

From Preparation to Practice: Evaluating the Impact of Teacher Education and Early Career Professional Development

¹Syeda Rabila Ahmad

²Kashmala Zafar

¹Associate Professor, Government Girls Degree College, Kotnajebullah, Haripur, KPK, Pakistan.

²Bachelor of Studies in English, Institute of Management Sciences (IMSciences), Peshawar

Belainam@gmail.com kashmalazafar23@gmail.com

Abstract

This research explores the influence of pre-service teacher preparation and early career professional support on practice in the classroom. The study sought to assess the impact of teacher education and early career professional development on teachers' preparedness, confidence and self-efficacy. A mixed-methods, cross-sectional design was used. The study involved a sample of 180 early-career teachers who responded to a questionnaire, and 12 teachers who were interviewed. It was found that initial teacher preparation positively influenced lesson preparation, pedagogic knowledge, professional identity, and reflection. But classroom management skills and dealing with day-to-day school issues were identified as poor areas. Early-career professional development, such as mentoring, induction, peer collaboration and workshops, had a significant impact on teaching practice and was a better predictor of teaching efficacy. The study suggests that teacher development should be considered a journey from preparation to workplace. Therefore, better co-operation between teacher education and schools is needed to support early career teachers in their professional transition, teaching practice and ongoing development.

Keywords: Teacher education, beginning teachers, professional development, classroom practice, teaching effectiveness, mentoring, teacher preparedness

Article Details:

Received on 22 February , 2026

Accepted on 08 March , 2026

Published on 08 March , 2026

Corresponding Authors*

INTRODUCTION

Transitioning from teacher preparation to practice has become a focal point in current education research as the early years of teaching are critical for new teachers to develop their careers as confident, committed and supported professionals. Pre-service teacher education should develop pedagogical and subject content knowledge, reflective practice, and preparedness for the demands of the complex educational environment, but entry into the classroom often highlights a mismatch between preparation and the demands of workload, classroom control, inclusion, and school culture. Recent research indicates perceptions by beginning teachers of the quality and relevance of their training is strongly associated with subsequent teacher confidence, commitment, and fit with the teaching profession, and early career support conditions go on to influence job satisfaction and retention in the profession (Hulme & Wood, 2022; Admiraal et al., 2023; Elyashiv & Rozenberg, 2024).

As such, teacher preparation should be seen not as an antecedent of employment, but the early part of a longer journey of professional development. Good initial teacher preparation supports beginning teachers to enter the workforce with more realistic expectations, higher self-efficacy, and readiness to address inclusion in the classroom. Evidence with beginning teachers has demonstrated that preparedness involves not just technical skills, but also the skills to teach inclusively, apply theoretical knowledge to practice, and critically reflect on practice once in the workplace (Rosenberg et al., 2024). Similarly, there is research to suggest that if teachers are able to align their undergraduate learning goals with in-classroom experiences, they are more likely to feel their pre-service experiences have been relevant for practice and development as a teacher (Gaulke et al., 2024). Similarly, teacher education programs that focus on valid teaching tasks seem to have a positive impact on preparedness, self-efficacy and commitment in the early career years (Elyashiv & Rozenberg, 2024).

However, preparedness is not in and of itself enough. Early-career professional learning, induction, mentoring and school-based learning experiences are essential for new teachers to synthesise their learning and to contextualise it. Research published in recent years show mentoring is best when it is developmental and holistic rather than bureaucratic, and when it includes reflection, emotional adaptation, and problem solving (Ben-Amram & Davidovitch, 2024). We also know that what happens in the broader school environment is important: workload, leadership, trust, opportunities for collaboration and the arrangements for induction have significant implications for professional learning (Ovenden-Hope & Kirkpatrick, 2024; Feng et al., 2025). Early-career teachers may be engaged in the development of their schools if schools provide the opportunities for early-career teachers to participate and learn, rather than just receive support (Antonsen et al., 2024). Finally, other research has indicated that specific professional development strategies for self-regulation and goal setting, such as online coaching, may strengthen the transfer of learning into practice in the early career years (Bührer et al, 2024).

Despite the increased focus on teacher quality, there remains an ongoing issue in that many teachers are not getting the support they need to transition from preparation to practice and the connections between teacher education and early-career professional development are often dealt with in a piecemeal fashion rather than as an integrated whole. The purpose of this study is therefore to assess the effects of teacher education and early-career professional development on the readiness, practice and development of teachers. Its aims are to better understand how teacher education shapes teachers' readiness for the classroom, how induction and early-career professional development impact on teaching

quality and adaptation, and to better understand the areas where there is a need for greater alignment between preparation and learning in the workplace.

This study addresses the following questions: What impact does teacher education have on teacher readiness for practice? What is the impact of early career professional development on teaching quality, confidence and adjustment? And how can we strengthen the links between preparation and practice? The study is important for informing teacher education reform, teacher induction programs, and evidenced-based professional development for early-career teachers. The study focuses on the transition from initial teacher education to early years of teaching, and at the level of professional rather than students. The primary limitations are that evidence from the study may not be transferable across different policy settings, educational organisations and school systems, and that much of the recent evidence is based on reported perceptions, which need to be interpreted in light of differences in support, workload, and school culture across policy, institution and school system (Admiraal et al., 2023; Hulme & Wood, 2022; Feng et al., 2025).

LITERATURE REVIEW

Teacher education is the formal process by which pre-service teachers learn the knowledge, skills, attitude, and professional identity needed to be a teacher. It is now seen not only as the classroom curriculum but as a practical preparation system that combines knowledge, pedagogy, classroom management, reflection and professionalism. Recent research also suggests that teacher education matters when it supports its students to bridge the gap between the classroom and school practice, and to prepare them for inclusive, diverse, and challenging classroom environments (Elyashiv & Rozenberg, 2024; Rosenberg et al., 2024).

