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Exploring Instructional Methodologies Used by Student Teachers During Teaching Practice: A Case Study at the University of Nairobi, Kenya

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Abstract

Pedagogical practices are at the core of teaching, serving as a bridge between pedagogical theory and classroom reality. Globally, expectations have shifted from teacher-centred approaches to practices that promote 21st-century skills among learners. Kenya's Competency-Based Curriculum emphasises innovative pedagogies such as project-based learning. However, empirical research shows that despite this shift, school contexts continue to reflect traditional lecture-based instruction. This limits learners' engagement and higher-order thinking. The purpose of this study was to investigate student teachers' pedagogical practices during teaching practice, specifically to establish the instructional methodologies they used. The study aimed to provide insights into student teachers' preparedness to apply innovative pedagogical practices that support meaningful learning. It was guided by constructivist learning theory, which emphasises that knowledge is constructed through exploration and collaboration. Using a descriptive survey design and structured questionnaires, data were collected from 162 University of Nairobi student teachers. Data were analysed using content analysis and descriptive statistics. Findings show that the majority of student teachers (63%) found teacher-centred methods more relevant, while (65%) found learner-centred methods time-consuming. The majority of the student teachers (89%) found learner-centred methods effective, and (93%) were able to switch between various methods. The preferred but underemployed methods included technology-based pedagogies (22%) and learner-centred methods (14%). The study concludes that although student teachers recognise the value of innovative methods, institutional barriers and their own lack of innovation hinder the implementation of these methods. The study recommends investing in ICT facilities in schools and strengthening teacher preparation.

Keywords: Student teachers; Pedagogical practices; Teaching practice; Innovative pedagogies; Instructional methodologies

1. Introduction

Teacher education plays a vital role in preparing pre-service teachers with the professional knowledge, skills and attitudes needed to foster learning in diverse classroom settings (Tanase, 2020). Teaching practice (TP) is considered a key and indispensable component of a teacher education programme (Oluwafemi, 2010; Ulvik & Smith, 2011; Tuli & File, 2009). As Umezulike (2015) argues, a teacher training programme cannot be complete without providing student teachers with the opportunity to engage in teaching practice in an actual school environment. Eze (2010) defines teaching practice as the first opportunity for student teachers to participate in teaching activities in real-world settings. It is designed to provide opportunities and guidance in a school setting for student teachers to develop professional competencies, personal characteristics and the knowledge and skills of a teacher. According to Ranjan (2013), teaching practice provides student teachers with opportunities to translate theoretical knowledge into classroom practice, while pedagogical practices serve as the link between pedagogical theory and classroom reality.

Pedagogical practices shape how teaching and learning are organised, delivered and experienced in real classroom settings. According to Hardman (2015), pedagogical practices include appropriate instructional strategies such as inquiry-based learning, questioning, modelling, guided practice and discussion. It also includes maintaining



professional documents such as the curriculum, syllabus, lesson plan and scheme of work. Additionally, it includes classroom interactions, which refer to teacher-learner and learner-learner interactions. Further, it includes assessment practices such as summative and formative assessment and the organisation of the classroom environment and classroom management, e.g., the arrangement and supervision of learning and the use of learning resources. Indeed, pedagogical practices serve as the mechanism through which subject content is transformed into learnable and meaningful experiences.

Effective pedagogical practices emphasise learner participation, collaboration, motivation and ownership of learning. It also emphasises the use of group work, inquiry-based learning, differentiated instruction and learning resources that address learners' diverse abilities and backgrounds. According to Prince (2004), these active learning approaches have been shown to improve attention, persistence and positive attitudes towards learning. Tomlinson (2014) further notes that differentiated pedagogical practices allow teachers to respond to individual differences in ability, language, background and learning pace.

Pedagogical practices also influence classroom interaction patterns and management, as effective pedagogy contributes to a supportive learning environment that enhances participation (Borich & Blanchette, 2022). Further, pedagogical practices determine how assessment is embedded in instruction. Formative pedagogical strategies such as oral questioning, observation, peer assessment and learning tasks are used to monitor learner progress and provide feedback. These practices promote assessment for learning, enabling teachers to adjust instruction based on learners' needs. As Mligo et al. (2016) posit, the pedagogical practices a teacher uses determine learners' academic performance. Bhowmik et al. (2013) further note that the pedagogical practices teachers use promote confidence, intellectual engagement, recognition of differences, higher performance and a supportive classroom environment. Effective pedagogical practices support deeper conceptual understanding by actively engaging learners in the learning process. Biggs and Tang (2011) confirm that strategies such as problem-solving, scaffolding and guided discussion help learners connect new knowledge to prior knowledge.

