

Benefits and Challenges in the Presentation of Microlessons in Teacher Training at the University of Technology



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ABSTRACT

This research aimed to evaluate whether providing microlessons once a year at every stage of training is advantageous for student-teachers. The research was qualitative and used a phenomenological design to explore the perceptions, experiences and feelings of purposively selected B Ed students and lecturers regarding microteaching. The research population was Central University of Technology, Faculty of Humanities. The sample involved forty-two participants, twenty-four B Ed students and eighteen micro lesson assessors who are lecturers at the university. In addition to the literature review, focus group interviews and open-ended questionnaires were used to collect data. The findings revealed that student teachers practice and gain different skills during different phases of micro lessons which lead to modification of their teaching behaviour. It was further found that microteaching improves students' subject matter knowledge since they realize the importance of mastery of subject matter and their weaknesses in content. Moreover, the findings suggest that microteaching should not be scheduled once a year as it is currently happening but should be increased to at least twice a year at all levels. This is in spite of the fact that microlessons reduce the amount of time available for teaching and require extensive preparation. According to this discovery, the research suggests that students should arrange extra micros independently, during which they will assess each other, record videos, and hand in the videos for the lecturer to evaluate.

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INTRODUCTION

The search for better teaching techniques is a continuous process in the field of teacher education. Microteaching stands out as a viable strategy among the most innovative educational methods that have attracted attention recently. In essence, microteaching, often referred to as student-teaching, is a planned and scaled-down imitation of actual teaching practice in which aspiring teachers take leadership of a small classroom and instruct a portion of a lesson to their peers.¹ To promote the development of pedagogical abilities and reflective teaching practices, it is a precise and concentrated training technique.²

¹ M. J. Taole M.J. (Ed.). *Teaching Practice, Perspectives and Frameworks*. (Pretoria: Van Schaik), 2015.

² Funmi Amobi and Leslie Irwin, "Implementing On-Campus Microteaching to Elicit Preservice Teachers' Reflection on Teaching Actions: Fresh Perspective on an Established Practice," *Journal of the Scholarship of Teaching and Learning*, 2009, 27–34.

Inexperienced teachers can learn, hone, and critically evaluate their professional knowledge and skills through the use of microteaching.³ With a watchful assessor overseeing the process, these emerging educators engage in a meticulous examination of their teaching methods, seeking areas for improvement. This meticulous feedback loop enables them to fine-tune their content knowledge, pedagogical content knowledge, and assessment skills, all essential facets of effective teaching. The significance of microteaching extends beyond the confines of teacher education institutions. It has found application in various domains, including employment training and in-service professional development. In the context of teacher education, its benefits are especially pronounced, equipping student-teachers with the crucial presentation skills they need before they venture into real classrooms.⁴

Student teachers are more prepared for the difficulties of the real teaching-learning dynamic by honing their skills and enhancing their experience in the controlled setting of microteaching. The execution and timing of microteaching, like any instructional strategy, are key considerations. In the framework of a Bachelor of Education degree in a university of technology, we explore a compelling subject in this study. Participation in microteaching is possible for first-, second-, and third-year students. Microteaching is done once a year and its mark forms Task One of the MCT (Microteaching) Module. However, these once-a-year sessions seem to be insufficient, as many pre-service teachers lack the skills that should be present after completing a microteaching session. Frequent microteaching sessions would improve these pre-service teachers' abilities while helping them overcome stage fright and boost their confidence.

This gap between theory and practice has serious repercussions, undermining the confidence of student instructors and reducing their enthusiasm for their vocation. The study, therefore, investigates the effectiveness of microteaching in the teaching practice component by looking into how it is conducted in the three teaching programmes that an institution offers. The study also weighs the possibility of increasing microteaching sessions from the first-year level of study through to the fourth year. This study is significant because it has the potential to help not only the student teachers but also their teachers and the schools in which they will eventually work.

This research aims to create a more capable and assured cadre of future educators by investigating how microteaching is now carried out in all teaching programs in the institution. It also considers whether microteaching can be offered at least twice a year, at all levels of training. By doing this, it aims to close the knowledge gap between theory and practice, making sure that individuals who wish to shape the minds of future generations are properly prepared for the job.

LITERATURE REVIEW

This review of literature relates to research findings and their implications that form the basis for this study on the effectiveness of microteaching on pre-service teachers at a university of technology. It will discuss the impact of microteaching on student-teachers, the drawbacks of not having microteaching, the benefits of microteaching and the phases of microteaching.

