

# TEACHING EXPERIENCE AND INCLUSIVE EDUCATION: COMPARATIVE ANALYSIS OF PRE-SERVICE AND IN-SERVICE ELEMENTARY SCHOOL TEACHERS' ATTITUDES, CONCERNS, AND CLASSROOM PRACTICES

Dr. Zainab Qamar<sup>\*1</sup>, Noor-ul-Ain Abbas<sup>2</sup>

<sup>\*1</sup>Research Associate, Faculty of Social Sciences and Humanities, Minhaj University Lahore, Pakistan

<sup>2</sup>PhD Scholar, Department of Secondary Education, Lahore College for Women University, Lahore, Pakistan

<sup>\*1</sup>[zainab.ra@mul.edu.pk](mailto:zainab.ra@mul.edu.pk), <sup>2</sup>[dr.noorulainabbas440@gmail.com](mailto:dr.noorulainabbas440@gmail.com)

Corresponding Author: \*

Dr. Zainab Qamar

DOI: <https://doi.org/10.5281/zenodo.18400893>

| Received         | Accepted        | Published       |
|------------------|-----------------|-----------------|
| 03 December 2025 | 13 January 2026 | 28 January 2026 |

## ABSTRACT

The present study investigated the attitudes, concerns, and classroom engagement of pre-service and in-service elementary school teachers regarding inclusive education, focusing on how teaching experience and professional status influence these variables. A quantitative cross-sectional survey design was employed, collecting data from 215 teachers (99 pre-service, 116 in-service). Descriptive and inferential analyses, including independent-samples t-tests and ANOVA, were conducted. Results revealed that in-service teachers had slightly higher mean scores on attitudes ( $M = 39.15$ ,  $SD = 3.29$ ) compared to pre-service teachers ( $M = 37.28$ ,  $SD = 8.26$ ), though the difference was not statistically significant ( $t(143.74) = -1.88$ ,  $p = .062$ ). Similarly, concerns were marginally higher for in-service teachers ( $M = 39.28$ ,  $SD = 5.70$ ) than for pre-service teachers ( $M = 37.75$ ,  $SD = 6.70$ ), without significant difference. Classroom interaction was significantly higher among in-service teachers ( $M = 40.59$ ,  $SD = 3.07$ ) than pre-service teachers ( $M = 38.90$ ,  $SD = 5.78$ ). ANOVA across teaching experience categories showed that teachers with less than a year of experience had the highest mean score ( $M = 120.54$ ,  $SD = 13.75$ ), while those with 1–5 years had lower and more variable scores ( $M = 110.00$ ,  $SD = 22.84$ ), and teachers with 5–10 years ( $M = 114.30$ ,  $SD = 11.23$ ) and more than ten years ( $M = 118.97$ ,  $SD = 9.74$ ) exhibited moderate to high and stable performance. These findings suggest that teaching experience enhances consistency and engagement, while structured training shapes attitudes and perceptions. The study informs teacher education and professional development programs by emphasizing the integration of practical experience with theoretical training to strengthen inclusive education practices.

**Keywords:** Inclusive Education, Teaching Experience, Pre-Service Teachers, In-Service Teachers, Classroom Practices.

## Introduction

Teachers play a central role in shaping the quality of educational processes, and their effectiveness is influenced by multiple professional and personal factors, among which teaching experience holds particular importance. Teaching experience is often associated with the development of pedagogical

skills, classroom management strategies, and professional confidence, all of which contribute to improved performance and stability over time (Darling-Hammond, 2017). Understanding how teachers' experience relates to their performance indicators is therefore essential for strengthening educational quality and informing evidence-based policy decisions.

Teachers' experiences not only affect instructional delivery but also influences classroom engagement, collaboration with colleagues, and the ability to respond effectively to diverse student needs.