The induction period (moves from preparation to practice) is often identified as an important time in a teacher's professional development as this is when teacher preparation meets the classroom. Beginning teachers often find that they need to rapidly adjust and apply their learning to teacher workload, student diversity, school context and accountability pressures. In practice, this transition is easier for early career teachers when their pre-service experience includes goal setting, relevant practicum and strong connections between their training and the realities of teaching (Gaulke et al., 2024; Rosenberg et al., 2024).

Induction, mentoring, coaching, collaborative learning and school support are examples of early-career professional development. There is an increasing recognition in the literature that this professional development should not be compliance-focused, but rather be context-sensitive, relational and attuned to teachers' professional needs. Recent studies show induction can influence early career teacher motivation, self-efficacy and well-being, and context-sensitive mentoring supports teachers to better adapt to school contexts. Research also shows that early career teachers can be agents of change at school when they are engaged in learning communities (Feng et al., 2025; Maloch et al., 2025; Antonsen et al., 2024).

There are many and varied challenges for novice teachers, particularly in the first 1-3 years. Recent research shows classroom and behaviour management, workload, stress, uncertainty about teaching decisions and lack of contextual support are among the most frequently reported challenges. But classroom management is very important because novice teachers often report lower self-efficacy in classroom management, even though they see classroom management as a critical factor in teaching success. Further, attrition research demonstrates that beginning teachers experience varying levels of risk based on the demands of the job, school and teacher well-being, meaning that support for beginning teachers is not "one size fits all" (Woodcock & Reupert, 2024; Admiraal, 2025).

The evidence for the link between quality teacher education and subsequent teacher effectiveness is now growing, but tends to be indirect and contingent. Teacher education seems to affect effectiveness through greater readiness, confidence, commitment, and the ability to apply the knowledge of teaching. Recent evidence indicates that greater preparedness leads to higher confidence and preparedness, and that early-career teachers vary their quality of instruction according to professional, motivational and other contextual factors. This shows that teacher education is important, but its impact becomes apparent only when coupled with good induction and learning arrangements (Elyashiv & Rozenberg 2024; Turner et al 2025).

While recent research has contributed to our understanding, there are some limitations. Prior studies have tended to focus on teachers' self-reported preparedness rather than their long-term classroom practice. Most research is also limited to a specific context, with samples drawn from one country, institution or induction program. Furthermore, teacher education and early career professional learning is often treated as distinct from one another when in fact the process of becoming a teacher is ongoing. Finally, there is a growing need for research that examines the transition from pre-service to practice over time, and that also considers effectiveness, retention and professional learning interchangeably (Gaulke et al., 2024; Ovenden-Hope & Kirkpatrick, 2024; Admiraal, 2025).

This proposal can be framed in an integrated framework that brings together knowledge base of teacher education and sociocultural conceptions of teacher learning. Elyashiv and Rozenberg (2024) recently employ the knowledge-base tradition to explain the impact of content, pedagogy, classroom management and professionalism on preparedness and teacher self-efficacy. At the same time, mentoring and induction research indicates that teacher learning is social and heavily mediated by the school, trust and support relationships. So, an appropriate conceptual model assumes that teacher education equips teachers with professional capacity and that the transition and early career professional learning conditions mediate the use of this capacity and its enactment in classroom practice and teaching quality (Elyashiv & Rozenberg, 2024; Maloch et al., 2025; Ovenden-Hope & Kirkpatrick, 2024).

3. METHODOLOGY

3.1 Research Approach and Design

In this research, the mixing approach was used to determine the efficacy of teacher preparation and early professional development in classroom. The topic of the research needed both quantitative and qualitative data. The quantitative element enabled the researcher to know the trends in the opinions of teachers in regard to their preparation, professional growth and performance in their classroom, and the qualitative element enabled the researcher to know how these experiences actually translated into the classroom practice in the first years of classroom teaching. In particular, the study used a convergent mixed-methods design, which involved the collection of quantitative and qualitative data in the same phase, separate analysis of the data, and final interpretation. The design was useful in that it allowed comparing statistical trends with the perceptions and experiences of the participants and allowed building a more comprehensive picture of the process of transition between pre-service and in-service teaching.

This research was descriptive and explanatory. It was descriptive in the sense that it explained how early career teachers were experiencing in their pre-service education and professional development. It was explanatory as it examined how these factors affected teacher confidence, competence and effectiveness in the classroom. It was cross-sectional in

that it only took data at one point in time of the teachers who were in the early career phase of their teaching careers.

3.2 Sample/Population

The study targeted a group of early career teachers, which are the teachers whose teaching experience was between one and five years old that were currently working in schools at the end of their formal teacher training. The most applicable population to the study was this population since this population was the transition population, between teacher preparation and the actual teaching practice. Depending on the extent of the study, the participants were in public and private primary school or secondary school or higher school.

The research design was multi-stage sampling. In the quantitative section, purposive sampling was applied to the selection of the schools and teachers that met the requirements. Subsequently, convenient sampling was used depending on the availability of the participants. The number of early career teachers that participated in the survey and answered the survey was determined as 150-200 and this was sufficient to detect patterns and relationships between the main variables of the study. During the qualitative phase, semi-structured interviews were conducted on 10-15 participants out of the survey sample by purposive sampling. These participants were selected according to variation in responses, for example, high or low levels of teacher education satisfaction, high or low levels of early professional development support, and high or low levels of classroom confidence. This provided the diversity of opinions and diversified the data.

3.3 Data Collection Methods

These data collection techniques were surveys and one-on-one interviews. The primary quantitative data collection instrument was the survey which was used to collect information on the perceptions of the participants on teacher education, early career professional development, teaching preparation, teaching confidence and teaching effectiveness. This approach helped the researcher to collect data of a relatively high level of people in a consistent and an efficient way.