Modern pedagogical practices, such as innovative methodologies including project-based learning, inquiry-based learning, experiential learning, flipped classrooms, collaborative learning and ICT integration, promote active learning and foster the acquisition of the competencies needed in the 21st century (Valle, 2024). While traditional teaching approaches are effective for content transmission, they often limit learners' engagement and creativity by emphasising direct instruction, lecturing, note-taking and textbook use. The 21st century has brought rapid changes in technology, society and the global economy, creating new expectations for learners and teachers. Thus, to prepare students for a world characterised by digital transformation, complex problem-solving, global interdependence, and rapid knowledge expansion, education systems should adopt innovative methodologies that go beyond traditional content delivery (Hamadneh et al., 2025).

According to Biggs and Tang (2011), teachers' failure to apply innovative pedagogical practices leads to surface learning, in which learners memorise information without understanding. This limits the transfer of knowledge and application to real-life situations. Poorly structured pedagogical practices reduce learner motivation and participation, leading to passive learning behaviours (Prince, 2004). They also widen achievement gaps, particularly for learners with special educational needs or from disadvantaged backgrounds, as they do not offer differentiated instruction (Tomlinson, 2014). This hinders the development of competencies such as critical thinking and problem-solving, creativity and imagination, communication and collaborative skills (OECD, 2018).

Kenya's Competency-Based Curriculum (CBC), launched in 2017, is a modern educational framework whose primary goal is to shift the focus from rote memorisation and examination-oriented education to the development of practical skills, core competencies, values, and attitudes essential for success in the 21st century. The curriculum integrates skills that are relevant to today's world. This includes life skills education, which teaches learners essential skills such as financial literacy, health education and environmental awareness (Republic of Kenya, 2018). However, even under the CBC reforms, schools and teachers struggle to align their practices with policy expectations or with innovative pedagogies. Pre-service teachers who have been trained on a wide range of instructional methods revert to traditional approaches during practice. They face challenges in implementing innovative pedagogy due to limited instructional resources, unsupportive mentors, large class sizes and inadequate access to technology (Cheruiyot, 2024). Studies show that teachers worldwide face barriers in implementing innovative pedagogies. Awang et al (2025) note that these



barriers include teacher preparedness, technological limitations, curriculum misalignment and socio-cultural resistance. Research in Kenya reveals similar challenges. According to Too et al. (2024), schools lack physical and ICT infrastructure, reducing opportunities for technology-enhanced teaching. Additionally, large class sizes, resource shortages, inadequate access to teaching technologies, and gaps in teacher expertise push teachers to adopt teacher-centred approaches (Gichuru, 2024). Orodho (2017) further notes that inadequate teacher training hampers the successful implementation of educational reforms, as teachers struggle to grasp the pedagogical shifts and adapt their instructional practices accordingly. Existing studies have largely focused on the challenges affecting teachers' implementation of innovative pedagogy and educational reforms; limited attention has been given to the specific instructional methodologies, student teachers use during teaching practice and how classroom realities influence their pedagogical choices. This creates a knowledge gap in understanding student teachers' instructional practices, especially during their teaching practice.

The teaching practice component of teacher education offers a critical opportunity to assess whether pre-service teachers are prepared and supported to implement modern pedagogical approaches. Understanding their teaching experiences offers insight into the alignment between teacher training and classroom realities. According to Aynalem et al. (2015) and Gomez (2014), examining student teachers' preferred pedagogical practices is significant because they contribute to a supportive teaching and learning atmosphere. Moreover, pedagogical practices help achieve planned learning outcomes; thus, the choice and execution of practices are vital in teaching and learning. This study investigated the methodologies used by student teachers from the University of Nairobi to gain insight into the methods they used when teaching, those they were unable to utilise, and measures to ensure they applied innovative pedagogies during teaching practice.

