
EXPLORING STUDENT TEACHERS' QUESTIONING TECHNIQUES AND LEARNERS' PARTICIPATION IN SECONDARY SCHOOLS IN BOMET COUNTY, KENYA.

¹Gladys W. Kinyua ²Ruth Mugo Kahiga.

¹⁻²University of Nairobi

¹gladys.wanjiru@uonbi.ac.ke; ²ruth.wangui@uonbi.ac.ke

ABSTRACT

Questioning technique is an important activity in every teaching and learning situation. It is indeed one of the most important means of communication carried out by teachers in the teaching learning process. The aim of this study is to examine the effect of questioning techniques used by student teachers in the classroom during teaching practice. Questioning stimulates thinking, making it easier for teachers to receive feedback from the learners. This assists the teacher to identify the learner who has understood the taught concepts from the one who missed out important details. The research paper explored the student teachers' responses to learner's answers through praise, acceptance, remediation and criticism when teaching various subjects. Reinforcement theory of motivation formed the framework for this study. A descriptive survey research design was adopted with a population of 25 student teachers and 1500 secondary school learners. Data was collected through an observation schedule used by the researcher and document analysis of questions in lesson plan and lesson notes. For data analysis the

study utilized descriptive and inferential statistics, where frequencies, graphs and percentages were used to compare categories. Findings revealed that student teacher's positive comments to learners' answers increased learner's participation in classroom activities. On the other hand negative comments were found to discourage a few learners from participating actively. This study recommends positive comments by student teachers to sustain learner participation and motivation during the teaching learning process.

Keywords: Questioning technique, Student teachers, feedback, praise, remediation, acceptance.

INTRODUCTION

Classroom teacher- learner interaction could be one of the most important factors in classroom communication. Effectiveness of teaching and learning may be determined by the questioning technique and quality of classroom interaction between the student teacher and the learners.

The mode and quality of classroom verbal interaction between the student teacher and learners determine the effectiveness, attitude and interest of the learners. Cheruiyot D.K. (2015), points out that the atmosphere in a classroom, is of extreme importance in shaping the character of the learner and determining the efficiency with which learning takes place. It is the student teacher's responsibility to make the classroom environment conducive for effective teaching and learning.

INTERACTION IN THE CLASSROOM

Teachers make countless real-time decisions and facilitate dozens of interactions between learners and themselves through questioning. Nasibi, M. W. (2003) emphasized the interaction between the teacher and the learner as an essential part of the teaching and learning process. Mwaka, M., Nabwire, V. K., and Musamas, J. (2014) contend that classroom interaction stimulates learner involvement in the classroom, resulting in increased participation in learning activities. Interaction in the classroom fuels learner motivation and helps the learner to see the relevance of the content, increasing participation as all learners are involved. Teacher-learner interaction is very important in the teaching and learning process because learners benefit from this interaction at both the social and academic level (Beyazkurk and Kesner, (2005). Such interaction is

referred to as "classroom interaction" and is defined as the process of face-to-face interaction (Robinson, (1994). Moguel (2004), observes that teachers often encourage learners to participate effectively in classroom discussions and answering questions but unfortunately these efforts may fail (Moguel, (2004)). According to Beyazkurk and Kesner (2005), learners benefit from encouraging relationships and positive interaction with their teachers. The student teacher on teaching practice should take advantage of this situation so as to reap maximum gains.

INTERACTION AND QUESTIONING

Recent researches in the field of classroom interaction have been concerned with investigating verbal questioning behavior and the techniques used in classrooms as they tend to serve different purposes, including simply checking for understanding, looking for unknown answers (Long & Sato, 1983). Classroom interaction involves a significant number of teacher questions directed to learners (Brown, 2006). Richards (2003) opined that the act of verbal questioning and answering that occurs between teacher and learner is more frequent than any other event in classrooms. According to Dalton-Puffer (2007), instructions that include posing verbal questions during lessons are more effective

in producing achievement gains than instructions carried out without questioning. Questions also engage learners to widen their way of thinking, leading them to explore the topic or concept on a deeper level and help learners to open a dialogue to engage others (Ganesan 2020).

Teachers focus primarily on facilitating learners to gain from the teaching offered by the teacher. However, this process requires classroom interaction and students' real involvement in order to be successfully achieved (Gillies, 2004). Kumpulainen and Wray (2002) asserted that in many contemporary classrooms social interaction is seen as a valuable tool for learning. Creating classroom interaction requires the effective use of a variety of techniques and effective implementation of pedagogical intentions in order to develop teachers' understanding of the classroom interaction (Seedhouse, 1997). This can be achieved by understanding the types of features and events that occur in classroom settings that serve to facilitate the creation of classroom interaction.