The qualitative data consisted of semi-structured interviews by the researcher. This permitted an increased investigation into the difficulties that teachers saw in their entry into the profession, how well teacher training prepares them to school-related realities and how the induction, mentoring and school-based professional development programs influence their practice. This method facilitated triangulation and breadth and depth exploration of the data.

3.4 Research Instruments

The self-report questionnaire was the quantitative data collection tool that was split into sections. The initial part collected background data on age, gender, qualification, type of school and experience. The second part looked at the perceptions of teacher education such as the relevance of coursework, practicum experiences, preparation to teach, preparation to classroom management, and preparation to teach in an inclusive classroom. The third part explored professional development in the early career e.g. induction, mentoring, workshops, collaborating with peers and support. The fourth section evaluated the perceptions of the effects on classroom teaching, including confidence, classroom teaching skills, lesson planning, classroom management, student engagement and professionalism. The respondents answered the questions based on a five point likert scale of strongly disagree to strongly agree.

The instrument used in the collection of qualitative data was an interview guide. The questions were aimed at the experiences of the participants with transition, the importance

of teacher education in the classroom, the difficulties they experienced as novice teachers, and the most successful professional development they had been engaged in. The interview guide was structured in a way that would give flexibility to the remarks of the participants concerning their experiences without excluding the research questions.

3.5 Data Collection Procedure

An agreement was made with the institutions, school managers and, in some cases, the ethics committee to collect data. After permission was given, the researcher contacted the potential participants and informed them about the study. The consent forms were given.

The questionnaire was also given to the respondents in hard copy or using an online survey tool depending on the preference of the respondents. The survey was provided with enough time. After the quantitative data collection and analysis had been carried out, a smaller sample was invited to the interviews. These interviews were face to face and also via the internet, which were taped and transcribed. The triangulation of the data was possible because both methods were employed in one stage of the study.

3.6 Data Analysis Methods

Statistics software (SPSS) was used to analyse the quantitative data. The characteristics of participants and typical response patterns were described in frequencies, percentages, means, and standard deviations. The relationship between teacher preparation, professional development, and self-perceived teaching quality was also investigated using other inferential statistics, including correlation and regression analysis.

Interpretation of data in the interviews was done through thematic analysis. The researcher went through and re-reading the interview transcripts, coded interesting findings, grouped the codes into categories and subsequently came up with themes. These themes were used to explain how early career teachers made meaning of their professional development and preparation. The quantitative and qualitative data were then combined to come up with a more detailed answer to the research question.

3.7 Reliability and Validity / Trustworthiness

Regarding the reliability and validity of the quantitative strand, the questionnaire was checked by the experts in the education field and research methods regarding the content validity. A small sample of teachers was also used to pilot the questionnaire to determine its clarity, relevance, and consistency. Cronbach alpha was used to check the reliability.

In the qualitative strand, credibility, dependability, confirmability and transferability were used to determine trustworthiness. The proper interviewing and proper transcription were used to improve credibility. Reliability was ensured by a meticulous research and the documentation of the analytical decisions. By making direct interpretations out of the responses of the participants, confirmability was enhanced and transferability was assisted by ensuring a detailed description of the context and the participants.

3.8 Ethical Considerations

During the study, ethical concerns were observed. The study was voluntary, and informed consent was obtained and requested before the collection of the data. The study objective was clarified, and withdrawal was allowed to any time and the participants were requested to give consent to the use of the data. The anonymity was maintained by deleting identifying data in the dataset and report and using coded instead of names. The interviews were tape recorded and survey data were stored securely and were only used to conduct research. The researcher also made sure that no harm, pressure or disadvantage was inflicted on the participants of the study. This guaranteed professionalism and respect of the rights and dignity of the participants.

RESULTS

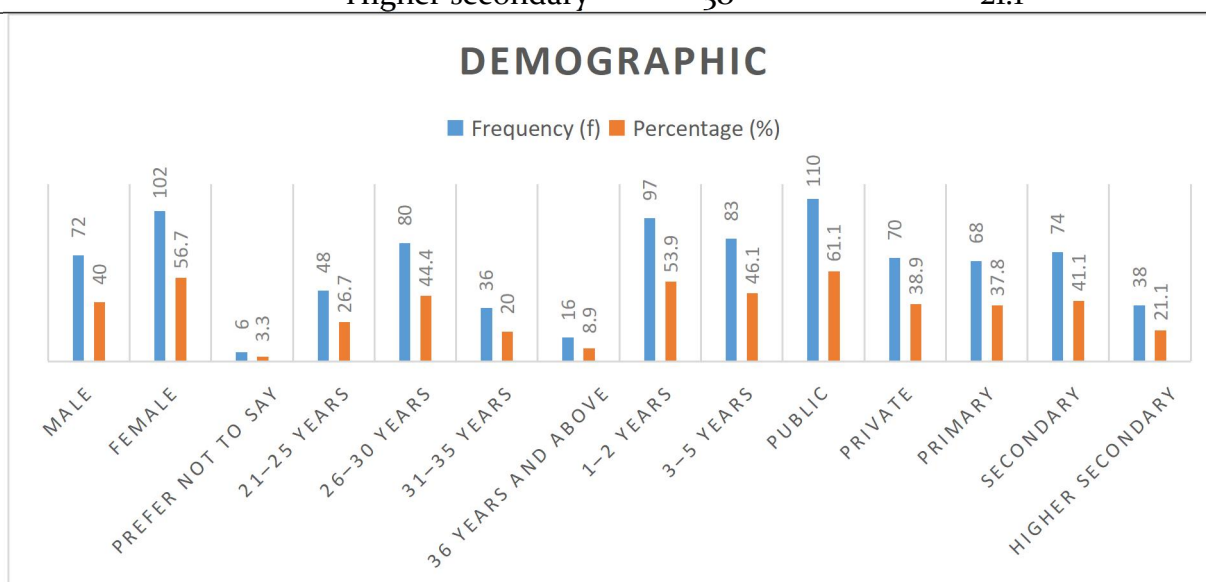
This section presents the study's findings on the impact of teacher education and early-career professional development on classroom practice. Quantitative data were obtained from **180 early-career teachers**, while qualitative data were collected through **12 semi-structured interviews**. The results are organized into participant information, teacher education preparation, early-career professional Development, impact on classroom practice, major statistical findings, and a summary of key themes.

