

Microteaching Process and its Impact on Teacher Training Programs in the University of Bamenda

Chongwain Lilly Oyoma Jehovah (PhD)

Faculty of Education University of Bamenda

Email: chongwainlilly@gmail.com

Abstract

Purpose: This study investigated the impact of the microteaching process on student teachers in teacher training programs.

Methodology: This study was guided by the effect of reinforcement, explanation and questioning skill of microteaching on student teachers' teaching performance during their teaching practice. The study employed a quantitative research approach which made use of a cross-sectional survey design. The purposive sampling technique was adopted in order to get to student teachers who have carried out the microteaching process. The 0 level 400 student teachers, who were randomly selected from the Higher Teacher Training College, Higher Technical Teacher Training College and 30 from the Faculty of Education, all in the University of Bamenda, Cameroon. A structured questionnaire was used to collect data which was analyzed using the Statistical Package for the Social Science (SPSS version 23). Statements related to the objective was cumulated to obtain a composite score for each skill.

Findings: The total score for each skill was used to compute the Pearson's correlation coefficient and the correlation was significant at the level of 0.05 both for reinforcement and questioning skill and 0.01 level for explanation skill. These skills therefore, had significant effect on the student teachers' teaching performance during their teaching practice. Thus, the findings established that there exists a significant impact of the microteaching process on student teachers.

Conclusion: This study shows that microteaching process has a significant impact on student teachers in teacher training programs. This helps in building teaching skill that will enable them to shift from the traditional ways of teaching to building critical thinking and problem solving skills in students.

Recommendation: The study recommended that educational policy makers, curriculum developers and teacher educators introduce this course to student teachers from the first year of their program.

Keywords: *Teacher training, micro-teaching, micro-teaching process, teaching skills.*

BACKGROUND OF STUDY

Microteaching is a valuable instructional tool that mediates between theory and practice (Benton-Kupper, 2001). It is a teaching experiment that promotes learning and skills acquisition in terms of duration of teaching, number of students, and subject matter (Tan, 2002). Micro teaching is a cycle (Higgins & Nicholl, 2003). Kucukahmet (2007) defines microteaching as a method that aims to instill the student teacher personality and develop their research skills. Aggrawal (2006) sees microteaching as a training programme that aims at simplifying the complexities of teaching process. Katz (2009) says that microteaching exercise can also be seen as a valuable tool that help students develop communication, critical-thinking, and problem-solving skills for effective teaching. Mahmud and Rawshon (2013) is of the view that micro-teaching as an instrument for teacher training which offers the students an opportunity to practice teaching activities under controlled situations. Microteaching is a teacher training technique that equips the learner with teaching skills (Tata, Shehu, & Aliyu, 2015). Actual teaching situation is organized for developing skills and deeper knowledge. The student for about five to twenty minutes is expected to teach in order to master a particular teaching skill. Micro-teaching is video-taped and at the end of the lesson, immediate feedback is provided in the form of a replay to enhance performance and focus on skills to be learned. A re-plan of the lesson is done while incorporating the suggestions for improvement and a re-teaching of the same lesson to a different group of students (Owuamanam, 2018). Another critique follows and the degree of improvement is determined. Microteaching involves plan, teach, observe, re-plan, re-teach, and re-observe. Thus each teacher-trainee completes a teach-re-teach cycle. Microteaching therefore may enable the student teacher to become effective in their teaching career.

Microteaching is distinct because of the opportunity which it provides to the student teacher and serves as a tool for immediate and individual diagnostic evaluation of performance by colleagues, supervisors, or lecturers. It is therefore a tool for measuring progress in specific teaching techniques hence, it can be used for both in-service and pre-service programme. Microteaching offers a lot of skills which are beneficial to the student teacher. These skills include: Set induction, closure, reinforcement, variability, questioning, explaining, classroom management, and blackboard usage. It also adds relevant improvement and quality to teacher-training procedures making teachers to embrace inspirational teaching. It has the merit of bringing theoretical discussions to trial (Ike, 2003; Williams, 2010; Saif 2011; Reddy, 2019; Osuji, 2016). The intention of any teacher training program is to develop competent and confident individuals who can use the knowledge and skills acquired to positively motivate or transform students to embrace real life learning. Microteaching is a valuable cyclical instructional tool that mediates between theory and practice (Higgins & Nicholl, 2003; Benton-Kupper, 2001). It is a training programme which simplifies the complexities of teaching by instilling confidence in the teacher candidates and developing their research skills and experience (Aggrawal, 2006; Küçükahmet, 2007).