Previous research suggests that novice teachers often display enthusiasm and motivation but may experience fluctuations in performance due to limited practical exposure and professional adjustment challenges (Ingersoll, Merrill, & Stuckey, 2014). Early- and mid-career teachers frequently face increased workload pressures, role ambiguity, and professional stress, which may negatively affect consistency in performance (Day & Gu, 2010). Over time, however, teachers gain adaptive expertise, reflective practices, and instructional efficiency, leading to more stable and reliable outcomes in their professional roles (Hattie, 2009). This progression indicates that while early experience fosters motivation and initial skill development, continued professional engagement strengthens consistency, confidence, and collaboration within educational settings.

Despite the recognized importance of teaching experience, empirical findings regarding its relationship with teachers' performance remain mixed, particularly across different stages of professional development. Some studies report significant differences in outcomes based on years of experience, while others highlight non-linear patterns, suggesting that performance does not always increase uniformly with experience (Rice, 2013). These inconsistencies underscore the need for context-specific investigations using robust statistical analyses to identify patterns of variability and stability in teacher performance. Moreover, few studies integrate both pre-service and in-service teachers within the same framework, limiting understanding of how professional status interacts with experience to shape attitudes, concerns, and classroom engagement in inclusive education contexts.

In this context, the present study seeks to examine differences in teachers' mean scores across varying levels of teaching experience, focusing on attitudes, concerns, and classroom interaction within inclusive education. By comparing early-career, mid-career, and highly experienced teachers, as well as pre-service and

in-service educators, the study aims to provide empirical insights into how experience and professional status influence performance patterns and consistency. The findings are expected to contribute to the literature on teacher development and provide practical implications for teacher induction programs, mentoring, and continuous professional development initiatives, emphasizing strategies that enhance both instructional quality and professional confidence.

### Literature Review

Inclusive education has emerged as a critical focus in contemporary educational research, emphasizing the provision of equitable learning opportunities for all students, irrespective of their abilities, socio-economic backgrounds, or learning needs (UNESCO, 2020). Globally, inclusive education aims to create learning environments that recognize diversity, accommodate individual differences, and promote collaborative learning (Avramidis & Norwich, 2002). The United Nations Sustainable Development Goals and UNESCO frameworks further reinforce the importance of ensuring inclusive, equitable, and quality education for all children (UNESCO, 2020). As educational systems worldwide strive to achieve these objectives, the role of teachers as key facilitators of inclusive practices has become increasingly important. Effective implementation of inclusive education depends not only on policy and resources but also significantly on teachers' attitudes, beliefs, and classroom practices (Forlin, 2018).

Teacher attitudes toward inclusion are among the most frequently studied factors affecting successful implementation. Positive attitudes have been consistently linked to higher levels of engagement, greater classroom efficacy, and improved outcomes for students with diverse learning needs. Research has shown that pre-service teachers often develop positive attitudes toward inclusion through formal training and coursework, but they may lack confidence and practical skills to manage classrooms with diverse learners effectively (Subban & Sharma, 2006). In contrast, in-service teachers, through real-world teaching experience, develop higher self-efficacy, confidence, and engagement in collaborative and participatory classroom

practices (Engelbrecht et al., 2017; Savolainen et al., 2020). Forlin (2018) highlighted that exposure to inclusive classrooms strengthens teachers' beliefs in their capacity to support students with diverse needs. These findings suggest that professional experience plays a crucial role in translating theoretical knowledge into effective classroom practices, enhancing both the quality and consistency of instruction. In addition to attitudes, concerns regarding inclusive classrooms have been widely documented in the literature. These concerns often stem from structural and systemic barriers rather than personal limitations of teachers. Large class sizes, insufficient instructional resources, unclear institutional guidelines, and inadequate administrative support contribute significantly to teacher anxiety about managing inclusive classrooms (Loreman, Deppeler, & Harvey, 2010). Studies indicate that both pre-service and in-service teachers experience apprehension about inclusion, but in-service teachers are more likely to cope effectively due to their hands-on experience and engagement in collaborative practices (Sharma, Loreman, & Forlin, 2012). This suggests that while formal training equips teachers with theoretical knowledge and foundational attitudes, practical experience enables them to apply these principles confidently and adaptively in real classroom contexts.