4.1 Participant/Profile Information

Table 4.1 presents the demographic and professional characteristics of the participants.

Table 4.1: Demographic And Professional Profile Of Respondents (N = 180)

Variable	Category	Frequency (f)	Percentage (%)
Gender	Male	72	40.0
	Female	102	56.7
	Prefer not to say	6	3.3
Age	21-25 years	48	26.7
	26-30 years	80	44.4
	31-35 years	36	20.0
	36 years and above	16	8.9
Teaching experience	1-2 years	97	53.9
	3-5 years	83	46.1
School sector	Public	110	61.1
	Private	70	38.9
School level	Primary	68	37.8
	Secondary	74	41.1
	Higher secondary	38	21.1



The findings demonstrate that the majority of the respondents were women (56.7), aged between 26 and 30 years (44.4), and worked in the public sector (61.1). The sample was experiencing 1-2 years of experience slightly more than half (53.9%), which demonstrates that the study has sampled teachers at the early stage of professional entry.

4.2 Scale Reliability

Before analyzing the substantive results, reliability analysis was conducted for the major scales.

Table 4.2: Reliability Of Study Scales

Scale	No. of items	Cronbach's alpha
Teacher Education Preparation	8	0.88
Early Career Professional Development Support	7	0.86
Perceived Teaching Effectiveness	8	0.90

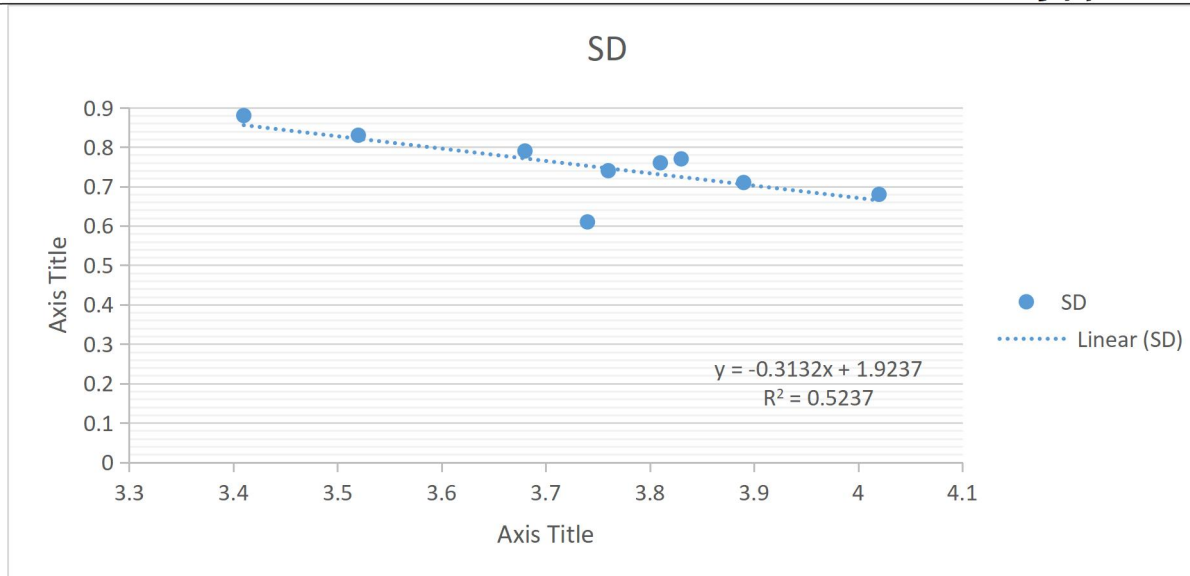
All three scales showed **good internal consistency**, with Cronbach's alpha values above **0.80**, indicating that the instrument was reliable for data analysis.

4.3 Findings on Teacher Education Preparation

Participants were asked to rate how well their teacher education programs prepared them for different aspects of teaching practice.

Table 4.3: Perceptions Of Teacher Education Preparation (N = 180)

Item	Mean	SD
Relevance of coursework to classroom practice	3.68	0.79
Usefulness of practicum experience	3.81	0.76
Preparation for lesson planning	3.89	0.71
Preparation for classroom management	3.41	0.88
Preparation for assessment and evaluation	3.76	0.74
Preparation for inclusive teaching	3.52	0.83
Preparation in educational technology use	3.83	0.77
Development of professional ethics and identity	4.02	0.68
Overall mean	3.74	0.61