Koch (2012) is of the view that the mediocre teacher tells, the good teacher explains, the superior teacher demonstrates, the great teacher inspires. Undiyaundeye and Inakwu (2013) are of the opinion that microteaching is one of the recent innovations in teacher education programme which aims at modifying teacher behavior according to modified objects. Training student teachers to desired expectation is very important and essential. They should be able to acquire new skills and expertise to achieve progress in a society where teaching process is dynamic and demanding. Microteaching as an efficient technique for learning effective teaching which provides student teachers with an opportunity to perk up their teaching skills

by improving the various simple tasks called teaching skills. According to Remesh (2013) and Tan (2002), microteaching aims at training inexperienced student teachers in acquiring teaching skills and improving those of experienced teachers it is a teaching experiment that is minimized and intensified in terms of duration of teaching, number of students and subject matter. Mahmud and Rawshon (2013) summarized micro-teaching as an instrument for teacher training which offers the students the opportunity to practice teaching activities under controlled conditions.

Statement of the Problem

The introduction and implementation of the Competency Based Approach curriculum (CBA) in 2016 into the secondary school system in Cameroon brought some challenges in the domain of teaching. Some practicing teachers however, might have not gone through the microteaching course during their professional training which is believed to have rewarding impact on teacher effectiveness in building students' capacity of thinking and creativity. Other teachers are not equipped with general pedagogic knowledge although have content knowledge, which focuses only on the content or subject matter to be taught. These category of teachers are completely deficient of skills acquired from microteaching process (Ball et al., 2008; Darwish & Sadeqi, 2016). This study therefore seeks to examine the impact of microteaching process on student teachers in teacher training programs of the University of Bamenda.

Objectives of the Study

The objectives of this study were to;

1. Find out the effect of reinforcement skills of microteaching on student teacher's performance during their teaching practice.
2. Find out the effect of explanation skills of microteaching on student teachers' performance during their teaching practice.
3. Find out the effect of questioning skill of microteaching on student teachers' performance during their teaching practice.

Research Hypotheses

Ha1: Reinforcement skill of microteaching has a significant effect on student teachers' performance during their teaching practice

H01: Reinforcement skill of microteaching has no significant effect on student teachers' performance during their teaching practice

Ha2: Explanation skill of microteaching has a significant effect on student teachers' performance during their teaching practice

H02: Explanation skill of microteaching has no significant effect on student teachers' performance during their teaching practice

Ha3: Questioning skill of microteaching has a significant effect on student teachers' performance during their teaching practice

H03: Questioning skill of microteaching has a significant effect on student teachers' performance during their teaching practice

LITERATURE REVIEW

Bandura Social Learning Theory (1986)

Bandura (1986) in his social learning theory as cited in Kurt (2020) is of the view that individuals learn from each other mainly through modelling, imitation and observation. Bandura like Thorndike and Skinner assumes that learning occurs through observation but learners have ability to influence their own behaviours and the environment (Denier et al. 2013; Kurt, 2020). Learning through observation is very vital in the microteaching process. Peer student teachers observe and learn the skills and attitudes of their mentor teacher and peers, thereby enhancing the development of individual teaching skill through social interaction with peers. Bandura in his observational learning model portrays a link between social learning theory and the microteaching process. Microteaching is related to the three models because there is usually an educator who mentors the student teachers. The student teachers must be in attendance and pay attention to the features of the modelled behaviour provided by the mentor in order for reproduction to take place.

Learning according to Loveless (2020) can occur without an immediate change in behaviour because learning and the demonstration of what has been learned are distinct processes. According to Bandura (2001), observational learning can occur in relation to three models; live model, verbal model and symbolic. Live model refers to the situation where someone is demonstrating the desired behaviour while there are people observing and imitating him. The verbal instruction is a process whereby an individual describes the desired behaviour in detail and instructs the participant in how to engage in the behaviour. In the symbolic, modelling occurs by the means of the media such as radio, audiotape and printed texts. The modelling process involves several steps which include attention, retention, reproduction and motivation.

Attention: In every learning situation, attention is necessary as it determines the quality of learning that occurs. Attention is crucial, having, a certain influence on others such they imitate it (McLeod, 2007). During the microteaching process, student teachers observe their peers and in doing so, they pay attention to the modelled behaviour. Many conditions can affect observer's attention; for instance, if a peer student teacher is sleepy, ill or distracted, he or she will be less likely to learn the modelled behaviour and imitate it later.

Retention: It is essential that behaviour's memory is established, to be later performed by the observer (McLeod, 2011). The second requirement for observational learning is being able to remember the behaviour that was witnessed. If a student teacher does not remember the behaviour portrayed by a peer, there is less than probable chance that they will imitate it.

Reproduction: This requisite of behaviour is primarily concerned with the physical and mental ability of the student teacher to copy the behaviour they observe. After observing the expert teacher demonstrating or a peer student teacher teaching, individual student teachers try to do the same. Even if the individual wishes to reproduce all the behaviours observed, he/she cannot (McLeod, 2011).

Motivation: Motivation is provided by the mentor teacher as its essential to student teachers. If a student teacher does not have reasons for imitating a behaviour, then no amount of attention, retention or reproductions will overcome the lack of motivation. The punishment and rewards which are linked to a given behaviour are usually put into consideration by the observer. Some researchers are of the view that motivation energizes and directs behaviour towards achievement (Robbins et al., 2004; Hattie, 2009; Plante et al., 2013).