Drawbacks of not having microteaching

A student cannot be assigned to teach in a classroom if they fail the microteaching course. Pre-service teachers benefit from microteaching by becoming more adept at their teaching techniques. Pre-service teachers must dedicate a significant amount of time to fully understand microteaching in order to gain the requisite skills because they are placed in teaching jobs. Even though microteaching requires a lot of time and resources, this highlights how important it is for preparing teachers for the classroom. This emphasizes how crucial it is for the preparation of teachers for the classroom; microteaching takes a lot of time and resources. However, there are still certain difficulties with microteaching, and these difficulties have been identified by numerous academics. These are the difficulties: nervousness affected student teachers'

³ Kadir Bilen, "Effect of Micro Teaching Technique on Teacher Candidates' Beliefs Regarding Mathematics Teaching," *Procedia - Social and Behavioral Sciences* 174 (February 2015): 609–16, <https://doi.org/10.1016/j.sbspro.2015.01.590>.

⁴ Zeki Aarsal, "Microteaching and Pre-Service Teachers' Sense of Self-Efficacy in Teaching," *European Journal of Teacher Education* 37, no. 4 (October 2, 2014): 453–64, <https://doi.org/10.1080/02619768.2014.912627>.

performance in the micro-teaching.⁵ Student teachers forget things that they have prepared and when they are nervous they often experience a slip of the tongue. Students experience mental and emotional stress when their record books are reviewed by a teacher supervisor or their lecturer and receive critical feedback.⁶ Some student teachers lack the necessary competence for effective teaching i.e. shyness, speaking in a monotonous tone, struggling with body language, having pronunciation errors, lacking English fluency, and having unclear handwriting.⁷ In addition to the above-mentioned difficulties lack of evaluation and mentor-teacher feedback, stage fright or anxiety, inadequate lesson planning and bad classroom management contribute to microteaching difficulties. From the viewpoints of supervisors and aspiring instructors, Al-Momani's study examined issues with teaching practice at the faculty of education.⁸ According to the findings, these difficulties for aspiring instructors in the classroom were caused by their apprehensions about instructing, their communication abilities, and the gap between theory and practice. According to Makafane, almost all of the student instructors who were put in this circumstance for the first time had a great deal of trouble speaking in front of an audience.⁹

One of the difficulties with microteaching, according to a study by Makafane, is that student teachers typically over- or under-plan courses.¹⁰ Lesson plans must be approved by the supervisor before student instructors are allowed to use the microteaching lab. Student teachers sometimes misunderstand the complexity and responsibilities of what it means to teach.¹¹ Universities now have the opportunity to close this gap by developing initiatives that help students prepare for their teaching careers.

This is consistent with the Makafane study, which emphasizes pilot instruction and then verbally makes comments in front of others to make sure the following student teacher who will stand at the podium does not make the errors that the prior student teacher was cautioned about.¹²

This is advantageous since it enables the students to examine themselves and gain knowledge from one another. Student teachers' supervisors are supposed to offer them constructive criticism so that they can develop their professional abilities.¹³ However, some of the participants believe that they do not receive enough feedback from their superiors. The micro-teaching committees must make an effort to minimize these disruptions by creating a controlled learning environment and grabbing students' attention by educating student teachers on how to design engaging courses. Finally, administrators must respond to every issue that affects a child in a stable, equitable, and consistent manner.

Benefits of Microteaching

Micro lessons give student instructors significant experience in real-world teaching settings and are a crucial component of teacher preparation. These mini-courses provide a platform for developing teaching abilities and fostering self-confidence, which are crucial traits for successful instructors, as noted by Punia, Miglani, and Singh.¹⁴ According to Kumar, student teachers intentionally practice across several phases

⁵ Herlina Dhika Meigawati, "The Analysis of Students' Perceived Problems in Microteaching Class as Depicted in The Students' Teaching Journals" (Program Studi Pendidikan Bahasa Inggris FBS-UKSW, 2016).

⁶ Z. Delawala, R. Mishra, and P. Chaudhary, "Challenges Faced By Student Teacher-Issues And Concerns," *BPAS Journal of Education* 1, no. 1 (2018): 65–70.

⁷ M Mosas, "The Challenges of Teaching Practice Exercise among Ogun State, Nigeria Student Teachers," 2019.

⁸ Fayhaa Al-Momani, "Challenges of Practicum at College of Education: Supervisors & Students' Teachers Perspective," *International Journal of Novel Research in Humanity and Social Sciences* 3, no. 3 (2016): 45–52.

⁹ Teboli David Makafane, "Student Teachers Challenges in the Preparation and Implementation of Microteaching: The Case of the National University of Lesotho," *International Journal of Academic Research in Progressive Education and Development* 9, no. 2 (2020): 144–57.

¹⁰ Makafane, "Student Teachers Challenges in the Preparation and Implementation of Microteaching: The Case of the National University of Lesotho."

¹¹ Moeniera Moosa, "Reducing Practice-Shock: First-Year Student Teachers' Experiences of a Campus-Based Teaching Practice Model," *Journal of Education (University of KwaZulu-Natal)*, no. 77 (2019): 94–114.

¹² Makafane, "Student Teachers Challenges in the Preparation and Implementation of Microteaching: The Case of the National University of Lesotho."

¹³ A. Aldabbus, "Challenges Encountered By Student Teachers in Practicing Teaching," *British Journal of Education* 8, no. 7 (August 30, 2020): 1–8, <https://doi.org/10.37745/bje/vol8.no6.p1-8.2020>.