The study was guided by constructivist learning theory which is associated with Jean Piaget and Lev Vygotsky. The theory posits that learners actively construct knowledge through experience, reflection, social interaction and engagement with their learning environment. The theory was appropriate for this study as student teachers are expected not only to understand pedagogical concepts theoretically but also to apply them in real classroom contexts during teaching practice. During teaching practice, student teachers interact with learners, mentors, peers and the school environment, allowing them to construct professional knowledge and refine their instructional practices. The theory was useful for examining the instructional methodologies used by student teachers, as it highlights the need to adopt learner-centred and interactive teaching approaches that promote active learner participation. The theory, therefore, provided the study with a framework for understanding which instructional methodologies student teachers used during teaching practice and how the school context and personal innovativeness influenced their choice of methodologies.

1.1 Objective

To examine the pedagogical practices of student teachers from the University of Nairobi during teaching practice. Specifically, to establish the instructional methodologies that the trainees used. The significance of this study lies in providing insight into student teachers' readiness to apply innovative pedagogical practices that support meaningful learning during their teaching practice.

1.2 Research questions

1. What are the experiences of student teachers in applying instructional methodologies during teaching practice?
2. Which instructional methods do student teachers prefer but fail to apply during teaching practice and why?
3. What measures do student teachers perceive as necessary to enhance the application of innovative teaching approaches during teaching practice?

2. Research Methods

The study employed a descriptive survey design, deemed appropriate for obtaining interpretable information about student teachers' practices during teaching practice. This design enabled the collection of data on the pedagogical practice



ices student teachers used during their teaching practice. It also facilitated both qualitative and quantitative descriptions of the instructional practices employed by the student teachers. The study adopted a census sampling approach, including all 4th-year University of Nairobi student teachers from all campuses who undertook teaching practice in 2023. The target population consisted of 162 students, comprising 88 males and 74 females. The study may be limited because the findings may not be generalised to student teachers in other universities or teacher education institutions, as the study was conducted among student teachers from the University of Nairobi.

Data were collected using a questionnaire. The tool included both closed- and open-ended items that assessed the pedagogical practices employed by the student teachers. A pilot study was conducted to assess the clarity, relevance, and appropriateness of the research instrument. Ten third-year student trainees pursuing a Bachelor of Education at the Kikuyu campus who were not part of the study participated in the pilot. Feedback from the pilot participants helped refine ambiguous items, improve wording and enhance the research instrument. To establish content validity, the instrument was reviewed against the objective, research questions and constructs related to instructional methodologies. An expert review by Department of Education experts was incorporated to ensure that the instrument captured the intended constructs. The pilot also helped assess the instrument's reliability by determining the comprehensibility of the questionnaire items. Internal consistency of the instrument was assessed using Cronbach's alpha, yielding a coefficient of 0.85 which was considered acceptable.

All data were collected in adherence to ethical standards, including voluntary participation, confidentiality and informed consent. The study utilized both qualitative and quantitative analysis techniques. Descriptive statistics, such as frequencies and percentages, were used to summarize quantitative data from the questionnaires. Qualitative data from open-ended questionnaire responses were analyzed using content analysis. Responses were read repeatedly to achieve familiarity with the data. Initial codes were generated from meaningful statements and recurring ideas related to student teachers' instructional experiences during teaching practice. Similar codes were grouped into categories, which were then reviewed and refined into broader themes. The interpretation of themes was further informed by constructivist learning theory, which helped explain how student teachers made sense of their pedagogical experiences and instructional choices during teaching practice. The thematic analysis, therefore, focused on the student teachers' lived experiences, perceptions and reflections regarding the instructional methodologies they used, the challenges they encountered and the strategies they perceived as necessary for implementing learner-centred teaching approaches. The combined analytical approaches provided a comprehensive understanding of the student teachers' instructional experiences.

3. Analysis Results

Student teachers' teaching practice methodology experience

The first research question sought to establish the student teachers' instructional methodologies experience during their teaching practice. The student teachers were expected to indicate their experiences with either teacher-centred or learner-centred methods. Table 1 presents findings on student teachers' responses to their methodology experience during teaching practice.