Behaviorism Theory Skinner (1953) (Source; Molly Zhou & David Brown, 2017)

Behaviorism is primarily concerned with observable and measurable aspects of human behavior. In defining behavior, behaviorist learning theories emphasize changes in behavior that result from stimulus-response associations made by the learner. Behavior is directed by stimuli. An individual selects one response instead of another because of prior conditioning and psychological drives existing at the moment of the action (Parkay & Hass, 2000).

Skinner's theory of operant conditioning is the underpinning theory. According to Saxena and Khajanchee (2012), microteaching is based on Skinner's theory of operant condition. The Skinner's theory stresses on reinforcement of target behaviors. Edward Thorndike's law of practice is also of great importance to this study. The law states that responses that produces a satisfying effect in a particular situation become more likely to occur again in that situation and responses that produces a discomforting effect become less likely to occur again in that situation (Gray, 2011). Thorndike however modified the law when he discovered that practice without feedback does not necessarily lead to increased performance. It is in keeping with this that the knowledge of immediate feedback dimension of microteaching is one of the pillars of microteaching as an innovative teacher training programme. In this study, the feedback of student teachers' behavior during microteaching exercise as in other cases is provided by the Supervisors, and peers to reinforce and enhance the development of the teaching skills

Skinner in his model was based on the premise that satisfying responses are conditioned, while unsatisfying ones are not. Operant conditioning is the rewarding of part of a desired behavior or a random act that approaches it. During the transfer phase of microteaching where the teacher trainee is given the opportunity to put into practice skills acquired during the acquisition phase, the expert teacher in observing the teacher trainee, reinforces positive behaviors portrayed by the teacher trainee and at the same time suppressing negative behaviors. By so doing peer teacher trainees observe and make adjustments to shape their own behaviors with the learned behavior. This idea linearizes with what Skinner remarked that "the things we call pleasant have an energizing or strengthening effect on our behavior". Therefore, the teacher trainee in the next attempt will make adjustment with the behavior initially employed to get the best experience. Skinner believed the habits that each of us develops result from our unique operant learning experiences (Shaffer, 2000).

Behaviorism theory by Skinner is of the view that reinforcement is rewarding to learners who observe and imitate behavior. This behaviour may have been identified and recommended by a supervisor or other student teachers as they teach. Social learning theory by Bandura supports learning through observation, imitation and modeling which is a procedure adopted during the microteaching cycle. It fosters social learning as student teachers learn variety of skills from their peers through observation.

RESEARCH METHODOLOGY

A cross-sectional survey design was adopted for the study. The population of this study was The University of Bamenda, Cameroon, which has about 17,250 students, distributed in six schools and six faculties; Faculty of Arts, Faculty of Education, Faculty of Science, Faculty of Economics and Management Science, Faculty of Law and Political Science, Faculty Health Science, College of Technology Higher Teacher Training College, Higher Technical Teacher Training College, Higher Institute of Commerce and Management, Higher Institute of Transport and Logistics, and National Higher Polytechnic Institute.

The target population involved all the 5361 students who registered in the teacher training schools of the University of Bamenda: Higher Teacher Training College, Higher Technical Teacher Training College and Faculty of Education. The accessible population consisted of all the level 400 students who registered in the above teacher training schools for the 2021/2022 academic year in the University of Bamenda. Using the Krejcie and Morgan table, a sample size of 120 student teachers was drawn from the three teacher training colleges. A structured four point Likert scale questionnaire was the instrument used for data collection. Both descriptive and inferential statistics were used for data analysis. The statistical software used for the analysis was the Statistical Package for the Social Sciences (SPSS version 23). Reinforcement skill of microteaching and its effect on student teachers' teaching performance

