

Student Teacher Perception of Microteaching in Developing Skills for Teaching: A Case of Selected Groups of Third Year Students: School of Education, Moi University, Eldoret, Kenya

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Abstract: The main purpose of this study was to explore student teacher perception of microteaching in developing teaching skills among third year Bachelor of Education students at the university level. At this level all students are expected to attend a microteaching course where they are trained on requisite teaching skills. In preparation for this student teachers attend common lectures on teaching skills followed by a practical sessions where each and every individual must participate under the guidance of a supervisor. The objectives of the study to determine the components of preliminary preparations student teachers were exposed to before micro-teaching, to determine student teacher perception on preliminary preparation and use of selected skills, to explore how student teachers utilized selected skills before and during micro teaching and to determine the impact of microteaching on student teachers performance on preparation and utilization on selected skill. The participants comprised of (320) three hundred and twenty participants from four groups selected to represent the undergraduate students from Moi University, School of Education. The study was an action research a case type of research and it adopted a mixed method approach where qualitative and quantitative techniques were used to collect the data. Instruments used to collect data included questionnaire, interview and content analysis. The results showed that a number of student teachers did not attend common lectures although it was a requirement. On the development and use of selected graphics a number of them either prepared and used or not used. Most of them believed micro teaching method gave a chance to evaluate their strong and weak aspects in teaching, they achieved various skills although they were candid on the challenges they faced and finally reported that if each one of them were addressed with the help of the supervisor and peers this would go a long way to improve in micro teaching.

Key words: Micro teaching, student teachers, preliminary preparation, teaching skills, impact

I. INTRODUCTION

Today the developed countries give great support to education because the future and the contributions of all sectors depends on education. The products of successful education cycle gives persons the power and voice as experts in various fields. However, the process of preparation on an individual depends on the availability of resources which are both human and non-human factors as well as other factors

have had effects the end product. The quality of the end product highly depends on among other factors is the teacher who forms plays a key role in an individual education process. The most important role of the teacher is to among other include to provide requisite knowledge and skills that shape the students terminal behaviour, provide room to development of positive attitude towards self and society at large. Besides this, they discipline, judge or through counselling hold confidential reports and guide inappropriate character, offer mentorship among other. All this requires teachers to believe in themselves, adhere to the general objectives and principles of the education process and have tolerance in order to develop individual entrepreneurship skill and creativeness. This makes the issue of raising quality teachers demanding, multi-dimensional and universal.

Therefore, process of producing quality teachers rests in the preparation process which universally providing and enabling environment where students are able to link theory into practice. This practice is commonly referred to as microteaching.

The term micro“ in micro teaching means small but its application in class room teaching is large” according to Allen & Ryan (1969) micro-teaching is an encounter which provides a setting for instruction in which complexities of a normal classroom is scaled down; student teacher is provided feedback after the encounter on their performance in an effort to improve one’s practice. Other scholars identify microteaching as a valuable and effective method in teacher professional development linking theory and practice (Benton-Kupper, 2001)

Microteaching was first used in the school of medicine at Stanford University, USA in 1961 by Dwight W. Allen and his co-workers to promote the quality of students (Cruickshanks & Metcalf 1993) but since then it has been applied in teacher training colleges in training students teachers in the School of Education (He &Yan 2011).

Microteaching is an organized practice teaching aimed at giving instructions, confidence, support and feedback to student teachers while allowing them try out among peers a

short segment of how they will do with the students in a normal classroom (Harvard University, 2006). It was carried out between 5 and 10 minutes and the number of students not more than 20 (Kulatic, 1994) and it involves teaching one skill at a time and the content of teaching reduced to a concept rather than a topic (Ike, 2017). The purpose of this being to equip student teachers with skills and competencies needed to perform as effective teachers in the profession (Mayhew, 1982)

Microteaching enables student teachers transfer the knowledge and skills they have acquired in the course of their studies into action as they try to bridge the gap between theory and practice (Gürses, Bayrak, Yalçın, Açıkıldız & Doğar, 2005). Microteaching not only offers a helpful setting for an inexperienced teacher to acquire new skills on preliminary preparation, planning and implementation of new teaching strategies but is also equally helpful to more experienced teachers to refine the skills in an effort aimed at achieving excellence in teacher education (Ike, 2017).

