Learning from Students’ Experiences of Microteaching for Numeracy Education and Learning Support: A Case Study at University of Namibia, Southern Campus

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Abstract

The purpose of this study was to investigate, reflect and learn from experiences of undertaking microteaching in a Numeracy Education and Learning Support class of 153 students studying Diploma in Junior Primary Education Year 3 (DJPE3) at University of Namibia, Southern Campus. Microteaching is a platform for beginner teachers to improve teaching competencies, and this took place prior to students’ placement and evaluation of School Based Studies for 4 weeks (June/July 2017) in any Namibia’s primary schools of their choice offering class teaching from Grade 0 to Grade 3. Prior to microteaching, student teachers demonstrated nervousness and were scared to present a lesson before their peers. Literatures on microteaching were synthesized before data were analyzed by summarizing 91 written reflections of 91 student teachers who unanimously took part in a survey after completing and returning a questionnaire with four open-ended questions. Analysis of the data revealed that, microteaching is a learning platform for teaching practice, positive and negative factors influence student’ microteaching scores, and most students were satisfied with microteaching scores. The results of this study suggest that microteaching lecturers at the University level should be trained and equipped with student-engagement skills to be highly effective and supportive toward students.

Keywords: Experiences; Microteaching; Student teachers; Teaching practice; University of Namibia.

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1. Introduction

Micro-teaching back dated to 1970s when Dwight Allen initiated this program to train medicine students at Stanford University [10]. Afterwards, it started to be adapted into teacher training programme to train teachers and pre-service teachers [10]. To date, micro-teaching is a pre-requisite course to certify teachers in many teachers’ training program across the world [7]. At the University of Namibia, the aim of this practical course is to provide student teachers “with self-confidence and skills to compile and present various school subjects, plan and develop suitable instructional materials and supportive learner engagement relevant to the teaching profession” [5: 49]. The following subsections would describe micro-teaching in details with reference to its features, benefits and limitations as well as micro-teaching skills.

1.1. What is micro-teaching?

There are multiple definitions of micro-teaching and there is no singular universal definition for this concept. For the purpose of validating this research, three definitions were considered. Yosuf [9] described micro-teaching as the practical training technique which afford student teachers and teachers alike the opportunity to master the skills inherent in teaching in a laboratory environment before actual class experience. Patel and Mohasina [8] described microteaching as an organized practice teaching which aims to provide student teachers confidence, support and feedback. On the other hand, Egunjobi, Nwaboku and Salawu [3] described microteaching as a program that prepares student teachers for teaching practice. For the same reason, micro-teaching of DJPE3 students in this study was carried out prior to their placement for teaching practice of School Based Studies (SBS) to equip them with the basic teaching skills by presenting a 5-15 minute lesson of a selected basic competency in either grade 0, 1, 2 or 3 of the Namibian syllabus.

1.2 Features of micro-teaching

Micro-teaching revolves around a number of principles to develop teachers’ teaching skills. Sravani [12] suggested seven features which characterized micro-teaching and these are as follows:

1.2.1 One skill at a time

Micro-teaching aims on a sequence of mastering one teaching skill a time before focusing on developing other teaching skills.

1.2.2 Small scale content

To help student teachers freedom to learn faster, microteaching allows student teachers to prepare and present a lesson based on a chosen basic competency and not more than one basic competency in a lesson.

1.2.3 Practice makes a man perfect

This simply means that for mastering of skills, students need to practice a lot a skill at a time and practices
would boost the self-confidence and promote development of teaching skills of student teachers [12].

1.2.4 Experiments

In micro-teaching, many experiments would be conducted to test teaching skills of a teacher under controlled conditions such as changing the length of a lesson, time duration, and number of students in a class.

1.2.5 Instantaneous feedback

Feedback from the supervisor and fellow students at the end of micro-teaching is significant as it helps student teachers to rectify their drawbacks.

1.2.6 Self-evaluation opportunities

In micro-teaching, self-evaluation becomes a learning opportunity after mistakes are pointed out along with possible solutions with the overarching aim for a student teacher to improve.

1.2.7 Continuous efforts

In micro-teaching, continuous efforts should be made towards attaining overall betterment and mastering of all teaching skills.