FINDINGS

Reinforcement Skill of Microteaching

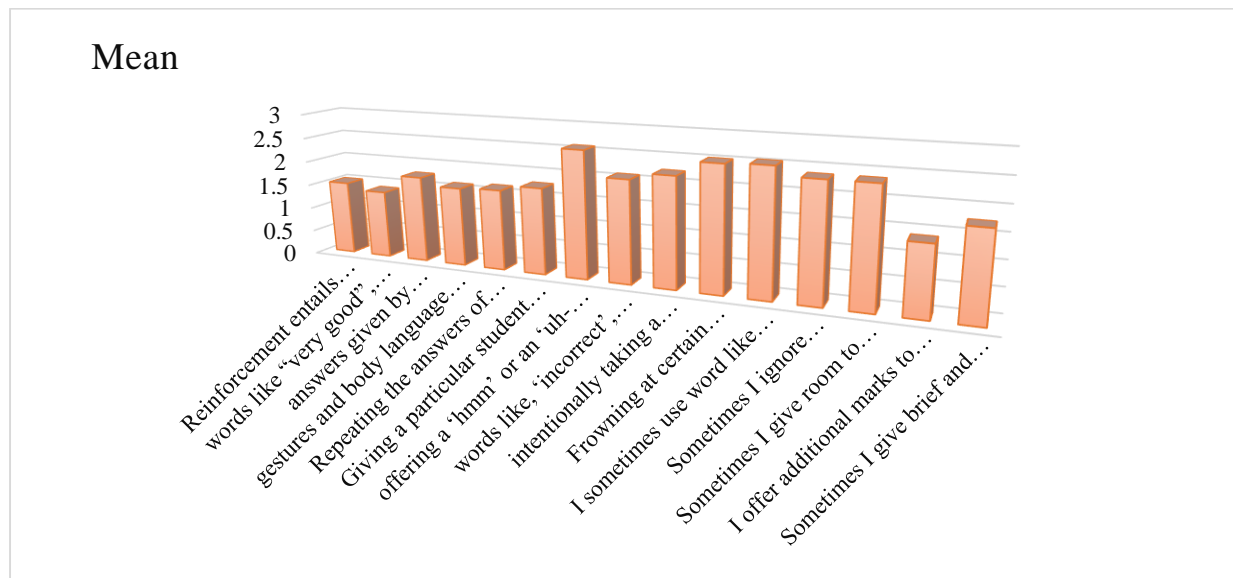


Figure 1: Statistics on reinforcement skill of microteaching

Source: Field survey, (2022)

Questioning skill of microteaching and its effect student teachers' teaching performance.

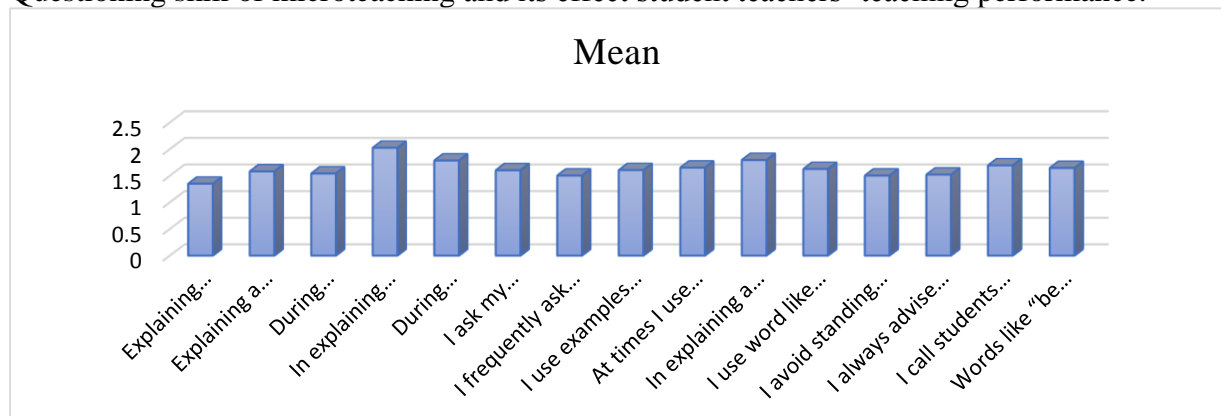


Figure 2: Statistics on questioning skill of microteaching

Source: Field survey (2022)

Explanation skill of microteaching and its effect student teachers' teaching performance

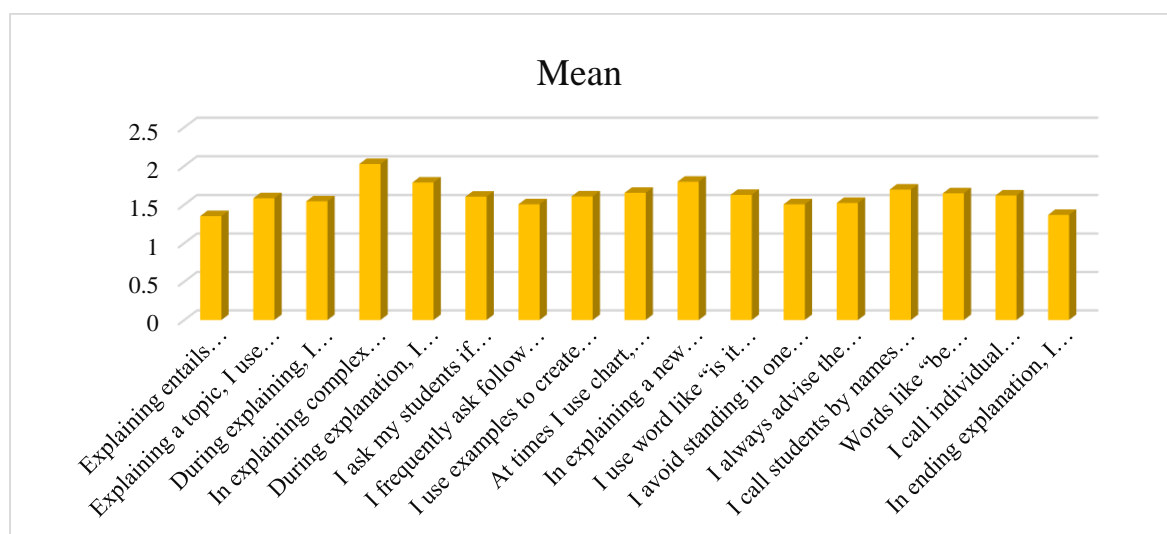


Figure 3: Statistics on explanation skills of microteaching

Source: Field survey (2022)

Correlation Analysis

Reinforcement skills of microteaching on student teacher's performance during their teaching practice

The respondents' rating in the statements related to reinforcement skills were cumulated to obtain a composite score for reinforcement skills and its influence on student teachers' performance during teaching practice. The total scores were then used to compute the Pearson's correlation coefficient to establish whether there was relationship between reinforcement skill and student teachers' performance during their teaching practice. The finding of the correlation analysis are as shown in table 1.