¹⁴ Vandana Punia, Priyanka Miglani, and Shireesh Pal Singh, "Perception of Pupil-Teachers' Regarding Micro-Teaching Sessions," *World Scientific News*, no. 27 (2016): 1–9.

of micro lessons, enabling them to gain a variety of abilities that ultimately result in changes and improvements in their teaching methods.¹⁵

Microteaching has a considerable impact on improving student instructors' subject matter knowledge, according to research that has been done on the topic. This conclusion is emphasized by Damalie, who demonstrates the indisputable significance of this component of teacher preparation.¹⁶ Furthermore, James, et.al., stress how important it is for student teachers to be knowledgeable about the subjects they will be teaching.¹⁷ The findings of the study by Cobilla, show that preservice teachers who use microteaching have superior subject knowledge, providing further credence to this idea.¹⁸

The importance of mastering content is highlighted by Godek's study of science teacher candidates, which shows how microteaching greatly improves subject matter understanding.¹⁹ Microlessons are essential for boosting essential teacher education competencies. According to Arsal, microlessons have a good effect on skills including critical thinking, self-efficacy, apprehension, and personality.²⁰ Ralph also emphasizes the role that micro lessons have in the growth of student teachers' professional confidence and competence.²¹ Micro lessons can be used to improve planning abilities, cooperation, and subject matter understanding, according to Herrera, Vielma, and Muoz.²²

Additionally, self-training happens when student instructors see their colleagues' lesson presentations.²³ This helps them develop the ability to provide and receive constructive criticism, which in turn builds their confidence.²⁴ Additionally, micro lessons help teachers get better at managing their time, their classrooms, and their capacity to handle difficulties that arise during the teaching process.²⁵

Microteaching is an effective method in teacher education, providing student instructors with worthwhile possibilities for skill improvement and experiential learning. It helps aspiring teachers fill the gap between academic understanding and real-world application by boosting their subject-matter expertise, teaching proficiency, and all-around confidence. Effective and competent teachers can be created by strategically integrating microteaching into programs for teacher preparation and resolving related difficulties.

Phases of Microteaching

Three steps were recognized by Eze and Arsal, namely the phases of knowledge acquisition, skill acquisition, and transfer.²⁶ The first stage, known as the knowledge acquisition stage, is also known as the pre-active stage. Pre-service teachers gain knowledge of the abilities and their constituent parts during this initial period through lectures, tutorials, examples, orientation, and expert demonstrations of the skills. They discover the function of the skill and the circumstances in which it is helpful during the teaching-learning process. They gain a lot of knowledge about the talents from the expert demonstrations. The

¹⁵ S. S. Kumar, "Microteaching– An efficient technique for learning effective teaching," *International Journal of Research in IT and Management*, 6(8), (2016); 51-61.

¹⁶ Sentumbwe Nakkazi Damalie, "Student-Teachers' Experiences of Microteaching on an Economics Methods Course," *African Research Review* 12, no. 2 (July 16, 2018): 101, <https://doi.org/10.4314/afrev.v12i2.10>.

¹⁷ N. C. James, N.C. Uwannah, C.O. Egwuonwu, and S. Joshua, "Impact of Microteaching, Mentoring and Teaching Practice on the Competency of Final Year Student-Teachers in Ekiti State University, Ekiti State, Nigeria." *Zaria journal of Educational Studies (ZAJES)*, 22(1), (2022); 27-43.

¹⁸ Leslie Elisa S. Cobilla, "Student Teaching Mentors' Role: A Perspective From University Student Teachers," *Journal of Educational and Human Resource Development (JEHRD)* 2 (December 10, 2014): 180–87, <https://doi.org/10.61569/samaek67>.

¹⁹ Y. Godek, "Science teacher trainees' microteaching experiences: A focus group study." *Educational Research Reviews*, 11(16), (2016); 1473-1493.

²⁰ Zeki Arsal, "The Effects of Microteaching on the Critical Thinking Dispositions of Pre-Service Teachers," *Australian Journal of Teacher Education* 40, no. 40 (January 1, 2015), <https://doi.org/10.14221/ajte.2014v40n3.9>.

²¹ Edwin G Ralph, "The Effectiveness of Microteaching: Five Years' Findings," *International Journal of Humanities Social Sciences and Education* 1, no. 7 (2014): 17–28.

²² Rodrigo F Herrera, Juan C Vielma, and Felipe C Muñoz, "Microteaching: A New Way to Perform Oral Presentations by Engineering Students," *Global Journal of Engineering Education* 19, no. 3 (2017): 285–90.

²³ Ambili Remesh, "Microteaching, an Efficient Technique for Learning Effective Teaching.," *Journal of Research in Medical Sciences : The Official Journal of Isfahan University of Medical Sciences* 18, no. 2 (February 2013): 158–63.