1.3 Micro-teaching skills

The art of teaching is a complex process, which is more than transferring of knowledge from one to another like in course books, information sheets and periodicals [12, 7]. “It requires good verbal and non-verbal skills [12: unpaged].” According to Ajileye [7] teaching skills includes all behaviors and actions that teachers acquire through practice and experiences of lesson presentations. To teach effectively, teachers need some teaching skills and student teachers under training should be subjected to these skills in microteaching [7]. Moreover, the number of microteaching skills should depend on preferences of supervisors and student teachers [7]. Ajileye [7] gave eight examples of microteaching skills, namely: lesson planning, presentation, explanation, reinforcement, stimulus variation, probing, classroom management, and illustrations with examples. In this study, student teachers were evaluated on ten microteaching skills using a teaching rubric and these skills were knowledge of subject matter, communication skills/clarity, poise/confidence, method of presentation, orderly sequence, professional appearance and conduct, and use of audio-visuals. These skills are illustrated in the teaching presentation rubric of the University of Namibia, Department of Early Childhood Development and Lower Primary Education, Faculty of Education, see appendix an attached.

1.4 Benefits and limitations of micro-teaching

The focus of this study is on evaluating the effectiveness of microteaching. Therefore, it is best fit for the benefits and challenges of micro-teaching to serve as the theoretical framework of this study. This section would first discuss the benefits of microteaching then later present the limitations of microteaching.
Microteaching has a lot of advantages over traditional teachers’ training techniques. In this regard, Ajileye [7] opined that teacher trainers, educators and educationists consider microteaching as an indispensible approach in producing effective teachers. One of the advantages of microteaching is that of elasticity of practice. By elasticity of practice, student teachers and teachers are afforded learning opportunities to broaden their knowledge of various techniques of teaching during the microteaching lessons’ presentation [7, 12, 1]. Microteaching is of paramount importance as a confidence and self-esteem booster of student teachers [11].

Research findings [4; 17] confirm that “beginning teachers highly valued microteaching as an effective pedagogical tool that enhanced their teaching competence and confidence, but that it is most beneficial under certain conditions.” According to Ajileye [7], microteaching affords student teachers opportunities to greatly grasp teaching which is a complex and challenging profession. In this regards, microteaching has the capacity of developing greater interest for teaching among student teachers. Through microteaching, “student teachers are motivated to participate in teaching and become professionals” [7: 51]. Ajileye [7] and Göçer [1] further noted that microteaching afford student teachers to become competent in designing effective teaching aids, writing lesson plans, stating lesson objectives and delivering their lessons as well as to overcome mannerism, stress, nervousness and other semantic barriers which hinder performance in front of the audience and supervisors.

Microteaching helps to improve attitudes of student teachers toward teaching. Sravani [12] suggested that a positive attitude help students to attain better performance and to accept any criticism which would also help them to strive for betterment. In addition, microteaching promotes systematic lesson planning as lesson planning is one of the skills that student teachers need to master [12, 1]. Besides, microteaching enables student teachers to get instant feedbacks from the supervisors which would give students more potential opportunities to rectify mistakes and learn from making mistakes [1]. Therefore, instant feedback is one of the advantages to student teachers they gain during microteaching. Microteaching also benefited students with mastering of various teaching skills and more learning experiences with less damaging of self-belief since student teachers would be more relaxed teaching a smaller group of fellow students as compared to teaching large groups [12].

Microteaching also has its drawbacks as limitations although they are minimal in comparison to its merits. For instance, Sravani [12] indicated that microteaching sometimes hampers creativity due to limited training period timing of students which is 5-10 minute lesson presentation for each student. This short training period is not enough to develop all the required teaching skills properly [12]. Sravani [12] also indicated that microteaching could be time consuming especially when the same supervisor has to work with a big group of students and he/she has to repeatedly observe, criticize, comment, correct, encourage and evaluate all students [7]. It could also be time consuming if all student teachers have to repeat presentation cycle of microteaching of planning, teaching, feedback, re-planning, re-teaching, re-feedback. Moreover, student teachers sometimes do not easily accept negative comments of their presentations and this would make learning difficult as they would repeat the same mistakes or end up in misunderstanding and quarrels with supervisors [7]. Lastly, microteaching requires well-trained educators to train student teachers since promoting of better learning experience could only materialize through better training [12].