Table 1: Reinforcement skills of microteaching and student teacher's performance

		Reinforcement skills	Performance of student teacher
Reinforcement skills	Pearson Correlation	1	0.200
	Sig. (2-tailed)		0.037

*. Correlation is significant at the 0.05 level (2-tailed)

From the correlation analysis, it was established that there was a fairly strong positive relationship between reinforcement skills and the performance of student teachers ($r=0.200$). The correlation was significant at the level of 0.05. Although the relationship was fairly strong, the positive nature of the relationship implies that higher levels of reinforcement skills can be associated with performance of student teachers during teaching practice. Based on the findings, the study concluded that there was a significant relationship between reinforcement skills and student teachers' teaching performance.

Effects of explanation skills of microteaching on student teachers' performance during their teaching practice

The respondents' rating in the statements related to explanation was cumulated to obtain a composite score for explanations and its influence on the performance of student teachers. The total scores were then used to compute the Pearson's correlation coefficient to establish whether there was relationship between explanation and student teachers' performance during teaching practice. The finding of the correlation analysis were as depicted in table 2.

Table 2: Explanation skills of microteaching and student teachers' performance during their teaching practice

		Explanation skills	Performance of student teachers
Explanation skills	Pearson Correlation	1	0.381**
	Sig. (2-tailed)		0.000

***.* Correlation is significant at the 0.01 level (2-tailed).

From the correlation analysis shown in the table above, it was established that there was a fairly strong positive relationship between explanation skills and performance of student teachers ($r=0.381$). The correlation was significant at the level of 0.05. Although the correlation was fairly strong, the positive nature of the relationship implies that higher levels of explanation skills can be associated with performance of student teachers. Based on the findings, the study therefore concluded that there was a significant relationship between explanation skills and the teaching performance of student teachers.

Effects of questioning skill of microteaching on student teachers' performance during their teaching practice

The respondents' rating in the statements related to questioning skills was cumulated to obtain a composite score for questioning skills and its influence on the performance of student teachers. The total scores were then used to compute the Pearson's correlation coefficient to establish whether there was relationship between questioning skills and student teachers' performance during teaching practice. The findings of the correlation analysis are depicted in table 3.

Table 3: Questioning skill of microteaching and student teachers' performance during their teaching practice

		Performance of student teachers	Questioning skills
Performance of student teachers	Pearson Correlation	1	0.188*
	Sig. (2-tailed)		0.049

**.* Correlation is significant at the 0.05 level (2-tailed).

From the correlation analysis, it was established that there was a fairly strong positive relationship between performance of student teachers and questioning skills ($r=0.188$). The correlation was significant at the level of 0.05. Although the correlation was fairly strong, the positive nature of the relationship implies that higher levels of questioning skills can be associated with performance of student teachers'. Based on the findings, the study concluded

that there was significant relationship between the skill of questioning and the teaching performance of student teachers.

Regression Analysis

The regression analysis was sought to find out the strength of the relationships between the dependent and independent variables.

Table 4: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.110 ^a	.012	-.008	.57785

Source: Field Survey (2022)

Research Question: What is the impact of microteaching process on student teachers in teacher training programs in the University of Bamenda. Results revealed the regression coefficient (R) 0.110^a, and which is 1.2% (0.012x100)

Table 5: ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	0.404	2	0.202	0.605	0.548 ^b
Residual	33.057	99	0.334		
Total	33.461	101			

Source: Field Survey, (2022)

The results in the table above shows $F(1,80) = 0.605$, $P > 0.55$ simply because if the p-value is more than the alpha .05 which it is in this case then we conclude that the model is not significant.

Testing of Hypothesis

To test the hypothesis, the researcher used the chi-square (X^2) method.

Table 6: Reinforcement skill of microteaching has a significant effect on student teachers' performance during their teaching practice

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	11.822 ^a	6	0.066
Likelihood Ratio	11.926	6	0.064
Linear-by-Linear Association	0.385	1	0.535
Number of valid cases	110		

a. 8 cells (66.7%) have expected count less than 5. The minimum expected count is .05.

The value of the test statistics is 11.822. The footnote for this statistics do not pertain to the expected cell count assumption that is; expected cell counts are less than 5, so this assumption implies the null hypothesis was rejected implying the hypothesis 1 (H_{a1}) was accepted.