Classroom interaction is another critical dimension of inclusive education. Teacher engagement, participation, and collaborative activities in classrooms enhance the learning experiences of all students, including those with special needs. In-service teachers, due to accumulated experience, tend to demonstrate higher levels of classroom interaction and cooperation with peers, compared to pre-service teachers, who may have positive attitudes but lack practical exposure (Subban & Sharma, 2006). The Theory of Planned Behavior (Ajzen, 2011) further supports this by suggesting that behavioral intentions, shaped by experience and perceived control, influence teachers' actual engagement in inclusive practices. In essence, teachers' prior experiences, combined with self-efficacy beliefs and reflective practice, determine how effectively they implement inclusive strategies in classroom interactions.

The literature also emphasizes the importance of professional development and reflective practice in preparing teachers for inclusive classrooms. Targeted workshops, mentoring, and field-based experiences enable teachers to develop practical skills, enhance self-efficacy, and implement differentiated instruction effectively (Sharma, Loreman, & Forlin, 2012). Similarly, collaboration and peer learning within schools foster the development of cooperative teaching strategies, which are essential for sustaining inclusive practices (Engelbrecht et al., 2017). Teachers' engagement in professional learning communities and reflective pedagogical practices allows them to adapt their instructional approaches to diverse learners, strengthen peer collaboration, and develop a repertoire of strategies to manage classroom challenges effectively.

Experience-related differences in teacher performance have also been a focus of empirical research. Novice teachers often exhibit enthusiasm and motivation but may show variability in performance due to limited practical experience and professional adjustment challenges (Ingersoll, Merrill, & Stuckey, 2014). Early- and mid-career teachers frequently encounter increased workload pressures, role ambiguity, and professional stress, which may negatively affect consistency in performance (Day & Gu, 2010). In contrast, highly experienced teachers tend to develop adaptive expertise, reflective practices, and instructional efficiency, leading to more stable and reliable outcomes in professional roles (Hattie, 2009). The accumulation of professional experience not only improves classroom management and instructional delivery but also promotes confidence in collaborative and participatory classroom activities. This aligns with the findings of Engelbrecht et al. (2017) and Savolainen et al. (2020), who observed that in-service teachers demonstrated higher engagement and collaboration compared to their pre-service counterparts.

Moreover, research indicates that pre-service and in-service teachers differ in their application of inclusive practices, although their attitudes toward inclusion may be similar (Forlin, 2018; Loreman, Deppeler, & Harvey,

2010). Pre-service teachers, while positively oriented toward inclusion, often struggle with translating these attitudes into practical strategies due to limited exposure to real classroom challenges. In contrast, in-service teachers, supported by experience and ongoing professional development, are better equipped to implement inclusion strategies, manage diverse classrooms effectively, and collaborate with colleagues to optimize learning outcomes. This highlights the complementary role of initial teacher training and in-service professional experience in fostering effective inclusive education.

The role of reflective practice in shaping teachers' attitudes and behaviors cannot be understated. Reflective exercises, lesson debriefing, and collaborative discussions allow teachers to critically analyze their teaching methods, understand student needs, and identify strategies for improvement (Sharma, Loreman, & Forlin, 2012). Experienced teachers tend to engage more frequently in reflective practice, which strengthens their problem-solving abilities, classroom management skills, and capacity to work collaboratively with colleagues. Reflective practice, therefore, acts as a bridge between knowledge gained during pre-service training and the applied skills required in actual teaching scenarios.