Rationale

The rationale behind this research rests in the premise that micro-teaching is not only a constructive teacher training technique but a versatile research tool which simplifies the logistics of investigating training in certain teaching skills and learning variables. The backdrop of this rests on the fact that the work of teaching involves physical and psychological preparation for session, developing personal competence, relational sensitivity, communication skills, rigor and imagination that is fundamental for effective practice.

It is because of this that research was necessary to determine the status of teacher preparation at the university level. The research was conducted among Bachelor of Education students in their third year who have undertaken theory in this field and expected to undertake a preparatory course in preparation for teaching practice. The researcher considers this as an important course if only effective teaching is to be attained by all student teacher. Lewis (2007) recognizes tasks and activities which have the highest leverage for new teachers which requires them to take responsibility as they are being trained. The question that is bedrock of this being; what preparatory sessions have been planned for the students in order to effectively and successfully conduct microteaching? Do students attend all the sessions prepared for them and what is the level of their involvement? Though numerous research have been undertaken on microteaching, little may be known about student's perception on preliminary preparations and individual actual involvement on selected skills. For this reasons the author felt the need to determine student teachers perception as it eventually affect quality of teaching.

Purpose of study

To determine student teachers' perception of microteaching in developing skills for quality teaching

Objectives

1. To determine the components of preliminary preparations student teachers were exposed to before microteaching
2. To determine student teacher perception on preliminary preparation and use of selected skills
3. To explore how student teachers utilized selected skills before and during micro teaching
4. To determine the impact of microteaching on student teachers performance on preparation and utilization on selected skill

II. METHODOLOGY

The study embraced pragmatic approach where a mixed method approaches (quantitative and qualitative approaches) was adopted. The research was action research based of a case type which was used to detect the existing situation (Ekiz 2003) and aimed at developing an understanding of an actual situation followed by evaluation and arrival of actual experiences which informed the need to adopt responsive strategies.

A pre-application was conducted and expert opinions were sought and taken into consideration for reliability and validity of instruments.

Participants

The target population was third year student's 2018 cohort from the School of Education, Moi University. The sample size was three hundred and twenty student teachers who were eligible and fulfilled the requirements as a third year student pursuing Bachelor of Education in all fields.

A sample of three hundred and twenty students were purposively selected. They were chosen on convenience basis and that they responded to a call of volunteers to participate in a study. Convenience sampling was used to draw a sample that was close to hand and readily available. Using this technique increases the data collection speed because the sample accessible by the researcher (Yıldırım & Şimşek, 2006). From the 320, each group had 80 student teachers, managed by one supervisor.

The instruments for collecting the data were questionnaire (open and close ended), interview (structured) and document analysis. The validity of the instruments were drawn by experts from the department of Curriculum Instruction and Educational Media. While the reliability of the instruments done by test –retest and the reliability coefficient of .89 was achieved thus considered reliable

III. PRESENTATION OF DATA, ANALYSIS, DISCUSSION AND CONCLUSION

The data gathered was subjected to scrutiny to clean out the unnecessary information followed by coding and data analysis tabulation.

Objective 1: the components in preliminary preparations which student teachers were exposed to before microteaching

The responses from student teachers were; all student teachers were expected to attend common lectures where information on the best practices for preparation and utilization of the skills were provided by experts from the department of Curriculum Instruction and Educational Media (CIEM). This was mandatory for all third year students taking Bachelor of Education in all fields of social sciences, Arts and Science groups. The common themes included preparation of professional documents, development of appropriate lettering skills; writing board use and management; identification, development, labelling and use of teaching aids which were

either 2D or 3D graphics. This were selected for the purpose of this study

The findings regarding student teacher's attendance and knowledge on components of preliminary preparation before micro teaching

On the student teachers views regarding the number of components in preliminary preparation before microteaching, from the four groups selected a number of them did not know exactly how many and mentioned from the range of five, six, ten or seven. Essentially the student teachers were expected to attend thirteen common lectures prepared and that laid the foundation for developing knowledge skills and effective practices during microteaching.