Table 7: Explanation skill of microteaching has a significant effect on student teachers' performance during their teaching practice

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	68.724 ^a	9	.000
Likelihood Ratio	25.744	9	.002
Linear-by-Linear Association	16.516	1	.000

Number of valid cases 115

a. 12 cells (75.0%) have expected count less than 5. The minimum expected count is 0.14.

The value of the test statistics is 68.724. The footnote for this statistics do not pertain to the expected cell count assumption that is; expected cell counts for 12 cells are less than 5, so this assumption implies the null hypothesis was rejected implying the hypothesis 2 (Ha₂) was accepted.

Table 8: Questioning skill of microteaching has a significant effect on student teachers' performance during their teaching practice?

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	30.091 ^a	9	.000
Likelihood Ratio	15.710	9	.073
Linear-by-Linear Association	6.828	1	.009

Number of valid cases 109

a. 12 cells (75.0%) have expected count less than 5. The minimum expected count is .03.

The value of the test statistics is 30.091 The footnote for this statistics do not pertain to the expected cell count assumption that is expected cell counts for 12 cells are less than 5, so this assumption implies the null hypothesis was rejected implying the hypothesis 3 (Ha₃) was accepted. From the above results of the various specific hypothesis being tested and their corresponding null hypothesis being rejected, it can therefore be concluded that Microteaching process has a significant impact on student teachers in teacher training programs.

SUMMARY OF FINDINGS

This study aimed at investigating the impact of the microteaching process on student teachers in teacher training programs. The total scores each of the skills were then used to compute the Pearson's correlation coefficient and the correlation was significant at the level of 0.05 both for reinforcement and questioning skill and 0.01 level for explaining skill, hence showing that these skills have significant relationship with student teacher's teaching performance.

DISCUSSION OF FINDINGS

The discussion of findings is based on the research questions guiding this study. What effect does explanation skills of microteaching have on student teachers' performance during their teaching practice? And the third research questions was, what effects does questioning skills of microteaching have on student teachers' performance during their teaching practice?

What is the effect of reinforcement skills of microteaching on student teacher's performance during their teaching practice? Based on the Pearson correlational analysis between reinforcement skill and students' teachers' performance it was seen that the correlation was significant at 0.05, depicting a strong and fairly positive relationship between reinforcement skill and students' teacher' performance. Although the relationship was fairly strong, the positive nature of the relationship implies that higher levels of reinforcement skills can be associated with the performance of student teachers during teaching practice. This was visible as participants indicated that microteaching help them to utilize both verbal and nonverbal actions (all sort of body language) for enhancing teaching in the classroom.

This finding was further confirmed by the test conducted on the first null hypothesis which postulates that "there is no significant impact of reinforcement skill of microteaching on student teacher's performance during their teaching practice." The chi-square method of analysis, where the researcher decides to reject any of the formulated hypotheses was used and the observed frequencies were being compared in each response category to the frequencies expected if the null hypothesis was true. These expected frequencies are determined by allocating the sample to the response categories according to the distribution specified in H_0 . The value of the test statistics for reinforcement was 11.822. The footnote for this statistics did not pertain to the expected cell count assumption. that is; expected cell counts for 8 cells (66.7%) was less than 5, implying that the null hypothesis was rejected and the alternative hypothesis 1 (H_{a1}) was accepted which affirms that there is a significant impact of reinforcement skill of microteaching on student teachers' performance during their teaching practice. This finding is in line with the study, carried by Esta and Priyatno (2020).

Second research question; What effect does explanation skill of microteaching have on student teachers' performance during their teaching practice? From the Pearson correlational analysis done between explanation skill and students' teachers' performance, it was seen that the correlation was significant at 0.01, showing a strong and fairly positive relationship between explanation skill and students' teacher' performance. The positive nature of the relationship implies that higher levels of explanation can be associated with the performance of student teachers during teaching practice. This was seen as participants indicated that explanation skill helps them to break down complex concepts into short and clear sentences while sequentially presenting them, avoiding ambiguity of words, pausing at interval for students to internalize what they have heard, regulating their voices to the hearing of every student, cautioning students to be attentive, avoiding standing on one position during explanation and ending explanations with a run-down summary of the entire concept. These actions undertaken by student teachers in classroom shows therefore that they obtained the skill of explanation from the microteaching process.

The chi-square method of analysis, where the researcher decides to reject any of the formulated hypotheses was still used and the observed frequencies were being compared in each response category to the frequencies expected if the null hypothesis was true. These expected frequencies are determined by allocating the sample to the response categories according to the distribution specified in H_0 . The value of the test statistics was 68.724. The expected cell counts for 12 cells (75.0%) was less than 5, so this assumption indicated that the null hypothesis was rejected, implying the alternative hypothesis (H_{a2}) was accepted, which affirms that there is a significant impact of explanation skill of microteaching on student teachers' performance during their teaching practice.