²⁴ Chaman Lal Banga, "Microteaching, an Efficient Technique for Learning Effective Teaching," *Scholarly Research Journal for Interdisciplinary Studies* 15, no. 2 (2014): 2206–11.

²⁵ Abdurrahman Kilic, "Learner-Centered Micro Teaching in Teacher Education," *International Journal of Instruction* 3, no. 1 (2010).

²⁶ A.E. Eze, *The Essentials of Microteaching and Teaching Practice* (.NSUKKA, Nigeria: Chika Educational Publishes, 2013); Zeki Arsal, "Microteaching and Pre-Service Teachers' Sense of Self-Efficacy in Teaching," *European Journal of Teacher Education* 37, no. 4 (2014): 453–64.

second step, referred to as the acquisition phase, is an interactive stage where teacher candidates are supposed to prepare a mini-lesson based on the experts' demonstrations.²⁷ The microteaching cycle allows the teacher candidates to practice the skills until they are proficient.

The feedback element of microteaching makes a major contribution to the skill level. Feedback is provided to influence teacher candidates' conduct in the desired manner. The post-active phase, often known as the transfer stage, is the final stage. After gaining command and mastery over each ability, the student teacher integrates them all and applies them to practical classroom instruction.

According to Banga phases of microteaching are as follows:

- **Knowledge Acquisition Phase:** During this stage, the teacher candidate gains knowledge of the skill and its components through discussion, examples, and expert demonstrations of the skill. He or she gains knowledge of the skill's function and the circumstances in which it is helpful during the teaching-learning process. His or her breakdown of the skill into its constituent parts results in numerous kinds of behaviors that need to be practiced. The teacher candidate tries to learn a lot about the skill from the expert's demonstration. He goes over and makes clear every detail of the talent.
- **Skill Acquisition Phase:** Based on the expert's demonstration, the teacher candidate designs a microlesson, or lesson, to allow students to practice the skill. Through the Micro-teaching cycle, he exercises his teaching technique, and he keeps working until he reaches the mastery level. The microteaching technique's feedback element makes a substantial contribution to the acquisition of the skill at the mastery level. Feedback is given based on the teacher candidate's performance in the classroom to change the candidate's behavior in the desired manner.
- **Transfer Phase of Micro-teaching:** The teacher candidate integrates all of these abilities and transfers them to actual classroom teaching during this transfer phase after achieving mastery level and command over each of the skills.

THEORETICAL FRAMEWORKS

A theoretical framework is a rationally created and connected set of concepts and premises that a researcher develops to build a study from one or more theories.²⁸ In this study, social constructivism and social learning theory are specifically examined.

Social Constructivism Theory

According to this view, human beings collaborate to produce understanding, importance, and meaning. In sociology and communication theory, social constructivism is a theory of knowledge that looks at how people collectively come to know and understand the world.²⁹ Social constructivists contend that learners build understanding collaboratively; this process is known as collaborative elaboration because learners cannot acquire understanding alone.³⁰ To enable student-teachers to socially construct knowledge, microteaching sessions are set up in accordance with the social constructivism theory.

Microteaching is a multi-strategy approach to learning that calls for both the teacher and the students to actively participate in a discussion style. Four fundamental techniques are utilized in reciprocal teaching: questioning, clarifying, forecasting, and summarizing.³¹ Students are expected to develop their understanding during microteaching presentations as well as their self-awareness and responsibility for their own learning. Vygotsky's Theory of Social Constructivism, in according to Yilmaz, emphasizes how social interaction and language impact the development of learning and cognition as well as the link

²⁷ S. Bakır, "The effect of microteaching on the teaching skills of preservice science teachers." *Journal of Baltic Science Education*, 13(6), (2014); 789-801; H Chuanjan and Y Chummei, "Exploring Authenticity of Microteaching in Presence Teacher Education Programme," *Central China Normal University Wuhan, China*, 2011.

²⁸ Michelle E Kiger and Lara Varpio, "Thematic Analysis of Qualitative Data: AMEE Guide No. 131," *Medical Teacher* 42, no. 8 (2020): 846–54.

²⁹ Roya Jafari Amineh and Hanieh Davatgari Asl, "Review of Constructivism and Social Constructivism," *Journal of Social Sciences, Literature and Languages* 1, no. 1 (2015): 9–16.

³⁰ John R. Anderson, Lynne M. Reder, and Herbert A. Simon, "Situated Learning and Education," *Educational Researcher* 25, no. 4 (May 1996): 5, <https://doi.org/10.2307/1176775>.

³¹ S Mackov, "Reciprocal Teaching," 2016, <http://msmcavoysclassroom.weebly.com>.

between the individual and society.³² During microteaching, student instructors actively participate in problem-solving and critical thinking through learning to construct knowledge socially.