Table 1: Student response on attendance of common lectures before microteaching

	Components of sessions	Number Of Students Attended (A) Not Attended (NA) Sessions							
		GROUP 1 N		GROUP 2		GROUP 3		GROUP 4	
		A	NA	A	NA	A	NA	A	NA
1	Introduction and lettering	35	45	60	20	50	30	55	25
2	Writing board use and management	30	50	50	30	55	25	40	40
3	Graphic development and use	35	45	25	55	65	15	52	28
4	3D development and use	40	40	38	42	52	28	45	35
5	Sound recorded program development	45	35	35	45	54	26	37	43
6	Development and use of multi-media centre	60	20	42	38	67	13	32	48
7	Set induction and closure	30	50	35	45	56	24	43	37
8	Stimulus variation	55	25	36	44	60	20	45	35
9	Use of examples	45	35	24	56	70	10	50	30
10	Questioning and reinforcement	49	31	23	57	68	12	45	35
11	classroom management and small group	50	30	32	48	50	30	40	40
12	Integration of skills	52	28	32	48	69	11	52	28
13	Project writing	30	50	25	55	65	15	60	20
	Total number/% (attended/not attended)	556 (53.5)	484 (46.5)	457 (43.9)	583 (56.1)	781 (75.1)	259 (24.9)	596 (57.3)	444 (42.7)

From the data out of 320 students who participated in this study, the number of those who attended any particular lecture varied and inconsistent. Group 1: 556(53.4%) attended and not attended 484 (46.1%); Group 2: 457(43.9%) attended while 583 (56.1%) not attended; Group 3: 781 (75.1%) attended while 259 (24.9%) did not attend and Group 4: 596 (57.3%) attended while 444(42.7%) did not attend. In total 3840 sessions where attended sessions were 2390(57.5%) not attended 1770 (42.5%).

On why some student teachers attended lectures or not, of those interviewed their responses were as follows:

From group 1: Edwin said 'I did not see the need to attend lectures after-all the topics had been covered earlier'

From group 2: John said 'I valued common lectures as this was going to be my foundation for good performance in micro teaching'

From group 3: Jane said 'I was busy with other matters and felt I could ask my friend to avail the notes which I could read and be informed'

From group 4: Joseline said 'I have no reason for not attending. I just did not feel like'

The effects of student absence during preliminary lectures ultimately affects microteaching, teacher practices and the quality of teaching. On factors that influence absence from lectures, the question raised by many scholars was why students miss out on lectures? (Gump, 2006; Nicholl and

Timmins, 2005; Hughes, 2005). The findings of this studies provided some reasonable excuses related to the daily circumstances of life while some studies show that students' attendance is closely linked with good students' health (Donka Mirtcheva, 2009). However, some excuses given by students were not convincing as Joanne Cleary-Holdforth (2007) study on a phenomenon of student apathy and students' absence from classes. Students are encouraged to attend lectures for their common good so that they can perform the expected duties when provided.

The second objective: student teachers perception on preliminary preparation and utilization of selected skill.

Questions: Rate the following statements regarding the preliminary preparation before micro teaching.

Table 1: perception of student teachers on preliminary lectures before microteaching

Statement on themes presented	Very Useful	Useful	Undecided	Not Useful
Attending preliminary lectures	228(71.3%)	25(7.8%)	22(6.8%)	45 (14.1%)
Preparation of professional documents	200 (62.5%)	89 (27.8%)	10(3.1%)	21(6.6%)
Development and use of lettering skill	50(15.6%)	61(19.1%)	39(12.2%)	170 (53.1%)
Development and use of graphics	75 (23.4%)	134 (41.9%)	22 (7.1%)	89(28.6%)
Development and use of 3D	126(39.4%)	44(13.8%)	0	150(46.8%)

Findings

The findings the student teacher on the questions provided were as follows. Of the total 320 student teachers 228(71.3%) alluded that attending preliminary lectures was Very useful while 25(7.8%) said it was useful. This is because they were reminded on the essential requirements on the preparation of the schemes of work, lesson plan and lesson notes before actual instruction alongside the essential teacher skills. However, 22(6.8%) were Undecided and 45(14.1%) did not see the usefulness. They alluded that this had been covered earlier hence did not attend lectures. On preparation of professional documents, 200(62.5%) found this as very useful and 89(27.8%) Useful. However, 10(3.1%) were undecided while 21(6.6%) not Useful. The cadre of those who did not find it useful during actual preparation were found to be unable to prepare required documents well.