**1.5 Statement of the problem and research question**
Prior to undertaking microteaching lesson presentations, most students showed nervousness and mannerism as most of them complained that it would be their first time in their three years at University to stand and present before their peers or large audience. Therefore, this study seek to answer this question: “What was the student teachers’ experience of microteaching for Numeracy Education and Learning Support at Southern Campus of University of Namibia?

2. Methods

In this study, a descriptive survey method was used. The study was framed within an interpretative paradigm as unit of analysis were qualitative data of participants’ written responses. Maree [6: 99] described the interpretative paradigm explicitly saying:

It tries to establish how participants make meaning of a specific phenomenon by analyzing their perceptions, attitudes, understanding, knowledge, values, feelings and experiences in an attempt to approximate their construction of the phenomenon. This is best achieved through a process of inductive analyses of qualitative data where the main purpose is to allow research findings to emerge from the frequent, dominant or significant themes inherent in raw data, without the restraints imposed by a more structured theoretical framework.

This study focuses on assessing the feelings and experience of student teachers on microteaching in a Numeracy Education and Learning Support course at the University of Namibia.

2.1 The participants

Students who participated in this study were student teachers enrolled for the DJPE program at University of Namibia, Southern Campus and they were all in their third year which is a final year of a diploma program and were registered for the Numeracy Education and Learning Support course, of which microteaching was a part of this course. 91 students out of 153 students in a Numeracy Education and Learning Support class participated in this study out of their free will.

2.2 Data collection methods and procedures

In microteaching, normally student teachers are taken through a six steps’ cycle, namely: planning, teaching, feedback, re-planning, re-teaching and re-feedback [2, 12, 1]. However, in this study, students were only taken through the first three steps of the microteaching cycle because the big number of 153 students in a class was too many for the lecturer to repeat the cycle and time was very limited to repeat the steps. Moreover, the students and lecturer were agreed not to repeat the cycle from the onset due to the former stated factors. First, every student teacher was given a basic competency from Grade 0-3 mathematics syllabi and with the mentorship of the lecturer; each student developed a full lesson plan according to a given basic competency. Student teachers presented their lessons individually before their classmates and lecturer. The lecturer used a teaching presentation rubric to award marks for the presentations and write comments. The duration of each lesson presentation was 5-10 minutes and the lecturer would ask the student to end their presentation once he observed that the student has made a transition from lesson introduction phase into lesson presentation phase of
Thereafter, instant oral feedback was invited from the classmates to give constructive criticism on the just presented lesson. Finally, the lecturer shared with the class his views on the lesson presented for the students to know their areas of strengths and in future, work on the weak points. After the microteaching cycle of three steps, students were asked to write personal reflections of their experience of microteaching presentation using a questionnaire of four open-ended questions. Concurrently, students were thoroughly informed that their responses would be examined and used for this research. 91 students have given written consents and out of their free-will, completed the questionnaire. Most noticeably, students were asked to be open and personalize their reflections and this was capitalized by asking students not to write names on the questionnaires even when they felt their responses were very positive.

2.3 Data analysis

The analysis of data was analyzed using content analysis. In this study, content analysis refers to analysis of qualitative responses to open-ended questions on a questionnaire of four questions [6]. Content analysis is an inductive and iterative process of looking at raw data from different angles with a view to identifying keys in the text that will help to understand and interpret data and for identifying similarities and differences in text to corroborate or disconfirm theory [6]. Unit of analysis in this study was written responses of the feelings of student teachers based on their experience of microteaching in a Numeracy Education and Learning Support course. The research findings emerged from the frequent and significant themes inherent in raw data.