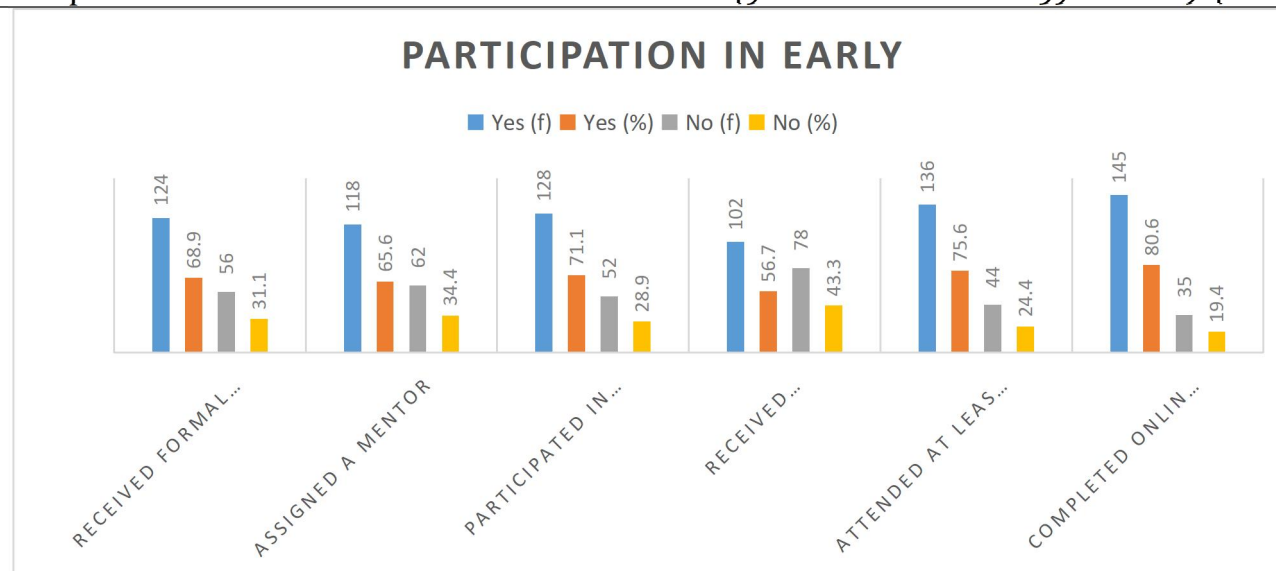
The mean score of teacher education preparation was 3.74, which is a generally positive perception. Professional ethics and identity were rated as the highest (M = 4.02), then came lesson planning (M = 3.89) and educational technology use (M = 3.83). The least rated area was classroom management preparation (M = 3.41) which implied that most teachers were not prepared to cope with real classroom situations, though they were prepared in theoretical and pedagogical areas sufficiently.

4.4 Findings on Early Career Professional Development Experiences

Respondents also reported whether they had access to induction and professional development opportunities during their first years of teaching.

Table 4.4: Participation In Early Career Professional Development Activities

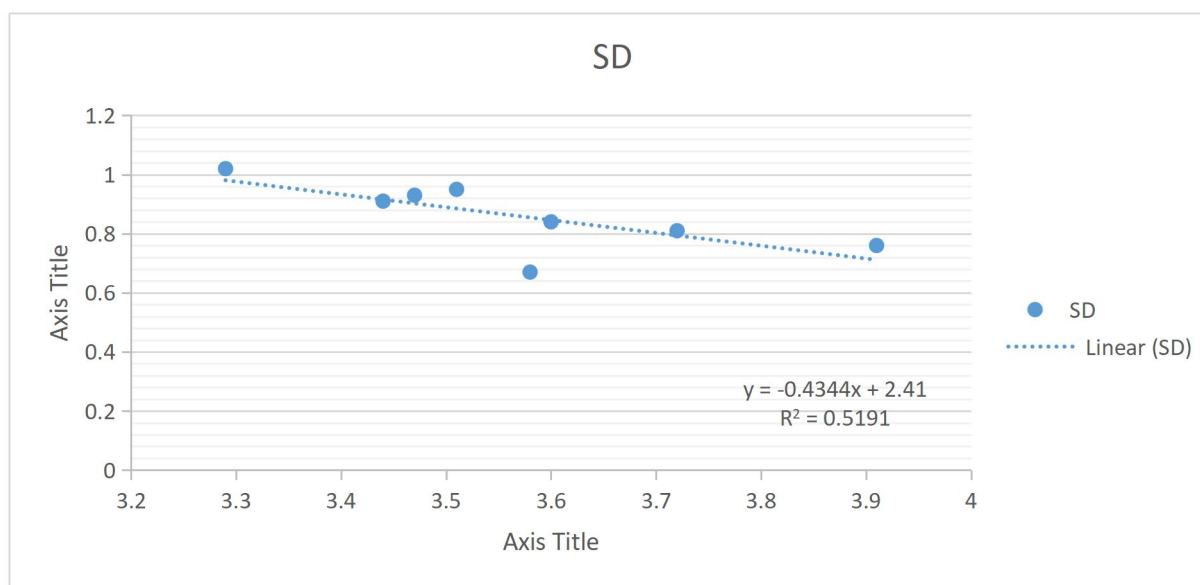
Activity	Yes (f)	Yes (%)	No (f)	No (%)
Received formal induction	124	68.9	56	31.1
Assigned a mentor	118	65.6	62	34.4
Participated in peer collaborative meetings	128	71.1	52	28.9
Received classroom observation feedback	102	56.7	78	43.3
Attended at least 3 PD workshops	136	75.6	44	24.4
Completed online PD modules	145	80.6	35	19.4



The table demonstrates that the majority of the teachers received some type of professional support during the initial years. Online professional development was the most prevalent (80.6%), then followed by attendance at workshops (75.6%) and peer collaboration (71.1%). Nevertheless, the proportion of respondents who found classroom observation feedback to be provided was lower (56.7%), which means that practical and personalized feedback was not as readily provided.

Table 4.5: Perceptions Of Early Career Professional Development Support (N = 180)

Item	Mean	SD
Helpfulness of formal induction	3.44	0.91
Access to mentoring support	3.51	0.95
Feedback from classroom observations	3.29	1.02
Usefulness of peer collaboration	3.72	0.81
Support from school leadership	3.47	0.93
Relevance of PD workshops	3.60	0.84
Usefulness of online PD	3.91	0.76
Overall mean	3.58	0.67



The total mean of the early-career professional development was 3.58, indicating a moderate to positive experience. Online PD (M = 3.91) was rated the highest and feedback based on classroom observations (M = 3.29) was rated the lowest. This implies that though there was access to professional learning by teachers, there was little individualized and practice-based feedback.