One of the techniques teachers usually employ to promote and create classroom interaction is questioning (Lynch, 1991). The importance of questions is emphasized by Ganesan, Khairi, Manimaran, Zulkufli & (Malar 2020) state that Teachers frequently

and extensively use verbal questioning in classes as a means of involving students in classroom discussions and as a means of creating interaction. They go on to state that the role of questions is to test the learner's past knowledge, to stimulate learner's thinking, to check the learner's understanding or misunderstanding of taught concepts and expose the loopholes therein. However, some of these verbal questions fail to elicit the desired interaction while others succeed in doing so. Jiang Y. (2020) emphasizes that the manner the student teacher handles learner responses is an important aspect of classroom interaction and begins with the questions posed by the student teacher to learners as they can encourage or discourage participation of learners in the classroom. Teachers therefore need to frequently adjust their questioning techniques in order to achieve the desired goals. (Hussain, 2003). The fact that questions should always be considered during the planning stage so that they are inbuilt and implemented appropriately during the lesson is of paramount importance. There ought to be questions for introduction, development and conclusion stages of every lesson.

STATEMENT OF THE PROBLEM

The preparation of student teachers is quite a challenge in their journey to becoming professional teachers. In support of this Odundo, Ganira and Kinyua (2018) affirm that teachers with inadequate preparation are unresponsive to learner motivation. Student teachers should be aware that teaching is not just about applying the theories they have learnt but also requires practical problem solving abilities that lead to effective teaching. There is need for the student teacher to create a classroom environment that encourages interaction among learners through choosing a variety of instructional methods that help to deliver content effectively. There is need also to be aware of the elements of interaction that can prevent positive classroom interaction. Such elements can discourage a learner through criticism of his/her answers and cause inactivity in the classroom.

However, Mahulo (2012), and Nasimiyu (2017), found out that student teachers were not accorded adequate preparation in education courses before the teaching practice engagement. This implies that the techniques the student teachers used in teaching and learning needed to be investigated. The study therefore identified the questioning technique as one that needed to be investigated as it is an avoidable in classroom teacher learner interaction. This

study seeks to explore verbal questioning and thus identify the features that lead to improve student teacher and learner classroom interaction.

PURPOSE AND OBJECTIVES

The purpose of the study was to investigate the student teacher's use of questioning technique and the effect of student teacher's responses to learner's answers during teaching practice.

THEORETICAL FRAMEWORK

The basis of this study is formed by Reinforcement Theory of Motivation which was proposed by B. F. Skinner in the year 1957. Reinforcement theory of motivation posits that behavior is the function of its consequences. This means that an individual develops a behavior after performing certain actions. Thus the theory focuses on what happens when an individual takes some action. It is observed that individuals tend to repeat activities which give them pleasure and avoid those activities which result in negative consequences or unpleasant outcomes. This theory is referred to as the "Law of Effect." Through the reinforcement theory of motivation light is shed on what may happen to a learner who gets verbal or nonverbal responses which may illicit positive or negative comments from the student teacher.

CONCEPTUAL FRAMEWORK

Classroom climate can affect learners’ interactive behavior in the classroom either negatively or positively. If the student teacher does not prepare questions well in advance before the lesson begins this may affect the answering of the questions by the learners due to misunderstanding of the questions. The answers by the learners may be responded to by the student teacher in form of praise, acceptance, remediation or criticism. These four factors can affect the classroom climate.

They consisted of 18 student teachers from the University of Nairobi, who did teaching practice in the year 2022 in Bomet County, Kenya. The learner population studied was 1500. Instruments used to collect data on student teacher’s responses to learner’s answers were observation checklists and documentary analysis from lesson notes and lesson plans. Ethical considerations regarding informed consent were upheld throughout the study. Data was presented in graphs, frequencies and percentages.

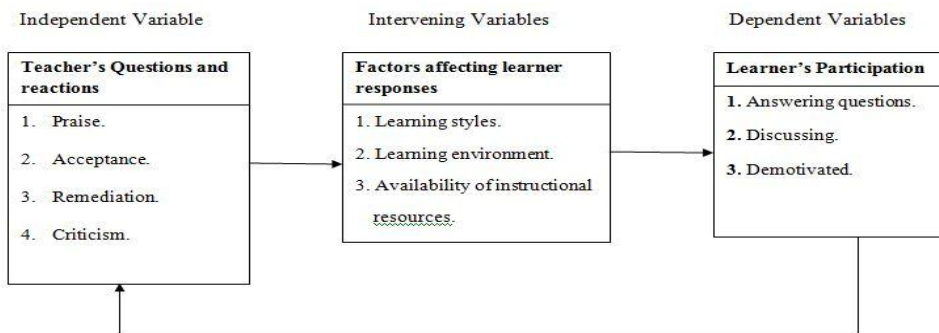


Figure 1.5 Conceptual framework of the study

Figure 1.5 Conceptual framework of the study

METHODOLOGY

The study adopted a descriptive survey research design. According to Kombo & Tromp (2009), descriptive design is used to help explain the position of affairs as it exists and thus improve the situation. The schools used in the study were purposefully selected as they had offered the student teachers the opportunity to practice teaching.