Third research question; What is the effect of questioning skills of microteaching on student teachers' performance during teaching practice? Analyzing the responses, with respect to rate

of agreements that were recorded, and noting the Pearson correlational analysis done between questioning skill and students' teachers' performance, it was seen that the correlation was significant at 0.05. Based upon this correlation analysis, it was established that there was a fairly strong positive relationship between performance of student teachers and questioning skills. Although the relationship was fairly strong, the positive nature of the relationship implies that higher levels of questioning can be associated with the performance of student teachers during teaching practice. This was seen as participants indicated that questioning skill helps them to be able to use a wide variety of questions, ranging from open ended to close ended, the art of introducing lessons through questioning, ability to give hints and clues or leading questions in class, ability to redirect questions to individual students, the ability to demonstrate questions to student using object or real things, the ability to cause peer/peer interactions in classroom by asking individual students to reflect on the response of others, and lastly the ability to give timely feedback on unanswered questions. These verities of actions undertaken by student teachers in classroom shows therefore that they obtained the skill of explanation from the microteaching process.

This finding was further confirmed by the third null hypothesis which postulates that "there is no significant impact of questioning skill of microteaching on student teachers' performance during their teaching practice." The chi-square method of analysis was still adopted, because it gives room for the researcher to reject any of the formulated hypotheses where by the observed frequencies are being compared in each response category to the frequencies expected if the null hypothesis is true. These expected frequencies were determined by allocating the sample to the response categories according to the distribution specified in H_0 . The value of the test statistics was 30.091. The footnote for this statistics did not pertain to the expected cell count assumption. Expected cell counts for 12 cells (75.0%) were less than 5, so the assumption indicated that the null hypothesis was rejected, hence accepting the third alternative hypothesis (H_{a3}), which affirms that there is a significant impact of questioning skill of microteaching on student teachers' performance during their teaching practice. This study generally goes in line to the study conducted on the effects of a microteaching course on student teacher's teaching practice.

CONCLUSION

The objective of this study was to find out the impact of microteaching process on student teachers in the University of Bamenda teacher training programs. Three specific objectives; the effect of reinforcement skill, explaining skill and questioning skills of microteaching on student teachers' teaching performance during teaching practice guided the study. The descriptive analysis illustrated in the frequency distribution tables of the data analysis, figures 1,2, and 3 shows that reinforcement, explaining and questioning skill of microteaching have significant impact on students' teachers' teaching performance during their teaching practice. Microteaching process has a significant impact on student teachers in teacher training programs, helps in building and instilling in them teaching skill that will enable them to shift from the traditional ways of teaching and focus on teaching that helps to build the 21st century skill, critical thinking and problem solving skills in our students, thereby overcoming the challenges faced in the implementation of the competency based approach of teaching in our Cameroon secondary and primary schools for a sustainable development

REFERENCES

- Aggarawal, J. C. (2006). Principles, Methods and Techniques of Teaching. Second Revised Edition. New Delhi: VIKAS Publishing House PVT Ltd.

- Aggarwal, J.C. (2008). *Essentials of Educational Technology*: Noida, New Delhi; Ulkas Publishing House Pvt Ltd
- Ball, D. L., & Forzani, F. M. (2009). The work of teaching and the challenge for teacher education. *Journal of Teacher Education*, 60, 497-511.
<http://dx.doi.org/10.1177/0022487109348479>
- Ball, D. L., Thames, M. H., & Phelps, G. (2008). Content knowledge for teaching: what makes it special. *Journal of Teacher Education*, 59, 389-407
- Bandura, A. (1986). *Social foundation of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A. (2001). Social Cognitive Theory: An Agentic perspective; *Annual Review of Psychology* 52 1-26
- Benton-Kupper, J. (2001). The microteaching experience: Student perspectives. *Education*, 121(4), 830-835
- Brendan J & Caroline S. (2000), *Microteaching and Teacher Education: A Critical Reappraisal*. *Irish Journal of Education*, 1972, vi, 2, pp 73-93
- Darwish S, A. & Sadeqi A. (2016). Microteaching Impact on student teacher's performance: A case study from Kuwait. *Journal of Education and Training Studies*. Vol. 4. No. 8 ISSN 2324-805X E-ISSN 2324-8068. Redfame Publishing. Doi: 10.11114/jets.v4i8.1677
- Hattie, J.A.C et al. (2009). The power of feedback. *Review of Educational Research*, 77(1), 81-112)
- Higgins, A et al (2003). The experience of Lecturers and students in the use of microteaching as a teaching strategy. *National Library of Medicine*
- Johnson. A. P. (2015). *An overview of Learning, Educating and Teaching*. Educational Psychology: Theories of Learning and Human Development. National science press
- Johnson. A. P. (2017). *Educational Psychology: Theories of Learning and Human Development*. National science press
- Kadir, B. (2014), Effect of micro teaching technique on teacher candidates' beliefs regarding mathematics teaching: retrieved from the link-
<https://www.ajol.info/index.php/afrev/article/view/157148/146759>
- Koch, M. et al (2012). *Personalized Online Education-A Crowding Challenge: Human Computation*
- Koross, R. (2016). Microteaching an efficient technique for learning effective teaching skills: Pre-service teachers' perspective. *International journal of education & multidisciplinary studies*. 04(02), 2455–2526, 289-299.
<http://dx.doi.org/10.21013/irajems.v4.n2.p7>
- Kukucahmet, L. (2007). Evaluation of the undergraduate programs of teacher education introduced in 2006-2007 educational year. *Journal of Turkish Educational Sciences*, 5(2), 203-219
- Kumar, S. (2010). Get Complete Information on Microteaching;
www.publishyourarticles.net/knowledge

