

Enhancing Pre-Service Teachers' Pedagogical Beliefs for Curriculum Delivery in South African Rural High Schools

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Teachers' pedagogical beliefs are central to shaping their instructional practices and significantly influence the teaching and learning process. These beliefs are often reflected in classroom behaviour and inform the quality of teachers' instructional decision-making. In South Africa, various higher education institutions offer pre-service teacher education programmes aimed at developing professional educators capable of upholding the core values of the teaching profession. This interpretive qualitative study investigated the lived experiences of pre-service teachers concerning their teaching skills during their enrolment in the Bachelor of Education (B.Ed.) and Postgraduate Certificate in Education (PGCE) programmes at a selected rural university. Data were collected through semi-structured individual interviews with 20 participants following their teaching practice placements. Thematic analysis was employed to identify and interpret key themes emerging from the data. The findings revealed that participants entered the B.Ed. and PGCE programmes with traditional pedagogical beliefs shaped by their own experiences as high school learners. However, these beliefs underwent noticeable transformation during their teaching practice in actual classroom settings. A recurring insight among participants was the disconnect between the theoretical knowledge acquired at university and the practical realities of the classroom. The study recommends a more deliberate alignment between pre-service teacher education coursework and the contextual realities of schools. Bridging this gap is essential for preparing future teachers to deliver the curriculum effectively. Moreover, the findings underscore the critical role of teaching practice in reshaping pedagogical beliefs and supporting the professional development of pre-service teachers.

Key words: Pre-Service teacher, Pedagogical Beliefs, Teaching Practice, Curriculum Delivery, Rural

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Introduction

Education plays a fundamental role in national development. The quality of a country's education system is often a reflection of the quality of its teacher education (Ajani, 2019; 2021). At the heart of effective teaching lies the pedagogical beliefs of teachers, which are evident in their classroom practices and instructional decisions. These beliefs, shaped by personal experiences and prior schooling, influence how teachers deliver content, interact with learners, and manage classroom environments (Gamede, Ajani, & Afolabi, 2022; Payiling & Taufik, 2022). According to Khader (2012), such beliefs represent internalized personal ideas, while Namoco and Zaharudin (2021) argue that pedagogical beliefs encompass how teachers perceive teaching, learning, and the role of technology in shaping these practices.

The link between teachers' beliefs and their instructional choices has been well documented (Whitley et al., 2019; Wang & Du, 2016). These beliefs affect classroom tone, student participation, and ultimately, learners' academic

achievement (De Vries, van de Grift, & Jansen, 2014; Wu, Chai & Wang, 2022). In this context, curriculum delivery becomes a crucial indicator of educational effectiveness, often assessed through learners' academic performance (Mpuangnan, 2024). As part of teacher preparation, pre-service teachers are tasked with applying their theoretical learning during teaching practice, where their beliefs about teaching and learning are tested and refined in authentic classroom environments (Gamede et al., 2022; Muthala et al., 2022).

Teacher education institutions in South Africa play a central role in preparing competent educators across various subjects. Pre-service teacher education programs, such as the Bachelor of Education (B.Ed.), are designed to nurture professional competence by developing both subject knowledge and pedagogical understanding (Mpuangnan, 2024). Pre-service teachers often enter these programs with beliefs rooted in their own schooling experiences (Anabousy&Tabach, 2022). These beliefs typically fall into two categories: subject-matter-oriented (traditional, teacher-centred) and student-oriented (constructivist, learner-centred) (Seaoane& Jimenez, 2022; De Vries et al., 2014). However, beliefs about teaching are not easily changed. According to Mpuangnan (2025), they are deeply entrenched and require time, practical engagement, and supportive learning environments to evolve. As the demands of education continue to shift, teacher education must adapt by fostering reflective practitioners who align their classroom practices with 21st-century learning needs. When pre-service teachers are equipped with modern pedagogical strategies, they are better positioned to influence both student outcomes and their own professional growth (Mpuangnan & Gugulethu, 2024).