FINDINGS

The study employed observation checklists for data collection from student teacher’s lesson plans and lesson notes.

Table 7.1 Planned questions in lesson plans.

Response	Frequency	Percentage	Response	Frequency	Percentage
Available	1200	80%	Unclear	500	33%
Lacking	300	20%	Clear	1000	67%
Total	1500	100		1500	100

Table 7.1. shows that 1200, (80%) student teachers had planned questions in their lesson plans. This means that only 300, which is 20% of the student teachers who did not have questions in their lesson plans. Questions with unclear language were written by 500 student teachers which is 33% of the total number of the student teachers. They were advised to rephrase such questions to help the learner to understand. The rest 1000 student teachers which 67%, however had clear questions in their lesson plans.

Table 7.2 Planned questions in lesson notes.

Response	Frequency	Percentage	Response	Frequency	Percentage
Available	1400	93%	Unclear	310	21%
Lacking	100	7%	Clear	1190	79%
Total	1500	100		1500	100

Student teachers had written questions in their lesson notes as part of planning to teach. Lesson notes are important as they are used to record and expand explanations in the lesson plan and text books. They are also used to write questions and possible answers as they flow in the sequence of lesson development. If they are used along with lesson plan, the student teacher may not forget to ask questions in the order they are supposed to flow.

Table 7.2 shows that 1400 (93%) student teachers take lesson notes as a vital document and therefore have recorded the questions they asked during lesson presentations to avoid to forget asking them to the learners. Again from

the table, only 100 (7%) student teachers who are seen to ignore to put down the questions in their lesson notes. The student teachers seem to concur with Genasan *et al.* agree that questions are useful as they help to check learner’s progress in class. After learners answer questions, the teacher is also helped to assess whether the teaching methods are effective and if they need changing. Unclear questions were found from 310 (21%) of the student teachers’ population. They agreed to correct them to avoid misleading the learners. Most student teachers, that is 1190 (79%) had clear and adequate question which were answered by the learners without struggle.

The student teachers responded to the learners answers in four different ways. Praising was used on 50% of the learners as 30% of learners answers were accepted as correct by the student teacher. Those questions found incorrectly answered by the learner were probed as the student teacher guided the learner towards the correct answer. Such questions were experienced by 15% of the learners while only 5% of the learners received criticism from the student teachers. The 3 three learners who had those negative responses looked disinterested, demotivated and withdrawn. Student teachers who responded this way were advised to cultivate better and positive interaction with the learners.

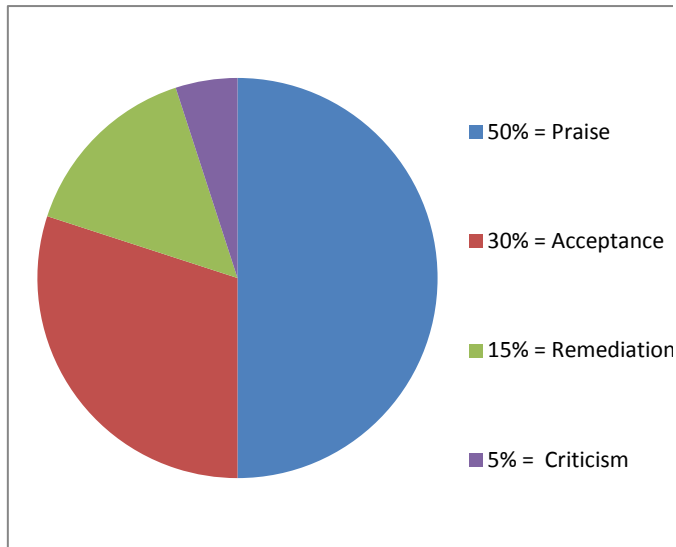


Figure 7.2 Nature of student teacher responses to learner's answers.