Social Learning Theory

The social environment of learning and how individuals learn from one another are the main topics of social learning theory. Early research focused on the concept of observational learning, in which the learner observes a living or symbolic model and then imitates the model's procedure, strategy, task, or ability. According to Bandura, the social learning theory was created because he thought behaviorism alone could not account for all the components of learning.³³ He believed that environment and behavior were interwoven, and the behavioral changes he observed in a youngster after observing an adult act hostile served as the impetus for the creation of his social learning theory.³⁴

Bandura contends that self-regulation, which involves making assessments of oneself and one's environment as well as responding appropriately to those assessments, enables people to control their behavior. Therefore, social learning can be described as a change in an observer's behavior as a result of witnessing the behavior of a model, whether that behavior is positive or bad. According to Kusumawati, microteaching involves courses with a variety of goals, such as assisting students in understanding the fundamentals of the practice, educating them in lesson planning, establishing and improving fundamental teaching-based competencies, fostering and enhancing fundamental and integrated teaching competencies, establishing personality competence, and establishing social competence.³⁵ The lecturer must first perform the necessary skill(s) before starting the microteaching presentation. Social learning is the process by which student-teachers must imitate lecturers after they have performed a task-specific demonstration. Student teachers will follow directions and receive assistance from the assessors as they carry out the competencies. The following parts will discuss the goal, procedures, and effects of microteaching after providing background information on the ideas that were used in the research on this topic.

METHODOLOGY

Research design

This study followed a qualitative approach, using a phenomenological design to explore the experiences of lecturers and pre-service teachers. Pre-service teachers' and lecturers' lived experiences, perceptions, viewpoints, and opinions were examined in this case. This study focused on the real-world experiences of lecturers and pre-service teachers regarding the effectiveness of microteaching presentations on pre-service teachers' teacher-education preparation. Phenomenological research was believed to be the best approach to feed this study because it interpreted and characterised the experiences of the participants.³⁶ From the participants' natural environments, data in the form of words rather than numbers was gathered. To obtain a thorough grasp of the phenomena, several data collection techniques, including focus group interviews and an open-ended questionnaire, were employed.³⁷

Population

According to Nieuwenhuis, a study's population consists of the group of subjects that the research is focused on.³⁸ The research population for the study was limited to one higher education institution, namely CUT Campus's Faculty of Humanities. Microteaching assessors (lecturers) and pre-service teachers made up the study's population. Participants were carefully chosen, as is the situation with most qualitative study

³² Kaya Yilmaz, "The Cognitive Perspective on Learning: Its Theoretical Underpinnings and Implications for Classroom Practices," *The Clearing House: A Journal of Educational Strategies, Issues and Ideas* 84, no. 5 (August 11, 2011): 204–12, <https://doi.org/10.1080/00098655.2011.568989>.

³³ Albert Bandura, "Social Learning Theory," *Englewood Cliffs*, 1977.

³⁴ Sunday David Edinyang, "The Significance of Social Learning Theories in the Teaching of Social Studies Education," *International Journal of Sociology and Anthropology Research* 2, no. 1 (2016): 40–45.

³⁵ I Kusumawati, "Panduan Pengajaran Mikro Teaching," *Yogyakarta: UCY* 56 (2015).

³⁶ K. Usher and D. Jackson, "Phenomenon," in *Qualitative Methodology: A Practical Guide*, ed. Jane Mills and Melanie Birks (1 Oliver's Yard, 55 City Road London EC1Y 1SP : SAGE Publications, Inc., 2014), 181–98, <https://doi.org/10.4135/9781473920163>.

³⁷ J. McMillan and S. Schumacher, *Research in Education Evidence Based Inquiry*, 7th ed. (Harlow: Pearson Education, 2014).

³⁸ J. Nieuwenhuis, "Qualitative Research Designs and Data Gathering Techniques," in *First Steps in Research*, ed. K. Maree, 2nd ed. (Pretoria: Van Schaik, 2016).

projects, especially phenomenological ones. A specific set of teacher candidates and a predetermined number of academics (lecturers) who serve as microteaching assessors were chosen from CUT. The reason for selecting CUT was simple; the researcher was familiar with the higher education institution its lecturers, and its students, therefore, interviews would be undemanding. Additionally, travel (and costs) to the campus were not extensive. According to Maree et al., sampling is the process of choosing a subset of the population for research.³⁹ The researcher employed a purposive sampling method because they thought that selecting the sample in this way would give them additional information relevant to their research objectives. CUT was purposefully selected to represent pre-service teachers and microteaching assessors (lecturers). The researchers' sample, drawn from this population, consisted of a distinct group of participants which allowed them to probe deeper to better understand the research problem. In total, 24 B. Ed pre-service teachers and 18 microlesson assessors who are lecturers at the university were purposefully selected.

Data Collection

To answer research questions, test hypotheses, and assess results from a variety of sources (such as questionnaires, observations, pre-existing records, and electronic devices), data must be obtained and measured in an established, systematic manner (Kabir, 2016).⁴⁰ The research study employed focus group interviews and an open-ended questionnaire as data collection methods.

