

EDUCATION

Pre-service Teachers' Perceptions on Focus discussion Groups as a Model of Context-based learning Primary Teacher education. A case of Meru and Egoji Teachers Colleges.

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Abstract

Research and policy documents in Kenya and in many other African countries have decried low quality primary education which they attribute to low quality teacher education (Government of Kenya-GoK- (2012) , GoK (2005), the Kenya Education Sector Support Programme document of 2005-2010(2005), Feiman-Nemser (2001), United Nations Educational, Scientific and Cultural Organization-UNESCO (2005) Dembele and Miaro-II (2003) and Wanzare (2002). This inhibits the vision of provision of an all-inclusive relevant and quality education particularly in Kenya as envisioned by the Vision 2030 and the MoEST (2015) National Education Sector Plan 2013-2018. Low quality teacher education as pointed out by Dembele and Miaro-II (2003), MoEST (2003) and GoK (2012) is mainly due to the use of the traditional content-based pedagogical primary teacher education model that lacks adequate learner involvement, splits learning into separate subjects and has little connection between theory and practice. This study sought to identify the experiences and perceptions of pre-service teachers on focus discussions groups as a model of context-based learning. A quasi experimental research design in form of pre-test/post test longitudinal panel control group was used. This involved a stratified random sample of 80 first year pre-service teachers from Meru and Egoji colleges (40 for experimental and 40 for control groups). The experimental group was sub-divided into groups of ten of equal gender proportions that held discussions under the facilitation of the researcher once per week during teaching practice sessions. A focus group discussion schedule, a reflective diary and a questionnaire were used to collect data. The findings obtained revealed that the experimental group that used the focus discussion groups as a component of context-based learning model performed better than the control group. The findings also showed that pre-service teachers found focus discussion groups (Cooperative learning) useful in their professional career development though they felt the discussion groups needed more time and fewer members.

Key Words: *Context-based Learning, Focus Discussion Groups, Cooperative Learning Reflective Practice, School-based Learning, Traditional Concurrent Content-based Pedagogical Teacher Education Model.*

Introduction

Teachers are fundamental to the teaching and learning process and their training and professional development is critical to the achievement of a country's vision and aspirations. Research by various scholars such as Mourshed, Chijioke, and Barber (2010), Combourne and Kiggins (2004), Hopkins (2001) and Schreens (2000) indicate that there is a very strong relationship between classroom instruction and students' learning outcomes. However, questions have been raised on the quality of teachers in many African countries as argued by UNESCO (2005), Dembele and Miaro-II (2003), Ministry of Education Science and Technology-MoEST Report (2003) Feiman-Nemser (2001). GoK (2012) points out that teacher education in Kenya has not kept pace with developments that have occurred in most developed countries. It further notes that the model used in primary teacher education does not conform to classroom changing demands and entails what Hoban (1999) refers to as a teacher training model that splits learning into separate subjects. This model narrows the trainee's view of learning and decontextualizes the knowledge. Farrell (2002) argues that there has been little progress in developing innovative teacher education programmes in Africa. The KESSP (2005) points out that, to improve teacher education in Kenya, innovative teacher training techniques should be encouraged. A report by UNESCO (2005) supports this argument by indicating that majority of primary school teachers in developing countries lack adequate training and content knowledge due to the use of traditional concurrent content-based pedagogical model in teacher education that lacks adequate learner involvement and does not help teachers to be innovative in their teaching. In addition, it presents a fragmented view of learning that is often not context – based leading to little or no connection between theory and practice to a trainee teacher and lack of mechanisms to help teachers creatively seek solutions to teaching professional problems in their specific day-day teaching environments. This makes pre-service teachers leave college feeling inadequately prepared for classroom teaching. (GoK, (2005), KESSP, (2005), Shiundu & Mohammed, 2005; Hoban, (2005), Feiman-Nemser (2001), Carter (2000), Armour & Booth, 1999; Kiggins, 1999 and Bogonko, 1992; There is need therefore for creative and improved models that would involve learners and help them to connect theory to practice such as the context-based learning model.