Teaching practice serves as a crucial opportunity for pre-service teachers to implement, test, and transform their beliefs. As noted by Sheridan (2016) and Korthagen (2017), real-life teaching experiences provide insights that challenge preconceived ideas and facilitate the development of more effective teaching approaches. Ertmer (2005) and Han, Shin, and Ko (2017) similarly affirm that exposure to classroom realities fosters belief transformation when theory is successfully applied. The goal of pre-service teacher education is to produce beginning teachers with strong, reflective, and adaptive pedagogical beliefs. This transformation from traditional, subject-oriented methods to constructivist, student-centred teaching is necessary for improving instructional quality. South African institutions have responded to this need by expanding teacher education programs, particularly the B.Ed., to address systemic challenges such as the shortage of qualified teachers with robust pedagogical dispositions (Memon, 2007).

Aligned with national professional teaching standards (Mnguni, 2024), the B.Ed. program in South Africa combines coursework on contemporary pedagogical strategies with structured teaching practice. This dual structure aims to prepare teachers who can bridge the gap between theoretical knowledge and practical classroom application. While prior studies in South Africa have explored various aspects of teachers' beliefs, such as self-efficacy (van Laren, 2025), perceptions of educational purpose, and subject-specific beliefs (Ndu& Makeleni, 2025), there remains limited research on how pre-service teachers' beliefs about teaching skills evolve during teacher training. Therefore, this study specifically examines the transformation of pre-service teachers' pedagogical beliefs through the teaching practice component of the B.Ed. program at a selected public teacher education institution in South Africa.

The study, therefore, explored possible answers to the following research questions:

1. What beliefs do pre-service teachers have about teaching skills at the beginning of the training program?
2. Do pre-service teachers' initial beliefs change after the completion of the teaching practice?
3. What type of changes do pre-service teachers experience in their beliefs about teaching skills?

Methodology

This qualitative study employed a case study approach. A qualitative design allows individuals to construct social reality through interaction (Merriam, 2009), which makes it possible for researchers to explore phenomena of research interest in detail (Creswell, 2012). A case study approach enables the researcher to capture the complexity of the participants' actions, perceptions and interpretations (Merriam, 2009). Such a design, therefore, suits the purpose of this investigation, which aims to understand the complexity of novice teachers' learner-teacher transition and the degree of control they have over their initial years of teaching.

A total of eight purposively selected participants, enrolled in the B.Ed. program, participated in this study. The criteria for selection of participants included: one, having a master's degree prior to B.Ed.; two, having completed the coursework of B.Ed. and being ready for teaching practice. The instructional period in the program lasted for a maximum of nine months, out of which a period of one month was spent by the pre-service teachers in local secondary schools getting practical teaching experience called teaching practice (teaching practicum). This teaching practice took place after the completion of the content-related areas. Before teaching practice, pre-service teachers attended the teaching methodology courses during the first eight months of the training. They were then sent to selected public and private schools in the district. Each student spent a period of four weeks in the school and taught two or three subjects to elementary and secondary students.

The data were collected through semi-structured interviews, which were conducted at two points, i.e. pre- and post the teaching practice. In the pre-teaching practice interview, a series of questions related to the prospective teachers' beliefs about teaching were asked of the participants. The purpose of the first round of interviews was to document participants' initial beliefs prior to attending actual classrooms. These were conducted on the premises of the teacher education institute when the pre-service teachers had their initial orientation and subject-related sessions but had not yet begun their teaching practice. As soon as the participants completed their teaching practice of four

weeks in the school, the second phase of the interviews took place. The interviews were conducted in the participants' respective schools where they were teaching as prospective teachers. All the interviews were audiorecorded. Since the participants were non-native speakers of the English language, the interviews were recorded in their local language (isiZulu). The audio-recorded interviews were then transcribed and translated into English.

The data were analyzed through a thematic analysis approach (Creswell, 2012) that was carried out in three main steps, i.e. coding, categorization and theme development. In the first step, initial codes were assigned to each segment of the data. After initial coding, a thematic map was developed, and extracts of relevance from coded data were collated within themes. Once all the thematic maps were developed, the coded segments were reclassified according to each thematic category. Categories of relevance were grouped together into themes and sub-themes. In order to refine the themes, all the coded extracts were read carefully and given names. The findings were presented in two themes: initial beliefs and transformed beliefs with support of evidence.