Data Analysis Procedure

The research study employed focus group interviews and an open-ended questionnaire as data-gathering tools. As mentioned, according to Cohen et al., focus groups are a type of group interview where the emphasis is on group interaction while the group discusses a topic provided by the researcher, resulting in a collective viewpoint as opposed to an individual one.⁴¹ Focus group interviews were deemed essential in this study to gather as much data as possible regarding the pre-service teachers' perceptions of their competence and the efficacy of microteaching. The researcher introduced herself to the participants before the interview and outlined the purpose, duration, and topic of each interview. The interviews were recorded with the participants' consent. The researcher conducted focus groups with key informants to gather information from CUT (microlesson laboratories).

The researcher asked CUT pre-service teachers to organise focus groups for interviews lasting between 30 and 60 minutes. Data for this study were also collected through an open-ended questionnaire, with hard copies given to CUT's microteaching lecturers to complete within a week. A questionnaire is a tool that contains statements or open-ended questions that demand a response from the participant.⁴² It can ensure anonymity, is affordable, and presents all participants with identical questions that are carefully designed to achieve a particular objective. This time allowed them to openly share their thoughts and views about the way the Higher Education Institution (HEI) conducts microteaching. In this study, participants were given the option to add as much context and description as they chose for their responses using an open-ended questionnaire. The responses addressed the research question How effective is the microteaching of B. Ed pre-service teachers?

Ethical Considerations

Ravitch and Carl regard ethics as the application of moral rules and professional codes of conduct to the collection, analysis, reporting, and publication of information about research subjects, with a particular emphasis on active acceptance of the subjects' right to privacy, confidentiality, and informed consent.⁴³ The researcher set up and conducted preliminary interview meetings with the participants to introduce herself, build a rapport, and describe key parts of the study, such as the study's purpose and goal, as well as the contents of the instruments to be utilised. During the preliminary meeting, participants were given

³⁹ K. Maree, *First Step in Research* (Pretoria. : Van Schilk, 2007).

⁴⁰ Syed Muhammad Sajjad Kabir, "Basic Guidelines for Research," *An Introductory Approach for All Disciplines* 4, no. 2 (2016): 168–80.

⁴¹ L. Cohen, L. Manion, and K. Morrison, *Research Methods in Education* (New York, NY: Routledge, 2018).

⁴² Martyn Denscombe, *The Good Research Guide: For Small-Scale Social Research Projects (Open UP Study Skills)* (McGraw-Hill, 2010).

⁴³ Sharon M Ravitch and Nicole Mittenfelner Carl, *Qualitative Research: Bridging the Conceptual, Theoretical, and Methodological* (Sage Publications, 2019).

a consent document to sign. The permission form contains all pertinent information about the study, as well as the method that will be followed during the interviews, including the recording of the session and who will have access to it or read the transcript. Ethical values were thoroughly explained to all participants to ensure that everyone understood what was expected of them and to avoid needless unethical behaviour during and after data collection. Participants were informed that anything spoken during the interviews will remain confidential and that sexist, racist or disrespectful comments will not be tolerated.

PRESENTATION OF FINDINGS

This study sought to determine how microteaching affected pre-service teachers. The opportunity to effectively apply their teaching techniques is provided by microteaching for pre-service teachers. Pre-service teachers are exposed to a setting where they can develop their teaching abilities by reflecting on their errors.⁴⁴ The findings demonstrated that pre-service teachers are prepared, equipped, and developed in a range of teaching abilities after using microteaching. Pre-service teachers explained that they can apply and share knowledge through microteaching. The focus group interviews and questionnaires yielded the following themes once the qualitative data were gathered and analysed.

Theme 1: Impact of microteaching practice

Microlessons enhance student-teachers' planning abilities, collaboration, and subject matter expertise as well as their professional competence and confidence.⁴⁵ Banga holds the same opinion, that pre-service teachers gain confidence through microteaching since they learn how to provide and receive constructive criticism.⁴⁶ A pre-service teacher from FG 6 added:

You gain confidence through microteaching, and it also assists with teaching skills improvement.

One lecturer remarked:

It increases their self-assurance. It reinforces what they already know. They can identify their advantages and disadvantages.

Another lecturer agreed with the above notion and emphasised:

It prepares a student to a certain degree to teach in front of learners with the necessary confidence.

Another lecturer supports the above assertions and stated:

It equips students' teachers with practice and methods of teaching under the guidance of their specialised lecturers.

The findings also demonstrated how microteaching increases pre-service teachers' comprehension of educational knowledge and helps them develop essential questioning strategies.

A pre-service teacher from FG 5 explained:

Microteaching impacted me in a good way you know. It also improved my skills as a teacher because over the years. I saw that mathematics and science students were struggling, so those microskills, skills and microskills assisted me in presenting lessons more simply to my learners so that they could understand what they were learning and why they must learn.

One lecturer emphasised:

Microteaching is at the heart of teacher training because during microlesson presentations students demonstrate how they apply the theoretical knowledge that was acquired in their methodologies, CK their pedagogical knowledge (SBL - PK) and PCK.