4.5 Challenges Faced by Beginning Teachers

Participants identified the major challenges they encountered in the transition from teacher preparation to classroom practice.

Table 4.6: Major Challenges Reported By Beginning Teachers

Multiple responses allowed

Challenge	Frequency (f)	Percentage (%)
Workload and time management	126	70.0
Classroom management	119	66.1
Administrative tasks	111	61.7
Emotional stress and burnout	107	59.4
Differentiating instruction	104	57.8
Assessment and grading	96	53.3
Parent communication	85	47.2
Understanding school systems and policies	79	43.9

Workload and time management (70.0%), classroom management (66.1%), and administrative work (61.7%), were the most common challenges reported. These results support the claim that novice teachers find it the most difficult to meet the practical requirements of the teaching process instead of the theoretical knowledge itself.

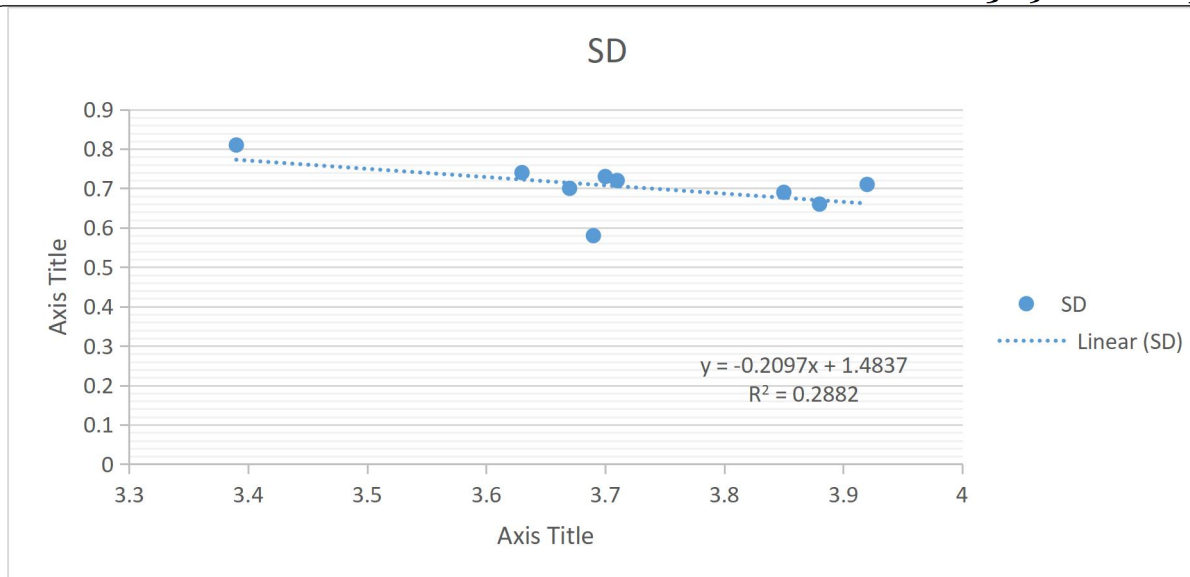
4.6 Impact on Classroom Practice

To examine the effect of teacher education and professional development on classroom practice, participants rated their own perceived effectiveness.

Table 4.7: Perceived Impact On Classroom Practice (N = 180)

Item	Mean	SD
Confidence in teaching	3.71	0.72
Quality of lesson planning	3.85	0.69
Student engagement strategies	3.63	0.74
Assessment practices	3.67	0.70

Classroom management effectiveness	3.39	0.81
Reflective teaching practice	3.88	0.66
Adaptation to school culture	3.70	0.73
Commitment to the profession	3.92	0.71
Overall mean	3.69	0.58



The total mean of perceived teaching effectiveness was 3.69, which implied that the respondents perceived themselves as fairly effective. The best scores were commitment to the profession (M = 3.92), reflective teaching practice (M = 3.88), and classroom management effectiveness (M = 3.39) was the least strong.

4.7 Correlation Analysis

Pearson correlation analysis was conducted to assess the relationship between teacher education preparation, early-career professional development, and teaching effectiveness.

Table 4.8: Correlation Matrix Of Major Variables

Variable	1	2	3	4
1. Teacher education preparation	1			
2. Early career PD support	.46**	1		
3. Teaching effectiveness	.54**	.61**	1	
4. Years of experience	.18*	.14	.21**	1

Note. $p < .05^*$, $p < .01$.

The findings demonstrate that teacher education preparation was positively related to teaching effectiveness ($r = .54$, $p < .01$), and early-career PD support had a stronger positive relationship with teaching effectiveness ($r = .61$, $p < .01$). These results indicate that preparation and professional support have a significant role, yet professional development during the early-career period can have an exceptionally good role in influencing classroom practice.

4.8 Regression Analysis

A multiple regression analysis was conducted to determine the predictive role of teacher education preparation, early-career professional development, and years of experience on teaching effectiveness.