Context-based learning entails a range of innovative teaching methods that situate learners learning in a realistic setting or real world context as noted by Williams (2008) and Merriam and Cafferella (1999). Schon (1983) referred to these models of learning as *procedural* forms of knowledge as opposed to *propositional* knowledge formalized in subject disciplines and taught through textbooks and training courses. He further notes that expertise is achieved through the art of reflection on personal understanding. He emphasized on the importance of *reflection-in-action* and *reflection-on-action* as fundamental in professional practice for the development of knowledge on procedures and the repertoire of practice. Reflection is important in helping teachers develop their own thinking about their own practice with a view of changing it according to

Students' needs and educational changes as argued by Galea (2012). Reflective practice especially when combined with a cooperative learning leads to what Broudy (1977) calls the concept of 'knowing *with*' which is beyond the concepts of 'knowing *how*' and 'knowing *that*'. Ibid (1977) explains that 'knowing *with*' helps in grounding knowledge in contexts that shape the learners perceptions and interpretations. Shaffer (2006: 223) builds on this by proposing the concept of *epistemic frames* which he defines as;

... the ways of knowing, of deciding what is worth knowing, and of adding to the collective body of knowledge and understanding of a community of practice.

Lave and Wenger (1991) argue that learning is a product of private cognition and social participation. This means that learning is better in the structures of community of practice through observation and participation in specific social groupings. This helps the learner to be cultured in the knowledge base of a community of practice which requires social and emotional involvement beyond intellectual involvement that is mainly emphasized in many traditional classrooms. In this study, the community of practice was in form of focus discussion groups guided through the use of the focus discussion group schedule and the reflective practice diary. Though some scholars such as Anderson, Reder and Herbert (1996) have argued that the benefits of context-based learning are exaggerated and misguided, research evidence by many others; Bell et al (2011), Choi and Johnson (2005), Tiwari, Wong and Lai (2005), Cambourne and Kiggins (2004) have shown that its effectiveness and impact is highly successful.

Bell et al (2011) argues that context-based learning situates a learner in a relevant and stimulating environment where a context rich in the learners own life and community experiences is developed. This creates a strong sense of connectedness and engagement leading to better learning. Studies done by other scholars such as Cambourne and Kiggins(2004) show that context-based learning improves students learning. These studies though useful in showing the benefits of context-based did not focus on students' experiences and perceptions of the model particularly on focus discussion groups and thus the need for this study. This study aimed at identifying the experiences and perceptions of pre – service teachers on focus discussion groups as a model of context - based learning. Positive experiences and perceptions of pre-service teachers on the focus discussion groups are fundamental for the success of the context-based learning model of primary teacher education.

Research Design and Methodology

A quasi-experimental design was used in this study. It entailed a pre—test/post-test longitudinal panel control group carried out between September 2010 and May 2012. The study involved first-year pre-service teachers from Meru and Egoji teachers colleges in Meru Central District, Eastern Province of Kenya. The two colleges were purposively sampled on the basis of being the experimentally accessible population. Colin (2002) and Borg, Gall and Gall (2003) argue that for experimental and causal comparative studies, the sample can be drawn from a much more limited accessible population in order to carry out an in-depth study and ensure proper control of variables. However, the researcher must be certain that the accessible population is closely related to the target population on a few key variables to ensure population validity. In this study, pre-service primary teachers in public primary teacher training colleges are selected from a national pool and the criteria for selection such as the minimum entry requirements are the same as noted by GoK (2005), MoEST (2003) and Kinyanjui (1997). Thus, on the basis of the two variables which are fundamental to this study, first-year pre-service teachers are closely related at the college entry point. Fraenkel and Wallen (2009) and Borg, Gall and Gall (2003) point out that it is not possible to fully control all the variables in a social studies experimental research and thus the use of a quasi-experimental design.

Experimental	R	O1	X	O3
Control	R	O2	(X)	O4

Where R = Randomization for both experimental and control groups ; X = Treatment for the experimental group; X = No treatment; O1 = Pre-test (observation) for the experimental group; O2 = Pre-test (observation) for the control group; O3 = Post-test (observation) for the experimental group and O4 = Post-test (observation) for the control group

The sample consisted of a total of eighty (80) stratified randomly sampled (based on gender) pre-service teachers from Meru and Egoji teachers colleges for the experimental group and control group respectively. Each group comprised of forty (40) members based on equal gender proportions. The two colleges are from Meru Central District, Eastern Province of Kenya. The same sampling technique was used to select 10 pre-service teachers per focus group for the experimental sample. The sample selected in relation to the total population per each TTC and the numbers of groups for each category were as shown in table 1.1.