3. Results and Discussions

This section presents the findings of the study on the experience from students’ reflections of microteaching for Numeracy Education and Learning Support at Southern Campus of University of Namibia. The findings took us to four themes: student satisfaction with microteaching presentation scores, positive and negative factors influencing student scores, microteaching as a learning experience for teaching practice and salient issues to be born in mind by lecturers during microteaching presentations and assessment at the University level. The results are presented as follows:

3.1 Students’ satisfaction with microteaching scores

Students were asked to state whether they were satisfied with their microteaching presentation scores. Participants used the following responses to show or indicate their satisfaction with the scores: ‘yes’, ‘no’, yes indeed’, ‘satisfied’, “very much satisfied’, ‘not satisfied’. The findings reveal that majority of the students 63 (69%) indicated that they were satisfied with their scores in microteaching presentation by using the ‘yes’ expression in the questionnaire with 38 (31%) indicated that they were not happy with their scores. The 69% includes those who used ‘yes indeed’, ‘satisfied’, ‘very much satisfied’ expressions, while the 31% included those who used ‘no’, ‘not satisfied’ expressions.
The findings show that, overall students were satisfied with their scores since they know what they did and how they presented their lessons. Although there are few students who indicated that they were not satisfied as what they scored was less than their anticipated marks, the results are consistent with Ajileye [7] who indicated that students may accept positive criticism and may not accept negative criticism such as good marks and low marks respectively.

3.2 Positive and negative factors influencing students’ scores in microteaching

In this section, students were asked to state things they did or did not do that contributed to their scores during microteaching presentations in not more than 5 statements. Students’ responses were categorized in the following themes:

3.2.1 Positive Factors that led to satisfactory scores

3.2.1.1 Variety of and colorful teaching aids

Majority (69%) of the students satisfied with their mark indicated that they have used a variety of and colorful teaching aids to attract and arouse learners’ attention and interest. “My teaching aids were appropriate, and age appropriate” narrating one student. “I used good and colorful class cards as my teaching aid” stating another student teacher. These findings support Ajileye [7] and Göçer [1] that microteaching help student teachers to design effective teaching aids.

3.2.1.2 Lesson objectives

Most of the students (65%) revealed that they clearly stated their lesson objectives at the beginning of the lesson and they assume that it contributed positively to their scores. “I clearly stated the lesson objectives right at the beginning of the lesson” says one student. This finding supports Ajileye [7] and Göçer [1] that microteaching
help student teachers to learn stating of lesson objectives in order to generate interest and focus among the learners for the lesson.

3.2.1.3 Professional appearance and conduct

The findings revealed that 80% of the students participated in this study were of the opinions that dressing professionally contributed to their satisfactory scores by their lecturer as narrated by this student, “I was dressed properly”. I conducted myself in a professional manner” says another student. The findings support Ralph [4] and Sa’ad, Sabo, Abdullahi [11] who claims microteaching help to broaden teaching techniques and boost confidence of student teachers and dressing appropriately is one of the ways most student teachers used to boast their confidence during lesson presentation as well as to influence the mark allocation by their lecturer.

3.2.1.4 “Juicy and mouthwatering” lesson introduction

Majority of the students (70%) indicated that they have used juicy and very interesting introductions. These students indicated that they started their lessons with poems, songs, rhymes and animated icons to generate interests among their learners. Based on the findings these were attributed to positive scores for some students. According to the findings these led to the learners to listen attentively and the lecturer awarding them with high marks. “I stated my lesson focus on time and introduced my lesson well with an interesting poem” says one student. The finding support Sa’ad, Sabo, Abdullahi [11] that microteaching help student teachers to learn effective teaching techniques such as using “juicy and mouthwatering” lesson introduction.

3.2.1.5 Well-prepared and focused lessons

Majority of those who were happy with their scores indicated that since they were well prepared and focused during their lesson presentation, it contributed positively to their scores. One of the students narrated that, “I was prepared and knew well what I was teaching”. This finding support Göçer [1] and Sravani [12] that microteaching help student teachers to recognize the importance of preparing well in advance before the lesson and stay focused during their presentations to for them to teach effectively. This finding also support Ajileye [7] who claims that microteaching is an indispensible approach in producing competent and effective student teachers in delivering their lessons.