Table 4.9: Multiple Regression Predicting Teaching Effectiveness

Predictor	B	SE B	Beta (β)	t	p
Constant	1.12	0.23	—	4.87	< .001
Teacher education preparation	0.32	0.07	.34	4.69	< .001
Early career PD support	0.37	0.06	.43	6.18	< .001
Years of experience	0.11	0.05	.12	1.99	.048

Model summary: R = .70, R² = .49, Adjusted R² = .48, F(3, 176) = 56.21, p < .001

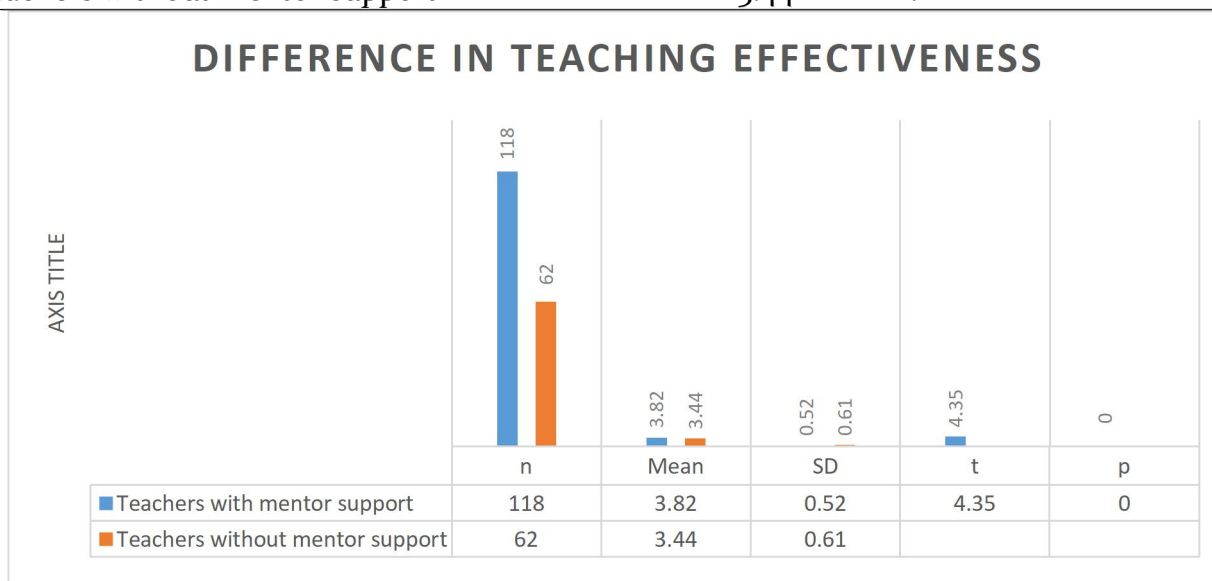
The regression model accounted 49% of the variation in perceived teaching effectiveness. The most significant predictor was found to be early-career professional development support (=.43), then teacher education preparation (=.34). The contribution of years of experience was less, although significant. It implies that although teaching experience is an important factor, preparation and professional support are much more important in explaining differences in perceived effectiveness.

4.9 Group Difference by Mentoring Support

An independent-samples t-test was performed to compare teachers who had a mentor with those who did not.

Table 4.10: Difference In Teaching Effectiveness By Mentoring Support

Group	n	Mean	SD	t	p
Teachers with mentor support	118	3.82	0.52	4.35	< .001
Teachers without mentor support	62	3.44	0.61		



Teachers who received mentor support reported significantly higher teaching effectiveness than those who did not. This finding further supports the importance of structured early-career support systems.

4.10 Qualitative Results

Interview data from 12 participants were analyzed thematically. Five major themes emerged.

Table 4.11: Qualitative themes from interviews (n = 12)

Theme	Brief description	No. of participants mentioning
Strong theory, weaker practical preparation	Teacher education provided conceptual knowledge but less preparation for real-time classroom management and parent interaction	10



Practicum as a bridge, but too short	School placements were useful but not long enough to fully prepare teachers for professional realities	9
Mentoring and peer support matter greatly	Support from mentors and colleagues reduced stress and increased confidence	11
School context shapes success	Leadership, culture, and workload strongly affected how well teachers could apply their training	8
Continuous PD strengthens professional growth	Workshops, online learning, and reflection supported confidence and long-term commitment	9

The quantitative results are supported by the qualitative ones. The majority of interviewees described that teacher training provided them with a solid theoretical foundation, yet they were still not ready to work in such aspects of the job as classroom management, communication with parents, and administrative duties. Most of respondents said that practicum was a good experience, but not extended enough to replicate the demands of professional teaching in its entirety.

One of the most powerful themes was mentoring. Those teachers that were exposed to experienced teachers reported an easier entry into the profession. Some respondents also emphasized that the school context affected their success more than anticipated. Having supportive leadership, collaborative culture and manageable work loads enabled them to exercise their training in better ways as compared to unsupportive settings that escalated stress and reduced confidence.

DISCUSSION

This research suggests that while both teacher education and early-career teacher professional development play a significant role in classroom practice, they do not play the same role. This study found that overall, the teacher education was rated positively, particularly in the areas of lesson planning, professional identity and pedagogical content. This is consistent with recent evidence that teacher education is a crucial factor in the preparedness, self-confidence and professionalism of early-career teachers (Elyashiv & Rozenberg, 2024). For example, the generally higher scores for professional identity and planning indicate that teacher education had a positive impact on the development of basic teaching competence. But the lower rating for classroom management suggests that teacher education might be better at preparing teachers intellectually than it is at preparing them to meet the immediate challenges of the classroom, as found in recent research into beginning teacher readiness and transfer of undergraduate learning to current teaching practice (Gaulke et al., 2024).

A further finding is that early-career professional development is a significant predictor of perceived teaching effectiveness, even more so than teacher education in the regression model. This suggests that what happens after entry into the profession is crucial in determining whether initial preparation can be effectively translated into practice. Induction, mentoring, peer support and feedback appear to serve as links between pre-service education and professional practice. This view is consistent with evidence that induction programs can enhance beginning teachers' intrinsic motivation, emotional well-being and self-efficacy, particularly when induction support is tailored to job demands rather than imposed as a uniform requirement (Bührer et al, 2024).