⁴⁴ Amobi and Irwin, "Implementing On-Campus Microteaching to Elicit Preservice Teachers' Reflection on Teaching Actions: Fresh Perspective on an Established Practice."

⁴⁵ Herrera, Vielma, and Muñoz, "Microteaching: A New Way to Perform Oral Presentations by Engineering Students"; Ralph, "The Effectiveness of Microteaching: Five Years' Findings."

⁴⁶ Banga, "Microteaching, an Efficient Technique for Learning Effective Teaching."

Another lecturer shared the same sentiments and added:

Before instructing a larger class, student-teachers can hone their skills with a smaller one through the use of microteaching.

The results show that microteaching helps with skill improvement and confidence building. From FG 5, a pre-service teacher stated:

I think it helps in preparation for being a teacher, microteaching is a very good initiative because it helps us lead us to, develop this teaching....and you gain the confidence of participants and then you improve your teaching skills you get feedback again.

Similarly, one lecturer indicated:

The skills and confidence gained through microteaching can positively impact student-teachers long-term careers. It sets a strong foundation for their teaching journey, leading to more effective and competent educators.

The findings demonstrated that pre-service teachers are prepared, equipped, and developed in a range of teaching abilities after using microteaching. They said that they can apply and share knowledge through microteaching. A pre-service teacher from FG 3 explained:

Yeah, the microteaching impacted us. Through microteaching student-teachers practice the application of different teaching skills safely while learning how to develop simple single-concept.

Theme 2: Analysis of limited presentation of microlessons

The results showed that while the existing microlesson presentations are helpful and efficient, they will be even more so if students are given the chance to take part in microlessons twice a year. The findings showed that pre-service teachers may begin to lose interest in their chosen careers because of inadequate microteaching presentations. According to the audit report by Davids, faculty members face the highest percentage of first-year student dropouts following their visit to the schools for their first-year practice teaching.⁴⁷

Pre-service teachers explained that microlesson presentations helped boost confidence. They also strongly believed that more microlesson sessions ought to be implemented at all educational levels or earlier in the teaching program.

In agreement with the aforementioned idea, a different pre-service teacher from FG 6 highlighted that:

Microlessons should be introduced, with presentations held twice a year, commencing at the first study level and continuing through the third or fourth level in order to develop them. I believe that one session per year is insufficient. It makes sense to conduct the microlesson twice a year.

A lecturer agreed with these remarks, stating that it is common for microlesson presentations to take place only once a year. However, it would be more advantageous to microlesson presentations to have microlesson presentations scheduled for at least twice a year in each level of study. The above assertions are corroborated in the following comment made by a lecturer:

The presentation of microlessons can be beneficial to student-teachers at various stages of their training. While it is common for microteaching to take place once a year, it can also be advantageous to schedule it for at least twice a year.

Additionally, another lecturer explained:

Even though microlessons are beneficial for, student-teachers they would have been beneficial more if microlessons were presented twice a year so as to equip them more with regards to the application of teaching methodology. Student-teachers need more practice to learn more about

⁴⁷ M N Davids, "Student Experiences of Microteaching: Promoting Reproductive or Innovative Learning?," *South African Journal of Higher Education* 30, no. 1 (2016): 106–22.

teaching and learning methodologies and the effective application of such, especially their actual classroom application.

DISCUSSION

The study's findings of Akkuş and Sinem showed that pre-service chemistry teachers improved their knowledge of chemistry and identified areas for improvement through microteaching techniques used in the Special Teaching Methods-II course.⁴⁸ Identification of areas of improvement related to social constructivism theory. Constructivism is a theory of knowledge in sociology and communication theory that examines the knowledge and understanding of the world that are developed jointly by individuals.⁴⁹ Vygotsky's Theory of Social Constructivism, in accordance with Yilmaz, emphasizes how social interaction and language impact the development of learning and cognition as well as the link between the individual and society.⁵⁰ Student instructors actively engage in problem-solving and critical thinking during microteaching by learning how to socially create knowledge. The teacher roles that pre-service chemistry teachers take on, according to Akkus and Sinem, help them see their shortcomings that they didn't notice before.⁵¹ After engaging in microteaching activities, they began to see themselves as teachers and critique their peers while observing from the perspective of a teacher.

Moreover, the results revealed from self-evaluations of pre-service chemistry teachers show that participants encountered more problems in their first presentations, but in their second presentations, they began to solve the problems they encountered and became more confident about teaching.⁵² The skills acquisition phase enables student teachers to design a microlesson and practice specific skills, the skills will be practiced until the student teacher achieves mastery level.⁵³ Microteaching is a pedagogical approach to make studies about the pre-service teachers' courses, keep track of preservice teachers' progress and teach.⁵⁴ Microteaching enables student teachers to integrate all abilities and transfer them to actual classroom settings.⁵⁵

Findings further, revealed that current microteaching presentations were helpful, students could benefit from them much more if they were given more than once a year. The more microlesson presentations pre-service teachers view, the more fully formed they will become. The results showed that pre-service teachers microteaching is advantageous; however, this process/model would be more effective if it began earlier in the teaching program.