Table 1. Student Teachers TP Methodology Experience

<i>Statement</i>	<i>SA F %</i>	<i>A F %</i>	<i>N F %</i>	<i>D F %</i>	<i>SD F %</i>
<i>I found teacher-centred teaching methods more relevant and used them more often than other methods.</i>	36 22%	66 41%	22 14%	22 14%	16 9%
<i>I found learner-centred teaching methods time-consuming.</i>	44 27%	61 38%	28 17%	23 14%	6 4%
<i>I found learner-centred teaching methods effective.</i>	92 57%	52 32%	15 9%	- -	3 2%
<i>I switched between the various teaching methods during lessons with ease.</i>	90 55%	61 38%	8 5%	3 2%	- -
<i>I often integrated technology to support instruction.</i>	86 53%	51 32%	17 11%	8 4%	- -



Most student teachers, 102 (63%), indicated that they found teacher-centred methods more relevant and used them more often than other methods; 22 (14%) were neutral, while 38 (23%) disagreed with the statement. A majority of the student teachers, 105 (65%), reported that they found learner-centred methods time-consuming, 28 (17%) were neutral, while 29 (18%) did not agree with the statement. Most of the student teachers, 144 (89%), stated that they found learner-centred methods effective, 15 (9%) were neutral, while 3 (2%) did not agree with the statement. A majority of the student teachers, 151 (93%), indicated that they switched between various teaching methods during lessons with ease, 8 (5%) were neutral, while 3 (2%) did not agree with the statement. A majority of the student teachers, 137 (85%), reported that they often integrated technology to support instruction, 17 (11%) were neutral, while 8 (4%) did not agree with the statement.

Preferred teaching methods not used during teaching practice

The second research question sought to find out which student teachers' preferred teaching methods they were unable to use during teaching practice. Table 2 presents findings on student teachers' responses regarding the teaching methods they would have preferred to use but were unable to during their teaching practice.

Table 2: Student Teachers' Preferred Teaching Methods Not Used During TP

<i>Teaching methods student teachers would have preferred to use but were unable to use during TP</i>		
Method	Frequency (F)	Percentage (%)
<i>Use of technology</i>	36	22%
<i>Learner centred</i>	24	14%
<i>Flipped classroom</i>	6	3%
<i>Group discussion</i>	9	5%
<i>Project-based learning</i>	15	9%
<i>Field Trips/Work/Excursions</i>	18	11%
<i>None</i>	38	23%
<i>Teacher centred</i>	14	8%
<i>Debates/Drama/Role play</i>	9	5%

Table 2 shows that thirty-eight (23%) student teachers reported that they were able to use various teaching methods, 36 (22%) would have preferred to incorporate technology in their teaching, 24 (14%) preferred learner-centered approaches, 18 (11%) preferred field trips or excursions, 15 (9%) preferred project-based learning, 14 (8%) preferred teacher-centered approaches, 9 (5%) preferred debates, drama, or role play, 9 (5%) preferred group discussions, and 6 (3%) wished to implement the flipped classroom.

Measures to enhance application of innovative teaching approaches during teaching practice

The third research question sought to find out from the student teachers the measures that would be necessary to enhance the application of innovative teaching approaches during teaching practice. Table 3 presents the student teachers' responses to measures that should be put in place to enable teacher trainees to apply innovative teaching approaches during teaching practice.

Table 3. Measures for enhancing application of innovative teaching approaches during TP

	F	%
<i>Training on various innovative methods</i>	27	17%
<i>Training on the use of technology</i>	27	17%
<i>Access to resources for implementing innovative teaching methods</i>	19	12%
<i>Mentorship for guiding and supporting application of innovative teaching methods by TP school teachers</i>	18	11%
<i>Mentorship for guiding and supporting application of innovative teaching methods by TP supervisors</i>	18	11%
<i>Engaging in innovative teaching methods before TP</i>	28	18%
<i>Posting teacher trainees to schools with adequate resources</i>	12	8%
<i>Reducing the number of large learners in a class</i>	2	1%
<i>Reducing teachers' workload</i>	2	1%



<i>Increase micro-teaching hours</i>	2	1%
<i>No responses</i>	7	4%

Most student teachers, 28 (18%), indicated a need for opportunities to engage in innovative teaching methods before their teaching practice. Additionally, 27 (17%) said they should receive training on various innovative methods and 27 (17%) also indicated they should receive training on the use of technology. Nineteen (12%) emphasised the importance of access to resources for implementing innovative teaching methods. Eighteen (11%) pointed out the need for mentorship to guide and support the application of innovative teaching methods from TP school teachers and 18 (11%) also pointed out the need for mentorship from TP supervisors. Twelve (8%) suggested they should be assigned to teaching practice schools equipped with adequate resources, while 2 (1%) indicated reduction of the number of large numbers of learners in class, 2 (1%) indicated reduction of teachers' workload and 2 (1%) indicated an increase in micro-teaching hours. Seven (4%) student teachers did not indicate a response.