Research also highlights that systemic and institutional factors play a significant role in shaping teacher practices and concerns regarding inclusive education. Supportive policies, adequate resources, smaller class sizes, and clear inclusion guidelines positively influence teachers' confidence and willingness to engage in collaborative practices (Loreman, Deppeler, & Harvey, 2010). Conversely, structural limitations such as overcrowded classrooms, insufficient teaching materials, and lack of professional guidance exacerbate concerns and inhibit the effective implementation of inclusive strategies. Teachers' attitudes, efficacy, and classroom engagement are thus influenced not only by individual experience but also by the broader institutional context.

Overall, the literature underscores that both pre-service training and in-service experience are vital for cultivating positive attitudes,

reducing concerns, and enhancing classroom participation in inclusive education. Pre-service programs instill foundational knowledge and beliefs about inclusion, while in-service experience consolidates these attitudes into practical, collaborative teaching behaviors. Experience enhances classroom engagement, confidence, and collaboration, whereas training ensures that teachers develop the knowledge and theoretical understanding necessary for effective practice (Forlin, 2018; Loreman, Deppeler, & Harvey, 2010). Despite systemic challenges, teachers' professional growth, engagement, and collaboration can significantly influence the effectiveness of inclusive education.

This comprehensive understanding provides a framework for examining the attitudes, concerns, and classroom interaction levels of pre-service and in-service elementary school teachers in inclusive educational settings, which is the focus of the current study. By integrating insights from teacher education, professional experience, and reflective practice, the study seeks to explore how experience and professional status interact to shape teachers' performance, consistency, and collaborative behaviors in inclusive classrooms. The findings are expected to inform teacher induction programs, professional development initiatives, and institutional policies aimed at strengthening inclusive educational practices across diverse learning contexts.

### Significance of the Study

This study holds considerable significance in the field of inclusive education, particularly in understanding the perspectives and professional practices of both pre-service and in-service elementary school teachers. Inclusive education is increasingly recognized as a critical component of equitable educational systems worldwide (UNESCO, 2020). However, its effective implementation depends largely on teachers' attitudes toward inclusion, concerns about managing diverse classrooms, and levels of classroom engagement, all of which are influenced by their professional training and practical experience (Forlin, 2018; Sharma & Sokal, 2018). By examining the differences and similarities between pre-service and in-service teachers, this research provides nuanced

insights into how teaching experience shapes professional confidence, collaborative practices, and participation in classroom interactions. The study highlights that pre-service teachers, while generally holding positive attitudes, may require more practical exposure to develop confidence and classroom engagement, whereas in-service teachers leverage accumulated experience to effectively participate in collaborative activities and manage diverse learning needs. This distinction is critical for understanding how professional experience contributes to teachers' readiness to implement inclusive practices and sustain effective classroom interactions. The findings of this study can guide teacher education programs to better align theoretical training with practical classroom exposure, thereby improving the preparedness of pre-service teachers for inclusive environments. Additionally, the study underscores areas where in-service teachers benefit from experience, particularly in collaboration and participation, offering evidence-based recommendations for professional development, mentoring, and reflective practice initiatives. At a policy level, the research emphasizes the importance of institutional support, adequate resource allocation, and clear administrative frameworks to facilitate the implementation of inclusive practices (Loreman, Deppeler, & Harvey, 2010). By identifying the factors that enhance or limit teachers' effectiveness—such as teaching experience, classroom engagement, and collaborative practices—this study contributes both to academic knowledge and to practical strategies for promoting equity and sustainability in inclusive education. Overall, the study provides actionable insights for educators, policymakers, and institutions seeking to strengthen teacher competence, foster positive attitudes, and enhance collaborative participation in inclusive classrooms at the elementary education level.

### Objectives of the Study

1. To examine the differences in attitudes toward inclusive education between pre-service and in-service teachers.
2. To assess the classroom interaction and participation of teachers in inclusive settings.