3.2.2 Negative factors that led to less/dissatisfactory scores

The results also show that there were students that were not entirely satisfied with their scores and as results they indicated that the following factors or circumstances contributed to the dissatisfactory scores of their microteaching presentation marks:

3.2.2.1 Not following lesson objectives, poor preparation and lack of the subject content

The study findings reveal that most of the students (67%) who were not satisfied with their scores did not prepare well for their lessons with some indicating that they were out of topic. It also came out clearly that some
students lacked subject contents and hence they are attributing their low scores to that. “I did not prepare well, I was out of topic-hence I did not understand my topic at all” revealing one student. The results support Ajileye [7] who claims that microteaching enables student teachers to get instant feedback from their supervisors and to learn from making mistakes.

3.2.2.2 Lecturer interruptions and “self-thoughts”

Majority of the students indicated that the Numeracy lecturer continued and persistently interrupted in their lessons by asking and suggesting what the students was supposed to do and how to do it. Like this students narrated: “you as a Numeracy Lecturer interrupt my lesson with the things you think I was supposed to do better, but I believe my things were right”.

Another student narrated that,

“I was explaining and you stopped me, which make me confused and lose focus”. “my lesson procedures and teaching aids I firstly planned was looked as unnecessary by the lecturer saying all I need to do was only talking and that’s the reason why I did not score all the marks in the lesson presentation and teaching aid used” narrating a student.

Based on this interruptions, students are claiming that they scores were negatively affected by this. This findings support Ajileye [7] who claims that student teachers sometimes do not easily accept negative comments of their presentations and this would make learning difficult as they would repeat the same mistakes or end up in misunderstanding and quarrels with supervisors.

3.2.2.3 Unfair allocation of marks and lecturer’s comments not matching scores

Majority of the students (70%) who were not satisfied with their scores blame the lecturer for one of these two reasons: a) that they had a feeling that the lecturer was unfair in allocating the marks to students and b) there was a mismatch between their marks and the comments given by the lecturer immediately after their presentation in the class. “I think sir was not fair with me, he first threw my papers around which demoralized me, I have explained and displayed concrete objects in relation to my topic but still did not give me the mark I deserve” narrating one male student. Other students felt that the lecturer did not balance his comments with the marks as he praised the students positively but the marks actual do not tally well.

“I really do not know what I did and what I did not do correctly because all the comments he gave me were all positive but the marks were too low” explaining a female student.

The excerpt above shows that student teachers sometimes may disagree with the comments and feedback from their supervisor [7].

3.2.2.4 Nervous and limited teaching time
The findings showed that most of the students (70%) who scored less suggested that they were nervous during their presentation and as a result they ended-up making mistakes or repeating some items unnecessarily. This mannerism led to students wasting their time on unnecessary things and was told to stop by the lecturer.

“I could not complete my lesson due to the fact that I was very nervous and because of that the lecturer did not give me time to explain my actual plan even though I made mistakes he cut me off which I think was not fair” said one student.

These findings contradict Ajileye [7] who claims that microteaching can affords student teachers to overcome mannerism, nervousness and other semantic barriers of good performance in front of their audience and supervisor, but support Sravani [12] that limited time of teaching affects creativity is one of the limitations of microteaching.

3.3 Microteaching as an exemplary platform and predictive future teaching practices tool

Participants were asked to explain in not more than 5 statements how microteaching presentations were a good learning experience towards their SBS and future teaching practices. The findings revealed that microteaching presentations were good learning experience towards student’ SBS their future teaching practices as it let them learning different strategies, methods, and different ways of addressing and teaching or approaching various topics in their subjects.

“I have learnt different teaching methods of different topics, new rhymes that I have heard during these presentation I will be able to use them in class during my SBS, I have learnt how to come up with simple but very interesting teaching aids” stating one male student.

“It was a good learning experience as I came to discover my weaknesses, it gave me a way to plan a quality lesson plan, it has given me light on how to teach the young ones (their interests)” revealing another student.

“It helped me to realize that teaching learners is not as easy as it seems, it motivated me to go an extra mile within the field of education, it build my confidence and helped me love kids even more, it also made me realize that teaching requires a lot of commitment, hard work and dedication” revealing one female student.

The above statements support claims by Egunjobi, Nwaboku and Salawu [3] that students learn a lot from microteaching and it is a program that prepares student teachers for teaching practice.