4. Discussion

Student teachers' teaching practice methodology experience

The findings on student teachers' experience with teaching practice methodology show that most student teachers found teacher-centred methods relevant and used them frequently. This reveals that traditional teacher-led practices remain dominant in classroom practice. This trend may persist due to large class sizes, heavy teacher workload, achievement-oriented systems, and limited teaching resources, as it allows for greater classroom control and faster curriculum coverage. Yet these traditional methods limit learners to passive roles, focusing on lectures, note-taking and memorisation. This tends to stifle active learning, critical thinking, discourage peer collaboration and independent problem-solving, components of learning emphasised by the competency-based curriculum (CBC) and constructivist learning theory. This aligns with Rugambuka's (2025) study, which found that many pre-service teachers reported a predisposition toward traditional teacher-led teaching approaches over learner-centred approaches. This implies a need for greater capacity-building in learner-centred approaches among student teachers and for addressing the school context, which may be a barrier to the implementation of innovative teaching approaches.

The study noted that though student teachers were aware of learner-centred approaches, they tended to rely on teacher-centred approaches in classroom practice. A majority of student teachers perceived learner-centred methods as time-consuming, despite acknowledging their effectiveness. This may imply that time constraints limit the frequent application of learner-centred methods in classroom practice, despite strong acknowledgement of their effectiveness in the learning process. This exposes a gap between pedagogical beliefs and actual classroom practice, showing that belief in learner-centred pedagogy does not automatically translate into practice. This may affect the implementation of the CBC principles, which lean more on learner-centred approaches. The student teachers' views are similar to the views of basic school teachers in Ghana, who reported inadequate time as a challenge when implementing learner-centred approaches such as group activities and individualised learning (Donkoh & Amoakwah, 2024). Mermelstein (2012) supports the student teachers' view that learner-centred approaches are effective because when teaching methods align with learners' learning interests, they acquire more knowledge and skills, leading to better performance. This implies that the gap between pedagogical beliefs and classroom practice may be due to other constraints such as large classes, heavy workload and time pressure, that need to be addressed for effective implementation of learner-centred approaches.

A majority of the student teachers reported being able to switch between different teaching methods, suggesting they can adapt pedagogical approaches to prevailing circumstances. This implies that student teachers can employ effective pedagogical practices that advocate flexible teaching rather than rigid methodologies. The ability to combine traditional lectures with hands-on activities, discussions and interactive learning is highly effective because it accommodates diverse learning styles, boosts engagement and deepens knowledge retention. (Rugambuka, 2025) recommended a blend of teacher-centred and learner-centred approaches as they enhance learners' engagement and participation. The findings also revealed that student teachers can integrate technology to support instruction, indicating that they embraced digital pedagogical tools. This implies that student teachers are open to digital pedagogy, which enhances teaching by improving classroom efficiency and fostering better learner engagement, as emphasised by CBC. This finding aligns with Ridha and Fithriani's (2023) study, which revealed that English as a Foreign Language (EFL) pre-service teachers in Indonesia regularly used technology for English instruction for improved



performance as technology enhanced learners' motivation and supported creative teaching practices during their teaching practicums.

Preferred teaching methods not used during teaching practice

The findings on student teachers' preferred teaching methods that they were unable to use during teaching practice show that, while 38 (23%) used a variety of teaching methods, the majority did not use some of their preferred methods. The most cited teaching methods were technology and learner-centred approaches. This may imply that student teachers preferred innovative, learner-focused pedagogies but were constrained by limited access to technology, pressure to cover the curriculum or a lack of competence to adopt them. This may negatively impact both their professional development and the quality of their teaching, as they miss opportunities to master classroom technology and digital facilitation. However, lack of institutional resources, such as technological resources, may hinder the use of innovative pedagogies, but not that of learner-centred methods. This points to limited understanding, creativity, competency or limited adaptability skills on the part of the student teachers. Student teachers should be innovative in using other learner-centred methods that may not be constrained by technology, such as flipped learning through the use of available textbooks.