- Kurt S. (2020). A review of Banduras social learning theory
- Loveless, B. (2020). Bandura social learning theory in education. <http://educationconer.com>
Retrieved on 12/11/2022
- Mahmud, I. & Rawshon, S. (2013). Microteaching to Improve Teaching Method: An Analysis on Students' Perspectives. Retrieved on 4th January, 2022 from <http://www.iosrjournals.org/iosr-jrme/papers/Vol-1%20Issue-4/J0146976.pdf?id=1689>
- McLeod, S.A. (2007). Skinner - Operant Conditioning-Simply Psychology: Retrieved from <http://www.simplypsychology.org/operantconditioning.html>
- Mohd, A. (2014); Impact of Microteaching on the Use of Core Teaching Skills - An Experimental Study. The Communications.
- Osuji et al (2018), Introduction to Microteaching: Microteaching Manual EDU216, Retrieved 07/09/2022
- Otsupius, I.A. (2014). Microteaching: A technique for effective teaching. African Research Review. 8 6(4), 183-197
- Owuamanam, C. N. (2018). Micro-teaching: A Basic Technique for Teacher Education Programme International Journal of Humanities, Social Sciences & Work Place Ergonomics in Africa. ISSN: 2384-6161, Volume 11, Issues 4&5, pages 49 – 56
- Plante Isabelle et al. (2013). The multifaceted role of interest in motivation and engagement: The Science of Interest, Spring international publishing AG 2017
- Reddy R. K. (2019). Teaching how to teach: Microteaching, (a way to build up teaching skills): Journal of Gandaki Medical College-Nepal 12(1):5-71
- Remesh, A. (2013). Micro-teaching, an efficient technique for learning effective teaching. Journal of Research in Medical Sciences, 18(2), 158-163. Retrieved MAY 2022 from <https://www.erc.ie/documents/vol06chp6.pdf>
- Robbins, S.B. et al. (2004). Do psychosocial and study skill factors predict college outcome? A meta-analysis: Psychological Bulletin, 130(2), 261-288
- Saif O. (2011). Departmental meeting exercise and its utility in personal teaching skills development of training teachers. Int. jclin. biomed.res.2017:3(4): 18-21
- Singh, S. (2011). Teaching Competency through Microteaching Approach [indianfusion.aglasem.com/% 3 FP% 3DI3323](http://indianfusion.aglasem.com/%3FP%3DI3323)
- Singh, S. (2014). Effective teaching competency with micro teaching. International Journal of Education and Science Research. 1(6), 2348-6457, 24-32.
- Stasia, B. (2013). Microteaching students' perception on the use of reinforcement skill in microteaching class. Yogyakarta: Sanata Dharma University
- Tambo, L. I. (2012). Principles and Methods of Teaching: Application in Cameroon Schools, Limbe: Anucam Publishers.
- Tan, et al (2002). Instructional Planning and Evaluation. Ankara: Ani publishing

- Tata U. S., Shehu S., & Aliyu D. A. (2015). The Impact of Micro-Teaching on the Teaching Practice Performance of Undergraduate Agricultural Education Students in College of Education, Azare. Journal of Education and Practice www.iiste.org ISSN 2222-1735 (Paper) ISSN 2222-288X (Online) Vol.6, No.26, 2015 109
- Teg, F. (2007). Microteaching Technique; voices.yahoo.com/micro-teaching-technique
- Umar S. et al. (2015). The impacts of microteaching on the Teaching practice of undergraduate agricultural education students in the college of Education, Azare: Journal of Education and Practice, vol. 6, No 26, 2015
- Undiyaundeye, F. & Inakwu, A. A. (2013). Microteaching Experiences in Pre-Service Education Programme. Retrieved on-15-02--2022.
<http://www.infonomicsociety.org/IJTIE/Micro%20Teaching%20Experiences%20in%20a%20Pe%20Service%20Early%20Childhood%20Education%20Programme.pdf>
- Williams, P. (2010). Effective management of video tape instructional materials in the teaching and learning in secondary schools. J. Sc. Technol. Res. 7(8):34-42
- Yiliz, A et al (2002). A comparison for mathematics learning approach of Gifted and non-gifted mathematical students: Turkish Journal of Computer and Mathematics Education
- Zhou, M., & Brown, D. (Eds.). (2017). Educational learning theories. : 2nd Edition" Education Open Textbooks. 1 Retrieved from. <https://oer.galileo.usg.edu/education-textbooks/1>