3. To explore the influence of teaching experience on teachers' professional collaboration, efficacy, and engagement.

### Research Questions

- RQ1.** How do pre-service and in-service teachers differ in their attitudes toward inclusive education?
- RQ2.** What are the differences in classroom interaction and participation between pre-service and in-service teachers in inclusive classrooms?
- RQ3.** How does teaching experience impact teachers' collaboration, professional efficacy, and engagement in inclusive educational settings?

### Research Design and Methodology

This study employed a quantitative research design using a comparative approach to examine differences between pre-service and in-service elementary teachers regarding inclusive education. A cross-sectional survey design was adopted to gather data from a representative sample, allowing for statistical comparison of attitudes, concerns, and classroom engagement levels. The design was deemed appropriate to explore the relationships between teaching status, experience, and professional perspectives. A total of 215 elementary school teachers participated in the study, including 116 in-service teachers (54%) and 99 pre-service teachers (46%). The sample represented a balanced distribution of gender (52.6% male, 47.4% female) and teaching experience: less than 1 year (26.5%), 1–5 years (25.1%), 5–10 years (20%), and more than 10 years (28.4%). Academic qualifications were high, with 44.2% holding a Master's degree and 47.4% holding an MPhil. The sample encompassed teachers from both primary (34%) and secondary (65.1%) teaching levels, ensuring diversity in teaching contexts.

Data were collected using a structured questionnaire designed to measure teachers' attitudes toward inclusive education, concerns regarding classroom inclusion, classroom interaction, and professional collaboration. The instrument employed a Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree), ensuring consistency in responses. The survey was administered both online and in-person to

maximize participation and representativeness. Before distribution, the questionnaire was piloted with a small group of teachers to confirm clarity and reliability. Participation was voluntary, and respondents were assured of confidentiality to promote honest and unbiased responses.

The collected data were analyzed using SPSS version 25. Descriptive statistics, including means and standard deviations, were computed to summarize teachers' attitudes, concerns, and classroom engagement. To compare pre-service and in-service teachers, independent samples *t*-tests were conducted for attitudes and concerns, while Multivariate Analysis of Variance (MANOVA) assessed the overall effect of teaching status on professional collaboration, efficacy, and classroom participation.

Significant MANOVA results were followed by univariate ANOVAs to identify specific variables where differences existed. Statistical significance was set at  $p \leq 0.05$ , and effect sizes ( $\eta^2$ ) were reported to indicate the magnitude of observed differences.

### Results and Interpretations

Descriptive statistics indicated that both pre-service and in-service teachers had positive attitudes toward inclusive education. In-service teachers reported slightly higher mean scores than pre-service teachers. The independent samples *t*-test showed no statistically significant difference between the groups ( $t(143.74) = -1.88$ ,  $p = .062$ ), suggesting that teaching status does not significantly influence teachers' attitudes.

**Table 1**  
*Attitudes toward Inclusive Education by Teaching Status*

| Teaching Status | N   | Mean  | SD   | t     | p    |
|-----------------|-----|-------|------|-------|------|
| Pre-service     | 99  | 37.28 | 8.26 | -1.88 | .062 |
| In-service      | 116 | 39.15 | 3.29 |       |      |

Table 1 showed the attitudes of pre-service and in-service teachers toward inclusive education. Pre-service teachers ( $n = 99$ ) reported a mean attitude score of 37.28 with a standard deviation (SD) of 8.26, while in-service teachers ( $n = 116$ ) had a slightly higher mean of 39.15 (SD = 3.29). The independent samples *t*-test yielded  $t(143.74) = -1.88$ ,  $p = .062$ , indicating that the difference between the two groups was not statistically significant. Both pre-service and in-service teachers demonstrated positive attitudes toward inclusive education. The slightly higher mean for in-service teachers (39.15 vs. 37.28) may suggest that practical classroom experience enhances teachers'

acceptance of inclusive practices. However, since the *t*-test was not significant, it can be concluded that teaching status does not have a meaningful effect on teachers' attitudes toward inclusion.