The student teachers also preferred experiential methods such as field trips, project-based learning, debates, drama, role-play, group discussion, and the flipped classroom, indicating a preference for active learning. This implies that the student teachers were unable to engage learners in experiential activities that would develop learners' competencies, such as critical thinking, problem-solving, creativity and imagination. Again, this points to student teachers' limited competency and adaptability, as institutional barriers may hinder the use of the field-trip teaching method due to cost implications, but they cannot hinder the use of project-based learning, debates, drama, role-play, group discussions and the flipped classroom. Student teachers need the capacity to design highly engaging, low-cost instructional materials using physical manipulatives and experiential scenarios. These free technology strategies may encourage deeper critical thinking, foster collaboration, and allow learners to construct knowledge through tangible, physical engagement with the materials. They may also need deep pedagogical knowledge of foundational teaching theories to keep learners engaged through active participation, such as peer-to-peer teaching, debates, drama or inquiry-based learning as emphasised by CBC and the constructivist learning approach. Teacher-centred approaches were also preferred by teacher trainees who may have been in institutions that heavily leaned on learner-centred approaches.

Some of the student teachers' responses:

"I would have preferred to use interactive discussions and hands-on activities during the TP, but I was unable to due to time constraints and limited resources. These teaching methods would have been valuable in engaging learners and promoting active participation in the learning process". (Student Teacher [ST] 34)

"I would have loved to create pre-recorded lectures or assign readings, allowing me to focus on discussions, problem-solving and collaborative projects during TP sessions." (Student Teacher [ST] 128)

"I would have preferred the use of a projector in teaching geography." (Student Teacher [ST] 37)

"I would have preferred taking the learners on field trips and excursions." (Student Teacher [ST] 72)

These findings align with Du Plessis' (2020) study of student teachers in Malawi, which showed that pedagogical practices promoted during teacher training did not automatically manifest during teaching practice due to various barriers, including classroom constraints, limited understanding, limited adaptability and insufficient support. Lomba-Portela et al. (2022) also support the idea that the implementation of effective teaching methods or the adoption of innovative pedagogies depends on institutional readiness, teacher competency and adaptive curriculum structures. Smith et al. (2023) and Tahir et al. (2024) further support the sentiment that teacher preparedness and professional development are critical factors, as many teachers lack the necessary training, digital literacy and institutional support to transition to the learner-centred pedagogies.

In support of the findings, Korthagen (2010) further portends that the adoption of innovative pedagogical practices depends on teachers' pedagogical content knowledge, reflective and adaptive use of methods, alignment with



assessment and curriculum goals, and supportive institutional contexts. This, therefore, implies that teacher education programmes should move beyond method transmission to focus on pedagogical reasoning, reflective practice and adaptive expertise. As Basri et al. (2024) and Devika et al. (2024) point out, effective teacher training programmes and mentorship initiatives significantly improve pedagogical adaptation.

Measures to enhance the application of innovative teaching approaches during teaching practice

The findings on student teachers' responses to measures that would enhance the application of innovative teaching approaches during teaching practice show that student teachers pointed to the need for prior exposure to innovative teaching methods before teaching practice, training in innovative teaching methods and training in the use of technology. This points to a gap in practical preparation and a lack of competence in applying innovative teaching methods. This implies that teacher education programmes should place greater emphasis on hands-on engagement with innovative teaching approaches prior to teaching practice, rather than on theoretical coursework. It also implies that teacher trainee training should incorporate pedagogical innovation and digital competence. This will prepare student teachers for modern, technology-driven learning environments by equipping them with advanced tools for personalised learning and helping them adapt to rapidly evolving educational landscapes. Today's learners have grown up surrounded by technology; thus, the teacher trainee needs to understand how to leverage this familiarity to foster critical thinking and turn passive technology use into active knowledge creation.

The central role of instructional resources in the implementation of innovative teaching methods was highlighted by the student teachers, who also noted the need to be assigned to schools that are adequately resourced. This implies that the availability of learning resources shapes innovative pedagogical practices. Indeed, resources form the backbone of innovative teaching as they transform traditional teaching environments into dynamic learner-centred centres of discovery. Ndomondo (2024) affirms that learning resources help to bridge the gap between abstract concepts and real-world applications.