On development of and use of graphics, 75(23.4%) found this very useful, 134(41.6%) useful while 22(7.1%) undecided and 89 (28.6%) not useful. This kind of response clearly showed that some did not take this seriously especially those taking arts based subjects and who felt their subjects did not require preparation and use of media. On development and use of 3

Dimensional teaching aid 126(39.4%) found it useful, 44(13.8%) undecided 150 (46.8%)

The third objective: The student teacher perception on development and use of selected skills.

The selected skills used in the research were lettering, writing board use and management, selection, development and use of graphics (2D or 3 Dimensional teaching aids).

Findings

On lettering student teachers were required to print visible and sizeable letters on the newsprint and the manila paper. The following guidelines and responses were provided.

Table 2: Development and use of lettering skill

On lettering skill I was able to...	VC	C	U	FC	NC
Write appropriate size of letters on manila paper	70	85	10	35	120
Print acceptable size of letters on the writing board	50	75	5	60	130
Space letters and words consistently in a statement	100	50	2	120	48
Able to write visible letters and words on the writing board	90	120	10	60	40
writings on the board was tricky	80	95	0	120	25

The findings were; on writing appropriate size of letters; the findings on student's responses is as given on the table. However the point of emphasis in this research as pertains student's inability to use this tool is as shown highlighted on the table. The larger number of students showed concern for the supervisors to step up training and student teachers practice on writing board use. The importance of the board cannot be underscored as it is a mirror through which the teacher can see his/her presentation and for the students the benefits are even more. It serves as a map of conversation, record of important points and a blueprint for future class sessions (Davies, 2009). It gives room to the students to create a concept map visually representing the connection on the content (Novak, 2008)

Research suggest that students learn better by having information presented by having multiple modalities especially through visual means with the board being the simplest yet widely used. Even though other visual aids are used students, are more active and ask a number of questions from what they see (Meo, 2013) and when appropriately utilized it encourages active learning in the classroom.

The findings on preparation of the writing board management and use a number of student teachers as highlighted below showed their inability to appropriately use the writing board

Table 3. Writing board use and management

Statement on writing board use	SA	A	U	D	SD
Able to subdivide the writing board at the beginning of the lesson appropriately	100	80	0	100	40
Unable to write contents on the divided board along a straight line	150	70	0	80	20
Able to systematically utilize the board as the lesson developed	110	55	5	50	100
I had much lesson notes/figures to write on one section of the board	80	100	0	60	80
I did not know at what point in clear the contents already on the board	110	66	4	40	100
Written words were invisible from the audience position	170	30	10	50	60
Unable to master the required posture while using the board	180	50	10	40	40
Unable to use place the teaching aid where it is expected to be	130	70	0	50	70

On the first row, 180 students were not able to subdivide write headings such as date, class and subject at the centre of the board and the topic of the day while 140 did not agree because they were able to write all the required headings before the lesson commenced. For example, the headings on the first column which have been bolded

Form/class: 1Blue	Subject: History and Government	Date: 2019/10/01
Section 1 Definition of terms citizenship Registration dual	Section 2 Topic: citizenship Definition Conditions of an individual to be a citizen of a nation i) Birth ii) Registration iii) Dual	Section 3 Teaching aid The student should mount on the board and use it when required

The inability of student teachers to use and manage the writing board appropriately has attracted numerous research whose findings provide a clear guidelines on this. Among other includes (Davies, 2009; Novak, 2008, Mayer, 2003) who presents clear principles on chalkboard use such as preparing and selecting key point, organize content visually, practice writing for maximum efficacy, always write, pause, step aside as you give students time to copy digest and formulate questions, avoid facing the board, maintain eye contact, write key phrases and terms on one side of the board no cram writing into the margin and avoid hasty drawing and be of good size, visible, written in a good height so that each student could see without straining, not stand between the board and the students but be in a parallel horizontal position to avoid obstruction. Student teachers urged to use variety of colour for contrast and use firm glare on board line

The findings on identification of topics and appropriate graphics for use, its development and utilization showed that the student teachers used the knowledge they had acquired to select a sub topic from their area of specialization. Further the research sought to find out student teachers feeling on identification of a topic and the appropriate graphics that will

support their explanation for better understanding. Mixed reactions were noted from the student teachers and from it a sample was selected as provided below.