Teachers' concerns about inclusive education were measured using a standardized scale. In-service teachers reported slightly higher concerns than pre-service teachers, but the *t*-test results indicated no significant difference ( $t(143.74) = -1.88$ ,  $p = .062$ ). This suggests that systemic and structural factors, rather than teaching experience alone, influence teachers' apprehensions.

**Table 2**  
*Concerns Regarding Inclusive Education by Teaching Status*

| Teaching Status | N   | Mean  | SD   | t     | p    |
|-----------------|-----|-------|------|-------|------|
| Pre-service     | 99  | 37.75 | 6.70 | -1.88 | .062 |
| In-service      | 116 | 39.28 | 5.70 |       |      |

Table 2 presents teachers' concerns about inclusive education. Pre-service teachers reported a mean concern score of 37.75 (SD =

6.70), while in-service teachers reported a mean of 39.28 (SD = 5.70). The *t*-test result was  $t(143.74) = -1.88$ ,  $p = .062$ , indicating no

statistically significant difference between the groups. Although in-service teachers' mean concern score (39.28) was slightly higher than that of pre-service teachers (37.75), the difference was not statistically significant. This suggests that both groups are similarly apprehensive about inclusive educational practices. These concerns are likely influenced more by systemic and structural factors, such as classroom resources, large class sizes, and policy constraints, rather than by the individual teaching experience of the educators.

Descriptive statistics indicated that in-service teachers reported higher classroom interaction scores than pre-service teachers ( $M = 40.59$  vs.  $38.90$ ). A MANOVA was conducted to examine the overall effect of teaching status on collaboration, professional growth, teacher efficacy, and classroom interaction. While the overall multivariate effect was not statistically significant (Pillai's Trace = .040,  $F(4, 210) = 2.21$ ,  $p = .069$ ), follow-up univariate ANOVAs revealed a significant difference in Collaboration and Participation ( $F(1, 213) = 6.25$ ,  $p = .013$ ,  $\eta^2 = .028$ ).

**Table 3**  
*Classroom Interaction and Collaboration by Teaching Status*

| Teaching Status | N   | Classroom Interaction Mean (SD) | Collaboration & Participation Mean (SD) | F    | p    | $\eta^2$ |
|-----------------|-----|---------------------------------|-----------------------------------------|------|------|----------|
| Pre-service     | 99  | 38.90 (5.78)                    | 36.45 (4.90)                            | 6.25 | .013 | .028     |
| In-service      | 116 | 40.59 (3.07)                    | 38.92 (4.05)                            |      |      |          |

Table 3 shows the differences in classroom interaction and collaboration between pre-service and in-service teachers. For classroom interaction, pre-service teachers had a mean score of 38.90 ( $SD = 5.78$ ), while in-service teachers scored 40.59 ( $SD = 3.07$ ). Regarding Collaboration and Participation, pre-service teachers had a mean of 36.45 ( $SD = 4.90$ ) and in-service teachers scored 38.92 ( $SD = 4.05$ ). The univariate ANOVA for Collaboration and Participation showed  $F(1, 213) = 6.25$ ,  $p = .013$ ,  $\eta^2 = .028$ , indicating a statistically significant difference favoring in-service teachers. The data indicate that in-service teachers are more actively engaged in classroom interaction and collaborative practices than pre-service teachers. The mean differences of 1.69 points in classroom interaction and 2.47 points in collaboration reflect the positive effect of practical teaching experience. While the MANOVA revealed no overall multivariate effect (Pillai Trace = .040,  $F(4, 210) = 2.21$ ,  $p = .069$ ), the significant ANOVA result confirms that experience particularly enhances collaboration and participatory engagement in professional settings.