Participants demographics

A total of eight prospective teachers enrolled in the B.Ed. program at the selected university participated in this study. All participants were female, with an average age of 25. They held academic qualifications across various disciplines, including science, social sciences, and literature. While some had received their schooling in public institutions, others had attended private schools. This diversity provided valuable insights into the initial beliefs they carried from their prior educational experiences. Notably, none of the participants had any previous teaching experience. While most expressed a strong interest in pursuing teaching as a career, a few had enrolled in the B.Ed. program due to family pressure rather than a personal desire to become a teacher.

Findings

The data analysis revealed key themes illustrating how participants' beliefs evolved during their teaching practice within the pre-service teacher education program. These themes are organized under two main categories: *Initial Beliefs of Prospective Teachers about Teaching* and *Transformation of Beliefs about the Teaching Process*. Figure 1 presents a diagrammatic overview of this thematic analysis.

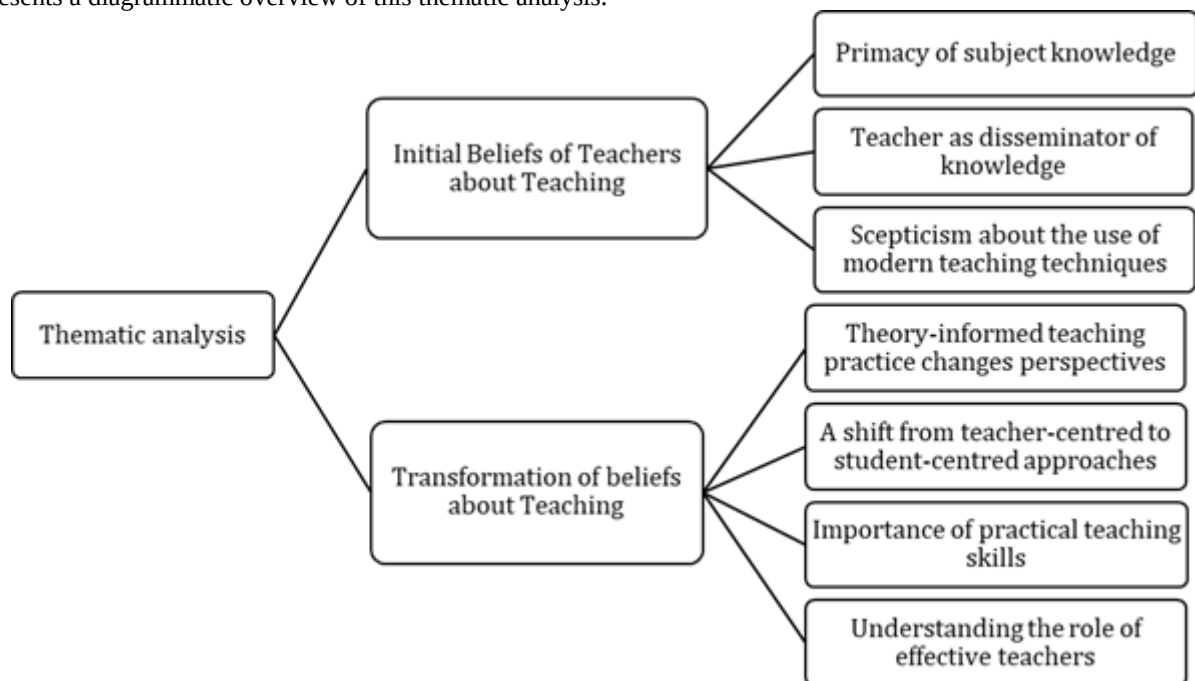


Figure 1. Thematic analysis–Transforming teachers' beliefs.

Initial Beliefs of Teachers about Teaching

The analysis of prospective teachers' initial beliefs led to the emergence of three key sub-themes: *Primacy of Subject Knowledge*, *Teacher as a Disseminator of Knowledge*, and *Scepticism Toward the Use of Modern Teaching Techniques*. These sub-themes are discussed in detail in the following sections.