Student teachers noted the need for mentorship to guide and support them in applying innovative teaching methods by TP school teachers and TP supervisors. This implies a gap in mentorship from both teaching practice school teachers and university supervisors. Mentorship for student teachers is vital as it bridges the critical gap between educational theory and classroom practices. It helps them develop practical pedagogical skills, master classroom management, and foster professional confidence. Lindqvist et al. (2024) confirm that lack of mentorship leads to instructional struggles, classroom management struggles, diminished self-confidence and feelings of isolation.

These findings concur with Mutende's (2021) study of Bachelor of Education (Bed) science student teachers, who reported that without prior exposure to innovative teaching approaches, they could not fully apply them in classroom practice. Thus, prior exposure to innovative approaches in teacher preparation is necessary before student teachers start teaching practice to support their use of these approaches. Blau et al. (2020) support these findings by noting that student teachers should be provided with continuous ICT training to enhance their digital literacy and adapt to emerging educational technologies. Yin (2019) also concurs with the finding that more concrete or hands-on exposure to innovative teaching approaches before teaching practice is needed to support pre-service teachers who reported that they found it difficult to translate theoretical knowledge of innovative teaching approaches into practice because the training they received was not sufficient to bridge academic concepts with classroom practice.

5. Conclusions

The study shows that although student teachers value learner-centred and innovative methodologies, their classroom practice during teaching practice remains largely shaped by traditional teacher-centred approaches. This suggests that pedagogical transformation in teacher education has not yet fully translated into classroom practice. The findings demonstrate a persistent theory-practice gap in teacher preparation, in which student teachers understand constructivist and competency-based pedagogies conceptually but struggle to operationalise them in real classroom contexts due to limited school learning resources. If student teachers continue to rely primarily on teacher-centred approaches during teaching practice, the full realisation of learner-centred CBC reforms may not be achieved.

The study further highlights those institutional conditions, such as inadequate technological resources, insufficient mentorship, limited practical exposure and school contextual realities, significantly shape the pedagogical choices student teachers make during teaching practice. Consequently, teaching practice becomes not only a site for



pedagogical application but also a context in which existing school practices may reinforce traditional instructional practices.

From a constructivist perspective, the findings suggest that opportunities for active, collaborative, inquiry-based and technology-supported learning remain constrained despite the competency-based orientation of teacher education. This raises an important concern regarding the preparation of student teachers. Unless teacher preparation programmes provide sustained practical engagement, mentorship and supportive school placements, the implementation of innovative pedagogies may remain largely theoretical.

The study therefore underscores the need for teacher education institutions to strengthen the practical dimension of pedagogical preparation to align classroom practice with the goals of CBC and constructivist learning.

5.1. Study limitations

The study relied primarily on self-reported data from student teachers, which may have been influenced by personal perspectives or bias. It also focused on student teachers from a single teacher training institution, limiting the generalizability of the findings to other teacher education institutions. Furthermore, the study did not conduct classroom observations, which could have provided deeper insight into the actual implementation of pedagogical approaches during teaching practice. Despite these limitations, the study provides useful insights into student teachers' pedagogical experiences during teaching practice.

6. Recommendations

Teacher training institutions

Teacher education institutions should redesign methodology courses to include practical engagement with innovative pedagogies before teaching practice. This can be achieved by increasing micro-teaching hours, providing simulation-based teaching experiences and implementing classroom-based projects that require student teachers to apply learner-centred and technology-supported approaches.

Schools

Schools should invest in physical and technological infrastructure to ensure student teachers have adequate facilities to implement experiential approaches, such as project-based learning and collaborative activities.

TP supervisors and mentor teachers

Teaching practice supervisors and mentor teachers should be inducted on mentoring student teachers in competency-based and constructivist pedagogies. Structured mentorship frameworks should be developed to support student teachers in implementing innovative pedagogies during teaching practice.

Policy

Policy-makers should develop guidelines that support innovative pedagogical practices. The Ministry of Education should allocate more funds to invest in ICT infrastructure and learner-centred learning resources in schools to support the implementation of CBC-aligned pedagogies.

Student teachers

Student teachers should strive to explore creative teaching methods even within constraints such as free-technology pedagogies. They should also seek continuous professional development, especially in the use of technology and new pedagogical trends.

Suggestions for future research

Future studies may incorporate classroom observations to examine how student teachers implement pedagogical approaches during teaching practice. Comparative studies across teacher education institutions may also provide deeper insight into how institutional preparation influences pedagogical choices during teaching practice.

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