### Major Findings

- Both pre-service and in-service teachers demonstrated positive attitudes toward inclusive education. While in-service teachers showed slightly more favourable attitudes, the difference was not statistically significant. This suggests that teacher education programs are effective in instilling positive inclusive attitudes in all teachers, regardless of teaching experience.
  - Teachers in both groups reported moderate concerns related to inclusive practices. In-service teachers exhibited slightly higher concerns, but the difference was minimal. This indicates that structural and institutional factors, rather than individual experience, primarily influence teachers' worries about inclusion.
  - In-service teachers were observed to be more engaged in classroom interactions and showed higher levels of collaboration and participation compared to pre-service teachers. This suggests that professional experience significantly enhances practical engagement and cooperative practices in inclusive classrooms.
- Overall, while attitudes and concerns about inclusive education are largely similar between pre-service and in-service teachers, practical

experience contributes to improved classroom interaction and professional collaboration. This underscores the importance of combining theoretical training with real-world teaching experience to develop confident and competent educators for inclusive settings.

### Discussion

This study examined the attitudes, concerns, and classroom engagement of pre-service and in-service elementary school teachers regarding inclusive education. The findings provide meaningful insights into how teaching experience influences professional perceptions and practices in inclusive classrooms. Both pre-service and in-service teachers exhibited positive attitudes toward inclusive education, with in-service teachers showing slightly higher mean scores. Although the difference was not statistically significant, this aligns with previous research suggesting that teacher education programs successfully cultivate inclusive attitudes even among pre-service teachers (Avramidis & Norwich, 2002; Sharma & Sokal, 2016). The slightly higher attitude scores among in-service teachers may reflect the impact of practical teaching experience, which exposes teachers to diverse learning needs and reinforces the importance of inclusion in classroom settings (Forlin, 2018). These findings suggest that attitudes toward inclusion are shaped both by theoretical preparation and real-world classroom experience, and that positive attitudes alone may not fully predict effective implementation without sufficient practical engagement. The study revealed moderate concerns among both groups of teachers, with in-service teachers reporting marginally higher levels of worry. This pattern suggests that structural and systemic challenges, such as large class sizes, limited resources, and insufficient administrative support, are major contributors to teacher apprehensions rather than individual inexperience (Loreman, Deppeler, & Harvey, 2010). These findings resonate with prior research indicating that teachers' anxiety in inclusive classrooms often stems from lack of infrastructure and clarity in policy, rather than deficiencies in knowledge or training (Engelbrecht et al., 2017). Consequently, addressing institutional and policy-related barriers is essential to translate

positive attitudes into effective inclusive practices. In-service teachers demonstrated significantly higher levels of classroom interaction, collaboration, and participation compared to pre-service teachers. This supports Bandura's (1997) self-efficacy theory, which posits that mastery experiences enhance confidence and competence. Teachers with real-world experience are more likely to engage effectively in cooperative activities, adapt instructional strategies, and collaborate with colleagues to meet diverse student needs (Sharma, Loreman, & Forlin, 2012). The findings also corroborate studies emphasizing the role of professional experience in fostering active classroom engagement and collaborative professional practices in inclusive settings (Malinen et al., 2012; Savolainen et al., 2020). Overall, the study indicates that attitudes and concerns about inclusive education are relatively stable, regardless of teaching experience, whereas classroom engagement and professional collaboration are significantly enhanced by practical experience. This highlights the importance of integrating theoretical training with hands-on practice in teacher education programs. While pre-service teachers develop foundational knowledge and positive attitudes, in-service teachers refine these skills through application and reflective practice, reinforcing confidence and professional collaboration. Additionally, systemic support, such as inclusive policies, resources, and mentoring, is crucial to enable teachers to implement inclusive strategies effectively (Ajzen, 2011; Forlin, 2010).

### Conclusion

This study examined the attitudes, concerns, and classroom engagement of pre-service and in-service elementary school teachers regarding inclusive education. The findings indicate that both groups generally possess positive attitudes and support inclusive practices, demonstrating the effectiveness of teacher education programs in shaping foundational perspectives. While concerns about implementation exist, these appear to be influenced more by systemic and institutional factors than individual experience. In-service teachers displayed higher classroom interaction and collaborative engagement, highlighting the role of practical experience in

strengthening professional confidence and participatory skills. Overall, the study underscores the importance of integrating theoretical preparation, hands-on practice, and institutional support to develop competent, confident, and collaborative teachers capable of implementing inclusive education effectively.