Primacy of Subject Knowledge

At the outset of the training, all participants shared similar beliefs about teaching skills, which were shaped by their prior experiences as school and college students, as well as by routine observations of their teachers. These beliefs were strongly value-laden. One participant remarked, "Teaching is a universal job; anyone with subject knowledge can teach" (P-ST1), while another noted, "Many teachers don't have formal training certificates, yet they still teach in schools" (P-ST7). Similar sentiments were echoed by others: "Subject mastery is more important than pedagogical skills for effective teaching" (P-ST8). Many participants assumed that holding a Master's degree was sufficient to make one an expert teacher, capable classroom manager, and effective communicator. Several respondents also believed that lesson preparation need not be a regular practice. As one participant explained,

"Preparing a lesson once is enough; it doesn't require any updates. A Master's student can teach any topic with ease" (P-ST4).

Teacher as Disseminator of Knowledge

Data about this theme revealed that many participants exhibited insufficient understanding of the teaching process. For example, one participant (P-ST3) observed:

"Teachers are expected to cover the syllabus within the given timeframe, prepare notes for students, and ensure they memorize the content for examinations. With textbooks provided, teachers simply need to complete the designated chapters each term this is what all our teachers did."

Reflecting on her past experiences as a learner, another participant (P-ST1) shared: *"In school, senior teachers would read aloud from the textbook, and we were expected to copy the content into our notebooks. The teacher would then check our work. There were no activities or peer interactions. For me, teaching seemed like an easy job since it only involved these basic tasks."*

With regard to student learning in the classroom, one participant (P-ST5) explained: *"The teacher's responsibility is to guide students through the concepts presented in textbooks. Although we have been introduced to interactive methods like questioning and discussion, I don't believe our students are capable of participating, as they generally lack prior knowledge of the topics being taught."*

Scepticism about the Use of Modern Teaching Techniques

There appeared to be a sense of scepticism among the participants regarding the use of modern teaching techniques. This scepticism seemed rooted in their strong belief in traditional teaching methods, shaped by their own experiences as learners and by the perception that schools lack the necessary infrastructure to support innovative approaches. When asked about modern teaching strategies, one participant expressed her concerns:

"I believe the way our teachers taught us was effective we learned well from them. I worry about how we can implement various teaching strategies in our classrooms, especially given the lack of resources in schools. These approaches require significant time and effort to be carried out effectively" (P-ST2).

Transformation in Beliefs about the Process of Teaching

The data analysis indicated a clear transformation in participants' beliefs about teaching skills and strategies during their teaching practice in real classroom settings. This shift is reflected in the emergence of the following sub-themes: *theory-informed teaching practice shapes new perspectives, a shift from teacher-centred to student-centred approaches, recognition of the importance of practical teaching skills, and a deeper understanding of the role of effective teachers.*

Theory-Informed Teaching Practice Changes Perspectives

During their coursework, participants were introduced to theoretical knowledge about teaching and various instructional strategies. However, this theoretical understanding alone was insufficient to shift their initial beliefs. It was the teaching practice component that played a transformative role, offering them the opportunity to apply what they had learned in real classroom contexts and to reflect more deeply on their perceptions of learners. For instance, one participant shared: *"I never imagined a classroom where students would be so active and constantly ask personal questions about my background" (P-ST5). Similarly, another noted, "This generation is technologically inclined, which makes them bold and confident" (P-ST7).*

Reflecting on her evolving understanding of teaching skills, one participant commented:

"Teaching is an art. My earlier belief that anyone with subject mastery can teach effectively is no longer valid. Effective lesson delivery requires thorough preparation. I now think a teacher must be like an actor in the classroom, ready to adapt to unexpected situations, such as students' spontaneous questions that spark discussion. Sometimes, initial plans may not work, so having an alternative plan is essential" (P-ST4).

Another participant shared a significant experience that highlighted her growing awareness of individual differences among learners:

"During teaching practice, I learned how to manage individual differences in the classroom. I noticed that slow learners often lacked motivation, which caused them to fall behind. I experimented with different activities and eventually saw positive results, which I now consider a teaching skill. One student, labelled by many teachers as mischievous, would become upset over minor issues. I approached her with empathy, engaged her in conversations about her interests, and gradually earned her trust. With time, I found myself more patient and composed. This experience led me to conclude that without the ability to handle individual differences, one cannot be an effective teacher" (P-ST3).