Group 1: Davis said *‘I think that is helpful especially where there were varieties of methods and resources to select from.*

Group 2: Susan said *‘it is not easy to link up and use all the skills in a lesson is very confusing more guidance and practice is required’*

Group 3: *‘The thought of linking a selected subtopic to selecting appropriate resource seemed impossible’* Jane said

Group 4: Tobias said *‘ I was able to prepare well and have a feeling I did well’*

What was exhibited showed mixed reactions as it was a daunting task for some beginners.

On development and use of graphics the student teachers were asked from their selected topics, they develop a teaching aid for use during microteaching. The following questions on a scale and responses provided

Table 4: Development and use of graphics

On the development of graphics...	SA	A	U	D	SD
Able to draw clearly annotated and visible charts	60	40	20	120	80
The chart drawn was not in harmony with the content of the lesson	20	80	0	120	100
Chart was clear precise contained all the components required (frame, key, title etc.)	150	50	0	70	50
The choice of colour used made the chart dull and unattractive	160	40	10	100	10
I asked my friend to draw for me as I felt I lacked the skill to draw	100	70	0	50	100
My audience were able to read the chart well	151	59	0	60	50
Unable to use the teaching aid at the expected time during the lesson	180	50	0	60	30

From the highlighted findings provided showed student teachers inability to work on task provided. It is important to note graphics or learning materials of any kind summarize significant information through a combination of drawings, words, symbols and pictures. Their value lies in the capacity for it to convey certain type of information in a condensed form. For this reason a developing a good graphics ought to adhere to the following; be clear, precise, accurate, simple, bold, readable, interesting and well annotated. To determine an in depth explanation on development and use of graphics four student teachers were randomly selected. The findings showed varied responses from student teachers where some were able to use the graphics at an appropriate time or when expected while others forgot to use altogether. To determine the reason for this the researcher selected four students randomly selected to give their response as below;

Group 1: Duncan said ‘during my first presentation I was nervous and hence taught very fast forgetting to use the teaching aid I had prepared’

Group 2: Mary said I was carried away during teaching and forgot absolutely to use the graphics’

Group 3: Joe said ‘I was able to develop a good teaching aid and used it effectively during the lesson’

Group 4: Gladys said ‘by nature am very shy and this distracted my thoughts and was unable to connect what I had planned’

On identification and development the 3- dimensional teaching aids, the student teachers were required to select content of their choice and use locally available materials to construct a 3D teaching aid in a group of ten members. The selected questions were provided and their responses were as shown below.

Table 5: Development of 3D teaching aids

On development of the 3 Dimensional teaching aid	SA	A	U	D	SD
We were able to develop the 3D as per our selected sub topic	100	80	0	70	70
Selecting and agreeing on the common topic was difficult and time wasting	150	120	0	50	50
Calling the group members to develop the group work was daunting task	140	90	0	10	80
Lacked creativity in developing the 3D hence used graphic developed by other members	180	50	10	30	50
We lacked adequate materials	220	30	0	20	50

The student teachers responses as highlighted showed difficulties faced first on selecting and agreeing on common topic and calling on group members to develop group work. Some even felt unable to develop good graphics hence used graphics made by other groups while a number complained for lack of adequate materials. To determine the students view on this an interview was conducted from four students randomly selected from each of the groups. The following responses were provided

Group 1: Edwin reported ‘am very poor in drawing so I asked my friend to help me’

Group 2: Sally said ‘I did not see the need to prepare one especially in my subject area; History’

Group 3: Duncan said ‘I developed very good drawing because I love drawing and on drawing I related it with what I was going to teach’

Group 4: David said ‘it is boring and not interesting I even not have drawing skills for me it is time wasting’

Majority of the student teachers could not make an attempt to develop the 3D materials, and were not innovative and creative enough when developing the graphics. Most of them complained of provided with inadequate materials (one or two)

which were not provided in good time also they were to practice the skill within the shortest time provided.