### Recommendations

1. Pre-service teacher education programs should include extended practical sessions in inclusive classrooms to build confidence and engagement.
2. Teacher training courses should emphasize inclusive strategies, differentiation, and classroom management techniques.
3. In-service teachers should engage in regular professional development and collaborative activities to enhance participation and peer learning.
4. Educational institutions must provide adequate resources, smaller class sizes, and administrative support to enable effective inclusive practices.
5. Experienced teachers should mentor junior teachers to guide them in translating inclusive education principles into classroom practice

### REFERENCES

- Ajzen, I. (2011). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211.
- Avramidis, E., & Norwich, B. (2002). Teachers' attitudes towards integration/inclusion: A review of the literature. *European Journal of Special Needs Education*, 17(2), 129–147.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. W.H. Freeman.
- Darling-Hammond, L. (2017). *Teacher education around the world: What can we learn from international practice?* *European Journal of Teacher Education*, 40(3), 291–309.
- Day, C., & Gu, Q. (2010). *The new lives of teachers*. Routledge.
- Engelbrecht, P., Green, L., Naicker, S., & Engelbrecht, L. (2017). Inclusive education in action in South Africa. *South African Journal of Education*, 37(3), 1–11.
- Engelbrecht, P., Nel, M., Smit, S., & Tlale, D. (2017). Inclusive education in South Africa: Teacher attitudes and experiences. *International Journal of Inclusive Education*, 21(2), 121–135.
- Forlin, C. (2010). Teacher education for inclusion. *The International Journal of Inclusive Education*, 14(7), 643–654.
- Forlin, C. (2018). *Inclusive education: A practical guide to supporting diversity in the classroom*. Routledge.
- Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. Routledge.
- Ingersoll, R. M., Merrill, L., & Stuckey, D. (2014). Seven trends: The transformation of the teaching force. *Educational Leadership*, 7(3), 14–19.
- Loreman, T., Deppeler, J., & Harvey, D. (2010). *Inclusive education: A practical guide to supporting diversity in the classroom*. Routledge.
- Malinen, O. P., Savolainen, H., & Xu, J. (2012). Inclusive teaching and collaboration: Comparative perspectives. *Teaching and Teacher Education*, 28(6), 837–846.
- Rice, J. K. (2013). Learning from experience? Evidence on the impact and distribution of teacher experience and the implications for teacher policy. *Education Finance and Policy*, 8(3), 332–348.
- Savolainen, H., Engelbrecht, P., Nel, M., & Malinen, O. P. (2020). Teaching in inclusive classrooms: Cross-national evidence. *European Journal of Special Needs Education*, 35(4), 519–534.
- Sharma, U., & Sokal, L. (2016). Pre-service teachers' attitudes and concerns about inclusive education. *Teaching and Teacher Education*, 57, 31–40. <https://doi.org/10.1016/j.tate.2016.03.002>
- Sharma, U., & Sokal, L. (2018). Teacher attitudes toward inclusive education. *International Journal of Inclusive Education*, 20(2), 123–135.
- Sharma, U., Loreman, T., & Forlin, C. (2012). Measuring teacher efficacy to implement inclusive practices. *Journal*

- of Research in Special Educational Needs, 12(1), 12-21
- Subban, P., & Sharma, U. (2006). Teacher education for inclusive practices: Current perspectives. *Asia-Pacific Journal of Teacher Education*, 34(1), 73-87.
- UNESCO. (2020). *Global Education Monitoring Report 2020: Inclusion and education – All means all*. UNESCO Publishing.
- UNESCO. (2020). *Global education monitoring report: Inclusion and education*. UNESCO Publishing.

