the prevailing developmental climate reflects a culture of collaboration, adaptability, and reflective practice. Self-efficacy among teachers reached exceptionally high levels, suggesting that educators possess a strong belief in their instructional competence, classroom management, and ability to engage students meaningfully. This sense of professional assurance reflects a teaching workforce that is not only skilled but also motivated to meet diverse student needs with confidence and consistency.

Statistical analysis confirmed that both curriculum viability and professional development had strongly significant positive relationships with teacher self-efficacy. This underscores the interconnected nature of institutional support and individual capacity, wherein effective curricular structures and sustained developmental efforts reinforce instructional confidence. Moreover, professional development emerged as the stronger predictor of self-efficacy, suggesting that consistent training and capacity-building initiatives exert a more pronounced influence on teacher confidence than curricular design alone.

Furthermore, these findings highlight the vital role of institutional systems in shaping teacher effectiveness. As educational environments continue to evolve, schools must prioritize not only the quality of their curricula but also the provision of structured, research-informed professional development programs to enhance teachers' self-efficacy and instructional success.

Recommendations

Based on the comprehensive study's findings, it is recommended that the Private Junior High School administrators of the City of Koronadal, South Cotabato, continue to strengthen curriculum viability by ensuring alignment through periodic curriculum review sessions, interdisciplinary planning, and inclusive policymaking. Recognition of innovative teaching practices should be institutionalized through transparent and equitable mechanisms. Enhancing communication through structured feedback systems and accessible digital platforms can further support timely curriculum updates and informed instructional decisions. Given the very high level of professional development observed, efforts should be sustained and improved through differentiated in-service training (INSET). A particular emphasis should be placed on building research capacity through action research, mentoring, and collaborative inquiry projects. Encouraging participation in school-based or regional research forums can cultivate a culture of innovation and evidence-based practice.

To further enhance teacher self-efficacy, schools are encouraged to provide targeted development on student engagement strategies and foster teacher leadership through coaching roles and peer mentoring. The significant relationship between curriculum viability, professional development, and self-efficacy underscores the need for integrated professional learning tied to curriculum implementation. Since professional development was the stronger predictor of self-efficacy, sustained, context-specific training initiatives must be prioritized to enable teachers to apply practical knowledge in classroom practice. Lastly, future researchers may explore additional influential variables, such as leadership support, school climate, and work-life balance, to deepen understanding of the multifaceted nature of teacher self-efficacy.

REFERENCES

- Abendaño, M., Arellano, M. A. G., Allawan, J. M., Lemindog, R. B., & Cagape, W. E. (2023). Multivariate analysis on curriculum viability, teaching competence, and effective instruction: Davao region teachers in focus. *Multivariate Analysis on Curriculum Viability, Teaching Competence, and Effective Instruction: Davao Region Teachers in Focus*, 127(1), 25–25.
- Agormedah, E. K., Ankomah, F., Frimpong, J. B., Quansah, F., Srem-Sai, M., Hagan, J. E., Jr., & Schack, T. (2022). Investigating teachers' experience and self-efficacy beliefs across gender in implementing the new standards-based curriculum in Ghana. *Frontiers in Education*, 7, Article 932447. <https://doi.org/10.3389/educ.2022.932447>
- Barcelo, M. G. (2019). Challenges of K-12 curriculum implementation in the Philippines: Insights from public school teachers. *Education Quarterly*, 36(2), 45–57. <https://doi.org/10.1080/0142159X.2019.1630726>
- Cerado, E. C., & Cardenas, H. J. C. (2016). School climate, teachers' efficiency, and learning outcomes in Koronadal City Schools Division, Philippines. *Journal of Modern Education Review*, 6(1), 19–25. [https://doi.org/10.15341/jmer\(2155-7993\)/01.06.2016/003](https://doi.org/10.15341/jmer(2155-7993)/01.06.2016/003)
- Fullan, M. (2016). *The new meaning of educational change* (5th ed.). Teachers College Press.
- Gordon, D., Blundell, C., Mills, R., & Bourke, T. (2023). Teacher self-efficacy and reform: A systematic literature review. *The Australian Educational Researcher*, 50(4), 801–821. <https://doi.org/10.1007/s13384-022-00526-3>
- Gutierrez, S. B. (2020). Examining learning environments: Teacher professional development and student engagement in the Philippines. *Issues in Educational Research*, 30(4), 1181–1194. <https://www.iier.org.au/iier30/gutierrez.pdf>
- Hussain, I., & Ali, S. (2022). The role of teacher training programs in optimizing teacher motivation and professional development skills. *Journal of Education and Practice*, 13(4), 22–33. <https://files.eric.ed.gov/fulltext/EJ1338294.pdf>
- Klassen, R. M., Bong, M., Usher, E., Chong, W. H., Huan, V. S., Wong, I. Y. F., & Georgiou, T. (2009). Exploring the validity of a teachers' self-efficacy scale in five countries. *Contemporary Educational Psychology*, 34(1), 67–76. <https://doi.org/10.1016/j.cedpsych.2008.08.001>
- Klassen, R. M., & Tze, V. M. C. (2014). Teachers' self-efficacy in 14 OECD