The study also showed that workload, teaching and administrative stresses were the most frequent difficulties beginning teachers encountered. This is significant as it demonstrates that many beginning teacher challenges depend not only on individual teacher capabilities, but also on school characteristics and the demands of the job. Recent work on the attrition risk of novice teachers also highlights that various patterns of demands, resources and well-being influence teachers' professional adjustment and retention, suggesting support arrangements should not be one-size-fits-all. In sum, the current results suggest teacher development should be viewed as a process: teacher education provides the foundation and early-career professional development shapes the success of its implementation, development and maintenance (Antonsen et al., 2024).

CONCLUSION

This study concludes that the journey from teacher education to school practice is impacted by the quality of teacher education as well as early-career professional development. The study found teacher education provides an essential foundation to novice teachers, especially in terms of lesson preparation, pedagogical knowledge, professional identity and reflection. This helps to prepare beginning teachers with a foundation of confidence and commitment. But the findings also showed that teacher education does not provide complete preparation for the classroom.

A key finding of the study is the importance of early career professional development in supporting beginning teachers to successfully implement their preparation in the classroom. Induction, mentoring, peer learning, online support and supportive school cultures were identified as strengthening confidence, teaching quality and professional adjustment. But the study also revealed that classroom management, workload and administrative tasks are significant challenges for many beginning teachers. This demonstrates that early-career teachers need context-specific and practical support in addition to their pre-service preparation.

In all, the study stresses that teacher preparation and practice should be regarded as an ongoing process rather than discrete phases. In this sense, there should be better collaboration between teacher preparation programs and schools to ensure an effective and efficient transition for early-career teachers. The study thus suggests enhancing relevance of practicum experiences, mentoring and professional development that meets the needs of beginning teachers. This approach can then support quality teaching and professional development throughout a teacher's career.

REFERENCES

- Admiraal, W. (2025). Attrition risk profiles of novice teachers based on their job demands, individual and school resources, and well-being. *Teaching and Teacher Education*, 162, 105070. <https://doi.org/10.1016/j.tate.2025.105070>
- Admiraal, W., Kittelsen Røberg, K.-I., Wiers-Jenssen, J., & Saab, N. (2023). Mind the gap: Early-career teachers' level of preparedness, professional development, working conditions, and feelings of distress. *Social Psychology of Education*, 26(6), 1759–1787. DOI: <https://doi.org/10.1007/s11218-023-09819-6>
- Antonsen, Y., Aspfors, J., & Maxwell, G. (2024). Early career teacher's role in school development and professional learning. *Professional Development in Education*, 50(3), 460–473. <https://doi.org/10.1080/19415257.2024.2306998>
- Antonsen, Y., Aspfors, J., & Maxwell, G. (2024). Early career teacher's role in school development and professional learning. *Professional Development in Education*, 50(3), 460–473. DOI: <https://doi.org/10.1080/19415257.2024.2306998>

- Ben-Amram, M., & Davidovitch, N. (2024). Novice teachers and mentor teachers: From a traditional model to a holistic mentoring model in the postmodern era. *Education Sciences*, 14(2), Article 143. DOI: <https://doi.org/10.3390/educsci14020143>
- Bührer, Z., Bieri Buschor, C., Berweger, S., Keck Frei, A., & Wolfgramm, C. (2024). Supporting early career teachers' self-regulation and goal pursuit through online coaching during a professional development programme. *European Journal of Teacher Education*, 1–18. DOI: <https://doi.org/10.1080/02619768.2024.2382820>
- Elyashiv, R. A., & Rozenberg, K. (2024). Fostering early career teachers' preparedness, self-efficacy and professional commitment: The role of teacher education. *Teaching and Teacher Education*, 148, 104691. <https://doi.org/10.1016/j.tate.2024.104691>
- Feng, X., Helms-Lorenz, M., & Maulana, R. (2025). Navigating the early-career landscape: Unpacking the role of induction in shaping beginning teachers' intrinsic motivation, affection, and self-efficacy. *Teachers and Teaching*, 1–34. <https://doi.org/10.1080/13540602.2025.2482977>
- Gaulke, S., Eady, M. J., & Dean, B. A. (2024). Looking forward, looking back: Early career teachers' perceptions of their undergraduate learning goals on current practice. *Teaching and Teacher Education*, 144, 104577. <https://doi.org/10.1016/j.tate.2024.104577>
- Hulme, M., & Wood, J. (2022). The importance of starting well: The influence of early career support on job satisfaction and career intentions in teaching. *Journal of Further and Higher Education*, 46(4), 504–521. DOI: <https://doi.org/10.1080/0309877X.2021.1985981>
- Maloch, B., Ries, E., Murdter-Atkinson, J., Wright, A., Alexander, K., & Mosley Wetzel, M. (2025). “Change happens at the speed of trust”: Context-attentive mentoring for early career teachers. *Teaching and Teacher Education*, 153, 104817. <https://doi.org/10.1016/j.tate.2024.104817>
- Ovenden-Hope, T., & Kirkpatrick, H. (2024). The Early Career Framework: Why context matters for teacher professional development. *Education Sciences*, 14(11), 1261. <https://doi.org/10.3390/educsci1411261>
- Rosenberg, R., De Bruin, K., & Ludecke, M. (2024). Beginning teacher preparation and readiness for the profession as inclusive educators. *Australian Journal of Education*, 68(1), 23–35. <https://doi.org/10.1177/00049441231218724>
- Turner, D. R., Vo, H., Lynch, D., Forrester, D., Yeigh, T., McCarthy, L., & Casey, T. (2025). Understanding early career teacher instructional quality: A person-centred approach. *European Journal of Education*, 60(3), e70168. <https://doi.org/10.1111/ejed.70168>
- Woodcock, S., & Reupert, A. E. (2024). First-year primary teachers' classroom management strategies: Perceptions of use, confidence, and effectiveness. *Journal of Education for Teaching*, 50(1), 90–106. <https://doi.org/10.1080/02607476.2023.2219218>