CONCLUSION

The current study investigated the types of student teacher reactions to learner answers and their influence on classroom interaction in 18 public secondary schools in Bomet County, Kenya. It was revealed that the student teacher's frequency response by praising learners for correct answers was 50%. Acceptance of learner's answers was done through recognizing the fact that the learner has answered correctly. Acceptance was at 30%. The typical acceptance responses were greeted with words like "yes", "correct", "right", "okay", "uh-huh", "excellent" which were short, not specific and imprecise. Remediation was used at 15% which was to a lesser extent than praise which was the most frequent response and acceptance which was the next frequently used. Since remediation are constructive

comments by the student teacher providing cues for further learner elaboration resulting in improving learners answers, it should be more frequent along acceptance and praise. Criticism of learner's answers was at 5% and only found in three investigated classes. The findings of this study suggest a need to take a careful emphasis on improving student teachers' questioning technique before they go out on teaching practice. This is because the three learners who were criticized were seen to have withdrawn and made no more effort to raise their hands. Every criticism should be polite and constructively done to explain to the learner how to improve the answers to teacher's questions.

RECOMMENDATIONS

To foster classroom interaction and enhance learning, student teachers in secondary schools should do the following:

- Increase their knowledge on different types of questions and their roles in classroom communication.
- Design and balance questions according to learner's levels, lesson objectives and teaching strategies.
- Use more follow up questions and clues to guide particularly slow learners to correct answers.
- Resort to yes/no questions when students have difficulties in answering questions.
- Carry out further qualitative and quantitative studies about the strategies used by teachers

when asking questions such as repetitions, probing, wait time/ pause.

- Further investigation is needed to examine the correlation between teacher's responses to learner's answers and their effects on learner participation in the classroom.

REFERENCES

1. Beyazkurk, D. and Kesner, J. E. (2005), Teacher-Child Relationships in Turkish and United States Schools. *International Education Journal*, 6, (547-554)
2. Cheruiyot, D. K. (2015). Classroom Verbal Interaction Patterns in Relation to Student Performance in Physics in Baringo Central Sub-County, Kenya. Kenyatta University Unpublished MED. Thesis.
3. Farrant , J. S (2009). Principles and Practice of education. Twenty-third impression. Pearson Education Limited, Edinburgh Gate, Harlow, Essex CM20 2JE, England and associated companies. Longman Group UK Limited.
4. Ganesan, S. Khairi, A. Manimaran, V. Zulkufli, M. &Malar A.R.K.S. (2020) Useful Classroom Questioning Techniques for Teachers
blog.teachmint.com/classroom-questioning-techniques-for-teachers
5. Hussain, A. (2016). Urban Poverty in China: Measurement, Patterns and Policies, International Labour Office, Geneva. *Open Journal of Social Sciences*, Vol.4 No. 7, July 2016.
6. Jiang, Y. (2014). Exploring teacher questioning as a formative

- assessment strategy. REICJ. 45,287-.doi:10.117710033688214546962.
7. Jiang, Y. (2020). Teacher Classroom Questioning Practice and Assessment Literacy: Case Studies of Four English Language Teachers in Chinese Universities.
 8. Long, M.H. & Sato, C. (1983), Classroom Foreigner Talk Discourse: Forms and Functions of Teacher's Questions. Roley, Mass; Newbury House.
 9. Mahulo, P. (2012). Influence of Teacher Training on the Performance of the Students in Mixed Secondary Schools in Gem District, Kenya (Unpublished thesis in Business Administration). University of Nairobi.
 10. Moguel, D. (2004). What it Means to Participate in Class, Integrity and Inconsistency in Classroom Interaction. *Journal of Classroom Interaction*.
 11. Nasibi, M. W. (2003). Instructional Methods: Teaching Across the Curriculum. Nairobi: Strongwall Africa.
 12. Nasimiyu, G. (2017). Preparations of Teacher –Trainees in Pedagogy in Kenyan Universities. *Journal of Education and Practice*, 8(13), 28-34.
 13. Odundo, P. A. Ganira, K. L. & Kinyua, G. W. (2018). Experiential Learning, Conditional Knowledge and Professional Development at University of Nairobi, Kenya. Focusing on Preparedness for Teaching Practice. *International Journal of Education Studies; Vol.11, No. 7; pp125-135*.
 14. Odundo, P. A. Ganira, K.L. and Ngaruiya, B. (2018). Preparation and Management of Teaching Practice Process at University of Nairobi, Kenya: Appropriateness of Methods and resources. *International Journal of Learning, Teaching and Educational Research Vol. 17, No. 8, pp.107-128, August 2018.* <https://doi.org/10.26803/ijter.17.8.7>
 15. Skinner, B. F. (1950). Are theories of learning necessary? *Psychological Review*, 57(4), 193-216.
 16. Solmaz Abdoirahmi Javid, Adei Zahed-Babelan & Yusef Namvar. (2013). A study on the state of teacher-student verbal interactions during teaching process and its relationship with academic achievement of middle school students in Ardabil. *International Research Journal of Applied and Basic Sciences*, 4(7), 1909-1913.