- countries: Teacher, student group, school, and leadership effects. *Teaching and Teacher Education*, 45, 22–32. <https://doi.org/10.1016/j.tate.2014.08.005>
- Kabaoglu, K. (2015). Predictors of curriculum implementation level in elementary mathematics education: Mathematics-related beliefs and teacher self-efficacy beliefs [Master's thesis, Middle East Technical University]. <https://open.metu.edu.tr/handle/11511/24864>
- Khan, A., Fleva, E., & Qazi, T. (2015). Role of self-esteem and general self-efficacy in teachers' efficacy in primary schools. *Psychology*, 6(7), 845–853. <https://doi.org/10.4236/psych.2015.67085>
- Khan, R. A., Spruijt, A., Mahboob, U., Al Eraky, M., & van Merriënboer, J. J. (2021). Development and validation of teacher and student questionnaires measuring inhibitors of curriculum viability. *BMC Medical Education*, 21, 1–14. <https://doi.org/10.1186/s12909-021-02843-0>
- Nevenglosky, E. A., Cale, C., & Aguilar, S. P. (2019). Barriers to effective curriculum implementation. *Research in Higher Education Journal*, 36, 1–19. <https://www.aabri.com/manuscripts/182882.pdf>
- Priestley, M., & Drew, V. (2019). Professional enquiry: An ecological approach to developing teacher agency. *Teachers and Teaching*, 25(1), 84–98. <https://doi.org/10.1080/13540602.2018.1533811>
- Reyes, V. C., & Aspa, M. S. (2020). Barriers to curriculum implementation in selected public secondary schools in the Philippines. *Journal of Educational and Human Resource Development*, 8, 132–141.
- Schleicher, A. (2018). *World class: How to build a 21st-century school system*. OECD Publishing. <https://doi.org/10.1787/9789264300002-en>
- Swan, S., Daugherty, J., & Pendergrass, M. (2011). Teachers' self-efficacy and their first years in the classroom: A longitudinal study. *Journal of Teacher Education*, 62(4), 387–399. <https://doi.org/10.1177/0022487111404242>
- Tschannen-Moran, M., & Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, 17(7), 783–805. [https://doi.org/10.1016/S0742-051X\(01\)00036-1](https://doi.org/10.1016/S0742-051X(01)00036-1)
- Williams, J. A. (2020). The impact of teacher preparedness and professional development on fourth-grade students' science achievement. *Journal of Research Initiatives*, 5(1), 18–30. <https://digitalcommons.uncfsu.edu/jri/vol5/iss1/4>
- Woodcock, S., & Hardy, I. (2023). Teacher self-efficacy, inclusion, and professional development practices: Cultivating a learning environment

for all. *Professional Development in Education*.
<https://doi.org/10.1080/19415257.2023.2267058>

Zhou, X., Shu, L., Xu, Z., & Padrón, Y. (2023). The effect of professional development on in-service STEM teachers' self-efficacy: A meta-analysis of experimental studies. *International Journal of STEM Education*, 10, 37. <https://doi.org/10.1186/s40594-023-00422-x>