A Shift from Teacher-Centred to Student-Centred Approaches

A clear shift from teacher-centred to student-centred teaching approaches emerged from the participants' responses. The participants described how their beliefs evolved to embrace strategies that prioritized learner engagement, such as the use of praise and rewards, incorporating students' interests and cognitive levels into lesson planning, and designing interactive learning activities. Notably, participants began to reconceptualize their role not merely as transmitters of content but as facilitators of student learning. Following their teaching practice, many expressed the view that pedagogical skills had become more important to them than subject mastery. This transformation is evident in the following reflections:

During my long-term teaching practice, I noticed that when I praised students for their work, they felt encouraged and motivated to improve. To enhance their learning, I regularly organized small activities. I believe these are essential teaching skills" (P-ST1).

"Based on my teaching experience, I now believe students are naturally creative—they just need encouragement from teachers. A simple comment in their notebooks or a pat on the back can make a big difference. For instance, whenever I gave stars or wrote 'good' on their homework, their performance improved. I now use such incentives regularly" (P-ST8).

"While teaching division in mathematics, I related the concept to a real-life example, distributing apples among children. I then invited the learners to share similar examples from their own experiences. To my surprise, many began contributing enthusiastically. This small activity helped make the lesson more engaging and gave value to their ideas" (P-ST2).

Importance of Practical Teaching Skills

Prospective teachers emphasized the importance of gaining practical classroom experience to become effective educators. Their reflections highlighted how hands-on teaching practice helped them understand the complexities of lesson delivery, student engagement, and classroom management. The following excerpts illustrate this perspective:

"Explaining content to students is not an easy task; it requires specific skills. Some individuals can teach effectively even with limited knowledge, while others struggle despite having advanced degrees. The key difference lies in teaching skills. During training, I learned several techniques, such as planning and presenting lessons using the 4P's Model. This approach helped me motivate learners, involve them in activities, and manage the classroom efficiently" (P-ST6).

"I came to appreciate the value of audio-visual aids in making lessons engaging and effective. I now see the use of such materials as a skill. For a teacher to be effective, the thoughtful use of audio-visual resources is essential" (P-ST3).

"One important realization for me was understanding the naturally restless nature of children. I learned that I cannot expect them to sit still like robots, something I had never considered before. I also recognized that while some students grasp concepts immediately, others may take several days. Therefore, a teacher must have the skill and the patience to understand and accommodate each learner's pace" (P-ST4).

Understanding the Role of Effective Teachers

The participants gained insights into the characteristics and responsibilities of effective teachers. They recognized that effective teaching involves the ability to manage the classroom efficiently, encourage student questioning, employ a variety of instructional strategies to maintain learner interest, and demonstrate both subject mastery and strong pedagogical skills. The data presented thus far reflects a significant shift in participants' beliefs, viewing teaching not as a fixed set of tasks, but as a dynamic and evolving profession that demands continuous learning and professional growth. These findings also underscore the transformative impact of the practical components within initial teacher education programs, such as the B.Ed. program explored in this study.

Discussion

This study revealed that pre-service teachers typically enter initial teacher education programs with deeply rooted beliefs formed through their past experiences as school and college students. This is consistent with Mpuangnan(2025), highlighting the significant influence of teacher experiences and observations on their beliefs about teaching skills. Many of these beliefs tend to be subject-oriented (Kardel et al., 2025), favouring traditional, one-way methods of instruction and overlooking interactive activities or the use of visual aids in teaching. This underlines the perspective of Mpuangnan(2024), indicating the need for teacher education programs to incorporate components that enable prospective teachers to critically reflect on and transform their prior pedagogical beliefs. Without such transformation, the mere acquisition of technical teaching skills is unlikely to enhance the quality of teaching and learning in the classroom.