3.4 Salient issues to consider during microteaching

Participants at this point were asked an open ended question to suggest two things which are salient that they think the lecturer should keep up or do away with when evaluating microteaching presentations of students in future.

3.4.1 Salient issues to keep
Findings revealed that majority of the students indicated that the lecturer should keep up with his constructive criticism by emphasizing to students that the teaching aid that are not appropriate for the learners age can distract and disturb the learning process, give equal and unbiased chances to student to present and show their methods in specific topic, motivating students and correcting them where they are wrong and more importantly “he must keep up the good comments since they are good motivators” stating one student. “Keep on encouraging students to do their best regardless of his comments and their reactions” a male student. This finding support Patel and Mohasina [8] who claims that microteaching should provide student teachers confidence, support and feedback.

3.4.2 Salient issues to do away with

The results show that majority of the students (80%) felt that the lecturer should do away with shouting to students, control his emotions, learn to keep his words, should wait for students to finish presenting before commenting, being harsh on students, work temper management, give students enough time to present their lessons, avoid interrupting students presentations. “Not shouting at students because we are not the same and a short hearted student can be touched by his demoralizing comments and shooting negatively” narrating one male student. “professionalism should be the first thing the lecturer have to take note of especially shouting at fellow adults was not good at all”, “the lecturer should not interrupt student when presenting because it confuse students and should give them enough time to present their lessons”. This finding support Sravani [12] who claims that microteaching requires well-trained educators to train student teachers so that teacher educators can avoid destructive behavior when training student teachers for teaching practice.

4. Conclusion

The study concludes that majority of the students were satisfied with their scores for microteaching presentations as to some their marks were a true reflections on the efforts and energy that they put in the preparations for the lessons. It is also concluded that students attributed positive scores in their presentations to the use of a variety and colorful teachings aids, well prepared and planned lesson objectives, professional dressing, juicy and mouthwatering lesson introduction by incorporating poems, songs and other artifacts that are relevant to the topic and professionally designed and eye-catching presentations. Consequently, some students indicated that they were not satisfied with their scores citing a number reasons and factors that likely to contribute to these unsatisfactory scores in their presentation such as; not following the stated lesson objectives, poor preparation, lecturer interruptions and self-thought infliction, unfair allocation of marks to students’ presentations, being nervous and unstable during the presentation, and a mismatch between the lecturer feedback and the actual marks allocated to a particular students.

Furthermore the study concludes that microteaching can be an exemplary platform and a predictive tool for effective and efficient teaching practices among the teaching practitioners in the country and above. This can only be achieved if the lecturers that are dealing with microteaching in the teacher education programs at the university level are serving as role models in their conducts, guide and prepare students teachers effectively, discover students weaknesses and positively assist the student to turn these weaknesses into opportunities.
The study further concludes that microteaching lecturers should keep on motivating, guiding, constructively criticizing students’ work/presentation, suggest relevant teaching methods/styles to the students. It also came out clearly that Microteaching lecturers should control their emotions especially when they are dealing with students’ during this time by not shouting and screaming at students that are not following the instructions or goes beyond the allocated time or cut their presentations but wait until they are done and advise them that next time they should improve and plan accordingly.

5. Recommendations

The study suggest that lecturers need to be role models, give positive comments, guide and direct students during microteaching to inspire them to like the profession. Additionally, also recommended that student teachers should always be fully prepared for their lessons and have lesson plans with stated and unambiguously stated objectives so that they can cover what they planned to teach in that lesson. The study further suggests that the teacher education faculty should ensure that it recruit lecturers with extensive teaching experience to lecture microteaching at relevant levels.

One of the limitations of this research study was that the study only focused on experiences of education diploma students at one campus of University of Namibia; therefore we suggest that another study should be carried out at all five education campuses of University of Namibia involving both education diploma and degree students’ experiences on microteaching. The proposed study would help lecturers to learn from each other’s best practices when conducting microteaching for Numeracy Education and Learning Support. The other limitation is that, this study used only a questionnaire and therefore, we suggest that another research be carried out using a questionnaire as well as a semi-structured interview method to enable triangulation of findings and to gain in-depth understanding of students’ experiences on microteaching.

References