RECOMMENDATIONS

More microteaching activities should be more widely implemented to enhance teaching techniques in pre-service teachers. There should be more microteaching demonstrations. The results also showed that pre-service teachers can watch video recordings of microlesson presentations. By doing so, they will become more accustomed to the format of the microlesson presentations and will have more opportunities for reflection. Pre-service teachers can then question themselves on what they are doing, why they are doing it, and the impact on their learners. They can view video clips of experienced teachers where they will deliver a lesson to learners. Before the actual microlesson presentations, pre-service teachers should be given the chance to put the abilities they saw on the video into practice. By doing this, they will be able to choose instructional strategies, instructional tools, and lesson plans with knowledge.

CONCLUSION

The findings of this study have revealed that current microteaching presentations have been helpful, and students could benefit from them much more if they were given more than once a year. The more

⁴⁸ Hüseyin Akkuş and Sinem Üner, "The Effect of Microteaching on Pre-Service Chemistry Teachers' Teaching Experiences," *Cukurova University Faculty of Education Journal* 46, no. 1 (2017): 202–30.

⁴⁹ Amineh and Asl, "Review of Constructivism and Social Constructivism."

⁵⁰ Yilmaz, "The Cognitive Perspective on Learning: Its Theoretical Underpinnings and Implications for Classroom Practices."

⁵¹ Akkuş and Üner, "The Effect of Microteaching on Pre-Service Chemistry Teachers' Teaching Experiences."

⁵² Hüseyin Akkuş and Sinem Üner, "The Effect of Microteaching On Pre-Service Chemistry Teachers' Teaching Experiences," *Cukurova University Faculty of Education Journal* 46, no. 1 (April 27, 2017): 202–30, <https://doi.org/10.14812/cuefd.309459>.

⁵³ Banga, "Microteaching, an Efficient Technique for Learning Effective Teaching."

⁵⁴ Maria Lorelei Fernandez, "Investigating How and What Prospective Teachers Learn through Microteaching Lesson Study," *Teaching and Teacher Education* 26, no. 2 (2010): 351–62.

⁵⁵ Banga, "Microteaching, an Efficient Technique for Learning Effective Teaching."

microlesson presentations pre-service teachers view, the more fully formed they will become. The results further showed that pre-service teachers microteaching is advantageous; however, this process/model would be more effective if it begins earlier in the teaching program. The results have revealed that by providing students with more authentic teaching experiences before microlesson presentations, they can become proficient in a variety of teaching techniques. The results also showed that technological innovation is imperative to the microteaching process, suggesting that additional technology should be included. Additionally, more group interaction should be promoted before microlesson presentations, according to the findings. In conclusion, pre-service teachers can acquire knowledge as they go through the creation of microteaching sessions, both on their own and in social settings. Microteaching lessons should therefore be made available at the right time to ensure efficiency in the delivery of lessons.

FUTURE RESEARCH

From the recommendations listed above, several areas of future research have been identified. They are discussed below:

Exploring the impact of incorporating peer feedback in microteaching sessions

Findings revealed that peer feedback contributed to pre-service teachers' skills development. As a result of their development as constructive feedback providers and receivers, student instructors become more confident. Therefore, it is essential to examine how peer input could improve the learning process.

Impact of reflection and self-assessment in microteaching

According to the findings, assisting pre-service teachers in doing self-evaluation and self-reflection during microteaching sessions helps them become more skilled teachers. In improving student-teachers public speaking and time management abilities, microlessons also assisted them in developing their critical thinking and self-reflection skills. A study investigating the impact of reflection and self-assessment in microteaching will be necessary.

Investigating the effectiveness of virtual reality and augmented reality technologies in microteaching

The 4IR is upon the world; therefore, higher education must make extensive use of technical resources.⁵⁶ Furthermore, the increased use of technological resources helps students acquire knowledge and skills relevant to their field. Student-teachers should graduate from the teacher education programme with the abilities needed to plan and run classrooms, including using technology.⁵⁷ Therefore, it will be crucial to investigate how incorporating virtual reality (VR) and augmented reality (AR) technology into microteaching sessions might enhance pre-service teachers' capacity to replicate real-world classroom scenarios, practice classroom management techniques, and engage students in creative ways.

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⁵⁶ Joseline M Santos and Rowell D R Castro, "Technological Pedagogical Content Knowledge (TPACK) in Action: Application of Learning in the Classroom by Pre-Service Teachers (PST)," *Social Sciences & Humanities Open* 3, no. 1 (2021): 100110.

⁵⁷ Nosihle Veronica Sithole, "The Efficacy of Microteaching in a Teacher Education Programme during the Lockdown at a University in South Africa," *International Journal of Learning, Teaching and Educational Research* 22, no. 2 (2023): 76–91.

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