For each of the microteaching sessions each student teacher was required to prepare a sample of professional documents which they were to use for the mini lessons. The task provided was; *In your subject area select any topic and from it prepare a two weeks schemes of work and make one lesson plan for the mini lesson*

The supervisor was tasked to mark the sample schemes and lesson plan. In Kenyan History and Government syllabus for example in form one a student teacher selected the topic; the origin, migration and settlement for the Kenyan communities.

Marking guide for the above question: The map to be well-drawn and labelled using varied colours to show key issues in question, have a title, have a compass point, and a key. Creativity to be an added advantage

The role of the supervisor was to; i) check and mark the schemes of work and the lesson plan to see whether all columns were clearly and appropriately filled. Findings on this showed that though student teachers were able to prepare the schemes of work and lesson plan but certain critical areas needed urgent guidance. For example columns on the teacher activity and student activities, teaching and learning resources and assessment were not aligned to the topic under discussion. Worth noting is microteaching offers new and different opportunities on planning, and implementation of various teaching strategies.

The fourth objective: student teachers’ perception on the impact of micro teaching on their performance on the selected skills

The findings

- i) On individual performance; the student teachers believed that micro teaching played a crucial role in shaping their future career. They felt preparation for instruction, process of identification, development and utilization of appropriate instructional media gave them a chance to transfer knowledge gained in theory into practice. The interview conducted revealed that micro teaching practices had positive effects in terms of professional preparation, adaptation and peer interaction. This is in agreement with Sadker and Cooper (1972) who aver that microteaching had positive impact as it enabled student teachers know their behaviour from peer feedback,
- ii) Majority of them agreed that micro teaching helped them develop autonomy because they had to select topics and sub topics on their own. Selection boosted their thinking ability especially when designing the lesson. This was in agreement with Benton-Kupper (2001) who alluded that prospective teachers viewed MT as a tool that assists them recognize and discover

thinking skills. Through selection of topics they were able to transform difficult topics into learnable units

- iii) On group tasks the student teachers responses were varied. Others said by working together in respective groups they were able to interact cooperate worked on similar tasks or that which was assigned to them and in turn able to value critical aspects like problem solving, critical thinking skills (Popovich & Kalz, 2009) tolerance, patience discussion among other. While other reported frustrations from those who were unwilling to work on the tasks. However, the student teachers complained of lack of enough time that 10-12mins lesson was too short. Kulack (1994) noted that micro teaching lesson ideally was meant to cover between 5-20 minutes with few numbers of students (not more than twenty). However, the participants in this had three hundred and twenty students where each group had eighty students as a set making quality of micro teaching questionable. Owing to this there is need for supervisors to develop innovative and coping strategies which are responsive to the changing needs of the society. Suggestion on the time frame is that microteaching presentation to be staggered at least twice in a semester for improvement and mastery of skills.
- iv) On evaluation majority of them agreed they were in touch with the content prior to presentation in the classroom and even consulted their peers hence adopting good practices. Comments from the peers and supervisors were positively accepted. Dwelkat (2010) found that participants had an opportunity to reflect their and other student teachers' performance used it to gain understanding of others practice under the guidance of the supervisor. Constructive feedback, improved self-confidence (Sen, 2010). Similar studies by Gorgen (2003) on pre service teachers' views on microteaching showed that microteaching was useful as one gains from the peers which help improve future practice.
- v) When asked what they could do better if given another chance the majority responded, psychological preparation for tasks, early planning, identification of appropriate teaching resources, adherence to teaching expectations, management and use of the writing board and time effectively and developing self-confidence and personal grooming would boost ones self-esteem.

IV. RECOMMENDATIONS

1. Microteaching be accorded the seriousness it deserves especially from the part of the student teachers who choose to attend or not attend lectures
2. Active student teacher involvement be encouraged as well as cooperative learning practices
3. The research recommends more practice and more time set aside in developing writing skills and usage of chalkboard appropriately because among other in all subjects its benefits cannot be underscored.
4. Simulated instructional practices be provided by the supervisors before microteaching by use of innovative modes
5. Adopting strategies that help mitigate challenges faced in the contemporary times as regards microteaching practices
6. A similar study be conducted from a wider student teachers body and in other universities

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