The findings of this study further suggest that pre-service teacher education programs, such as the B.Ed., play a crucial role in reshaping pedagogical beliefs. The B.Ed. program typically comprises two major components: (1) theoretical coursework, which introduces a range of pedagogical theories and strategies, and (2) teaching practice, which provides an opportunity to apply these concepts in real classroom settings. While theoretical knowledge lays the foundation, it is often the teaching practicum that significantly contributes to altering pre-service teachers' beliefs (Mpuangnan et al., 2021; Korthagen, 2017). Participants reported that hands-on classroom experience enabled them to see the relevance and effectiveness of modern pedagogical approaches, thereby fostering meaningful belief change. However, it is important to acknowledge that both coursework and teaching practice contribute to belief transformation. Li and Huang(2024) support that teaching practicum helps participants gain exposure to contemporary teaching strategies, while teaching practice allows them to implement and evaluate these methods. This interplay between theory and practice facilitated a shift in beliefs, particularly when new strategies were successfully applied and reinforced through positive classroom outcomes.

Despite these promising findings, previous research has noted that changes in teacher beliefs may not always translate into sustained changes in classroom practices. For instance, Ben-Amram and Davidovitch (2024) argue that teachers often revert to traditional practices due to various factors. These may include a persistent preference for an authoritarian teaching style, personal and pedagogical belief systems, institutional culture resistant to change, and a

lack of resources to support modern instructional methods (Amasha& Assadi, 2024). Therefore, to ensure long-term alignment between teacher beliefs and practices, continuous pre-service and in-service professional development is essential.

This study provides strong evidence of belief transformation among pre-service teachers. Most participants recognized that teaching involves far more than simply delivering subject content. Their views on student engagement also evolved, with many acknowledging the motivational impact of simple incentives such as praise, a smile, or a pat on the back. These small actions were found to enhance student learning and contribute to positive classroom dynamics.

The findings align with Guskey's (2002) model of teacher change, which suggests that sustainable changes in teaching practices are often preceded by a shift in teachers' beliefs and attitudes. They also resonate with Huang et al.'s (2021) stage-based model of belief transformation, which outlines three phases: realization, disagreement, and transformation. In the first phase, participants came to appreciate the value of modern pedagogical methods in enhancing student learning and engagement. Initially intending to teach as they had been taught, their classroom experiences prompted a re-evaluation of those assumptions. During the second phase, disagreement emerged between their prior beliefs and the new realities of 21st-century education, leading them to question traditional methods. These findings support the conclusion by Amegbanu and Mpuangnan (2023), who argue that well-structured pedagogical training equips pre-service teachers with the skills necessary to create inclusive and engaging learning environments. In the third phase, transformation occurred as participants began to incorporate student-centred practices such as using audio-visual aids, designing interactive activities, and encouraging active participation. This process helped them bridge the gap between theory and practice and fostered the development of personal pedagogical beliefs.

Recommendations

Education policy frameworks should mandate the integration of reflective pedagogical components into all teacher education programs. This includes structured opportunities for pre-service teachers to critically examine and challenge their pre-existing beliefs about teaching and learning.

Institutions offering teacher education programs must ensure a balanced curriculum where pedagogical theories are meaningfully linked with classroom practice. Simulated teaching experiences, micro-teaching, and reflective journals should be embedded in coursework.

Future studies should explore belief transformation processes in diverse cultural, institutional, and socio-economic contexts to identify universal and context-specific patterns in teacher development.

Schools hosting pre-service teachers should be viewed as collaborative learning environments. School leadership and mentor teachers should be involved in supporting belief transformation through constructive feedback and modelling of innovative practices.

Conclusion

This paper presented evidence of the transformation of pre-service teachers' beliefs within a teacher education program in the Pakistani context. It explored how participants' initial beliefs, shaped largely by their prior experiences as learners, underwent meaningful change during their participation in the B.Ed. program. While the coursework component enriched their theoretical understanding of pedagogy, it was the teaching practice that played a critical role in enabling the application of this knowledge in real classroom settings. The belief transformation process observed in this study appeared to unfold in three key stages: realization, disagreement, and transformation.

The findings affirm the significant role of the B.Ed. program in reshaping pre-service teachers' pedagogical beliefs. However, an important area for future inquiry lies in examining whether these belief changes translate into sustained classroom practices over time. Further research is needed to substantiate these findings and to investigate the long-term impact of initial teacher education programs on teachers' instructional behaviours and professional growth.

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