Table. 1.1 Sampling Grid

College	Total Population	Sample	Focus Discussion Groups
Meru (Experimental)	485	40	4
Egoji (Control)	564	40	0

The researcher facilitated a total of four focus group discussions once per week for each of the four groups. The research instruments used in this study were divided into two parts; a) Data collection research instruments which comprised of a developed pre – test (pre-observation) and post – test (post-observation) in form of a classroom observation schedule on teacher actual classroom teaching and a questionnaire.; Treatment research instruments that included a focus discussion group schedule for guiding the facilitator working with the focus groups and a reflective teaching diary for pre-service teachers to record their day’s reflections on their teaching and classroom behaviour practices. Reliability and validity of the research instruments were evaluated through piloting of the instruments at Kigari primary teachers college. The Reliability (r_{tt}) of the observation schedule and the questionnaire was tested through the split – half method which yielded a reliability (r_{tt}) level of .8727 and .8230 respectively. The content validity of the classroom observation schedule, the focus discussion group schedule, the questionnaire and the reflective teaching diary were evaluated through expert evaluation and scrutiny by experienced college tutors and primary teacher education university lecturers.

Pre – tests and post – tests in form of classroom observations were done by one trained observer and the researcher. A total of two pre – test and two post-test observations for each pre-service teacher were made and the mean of the two observations for each learner constituted the pre-test and post test results respectively. The meetings of focus discussion groups (FDGs) started immediately after the pre-tests. Each meeting of the FDG was held once per week for one hour. The FDGs agenda was a balance between what is provided in the focus discussion group schedule and the issues raised by FDG members based on their reflective practice diary recordings. Pre-service teachers were required to fill in the reflective practice diaries every day after their lessons. Information obtained from the diaries was used during the focus discussion group meetings. Data obtained was analyzed by use of descriptive statistics in form of frequencies means, gain scores and standard deviations while inferential statistics used were in form of a t-test for independent means at a set significance level of ($p < .05$) through the use of the Statistical Package for Social Sciences (SPSS 11.0) Fraenkel and Wallen (2009) note that a t-test for independent means is used to compare means scores of two different or independent groups. In this study the two groups of pre-service teachers were from two Primary teacher training colleges (Meru and Egoji), in Kenya. A lavene’s test was used before the t-test to help in comparing the equality of variances between the two groups. This is useful in determining whether the obtained differences in sample variances between the two groups is as a result of random sampling and not due to the effect of the experimental treatment of the experimental group. In this study the Lavane’s test for equality of variances was not significant on all dependent variables of the study since the significance levels obtained were higher than the set significance level of ($p < .05$).

Results

Pre-Test Classroom Observation t-test Results

Pre-test data analysis was done to determine whether the experimental and control groups were initially significantly different from each other on the dependent variables under study. The results of an independent sample t-test are as recorded in Table 1.2.

Table 1.2 Pre-test Independent Sample t-test Values

Dependent Variable			Lavene's Test for Equality of Variances	t-test for Equality of Means			
			F	Sig.	t	df	Sig.(2-tailed)
Instructional System Planning.	Equal assumed	Variances	.106	.746	.060	78	.1193
Teacher-learner Interactions	Equal assumed	Variances	1.011	.318	.049	78	.1258
Learners' motivation & interest.	Equal assumed	Variances	.828	.366	-.107	78	-.2348
Use of Instructional Resources	Equal assumed	Variances	2.032	.158	1.611	78	4.8758
Classroom Management & Control.	Equal assumed	Variances	.458	.501	-.389	78	-.6793

Table 1.2 Pre-test Independent Sample t-test Values

It is clear from table 1.2 that, the two groups did not differ significantly in all the dependent variables under study namely; Instructional system planning ($t(78) = .060$, $p < .05$), teacher-learner interactions ($t(78) = .049$, $p < .05$), learners' motivation and interest ($t(78) = -.107$, $p < .05$) and classroom management ($t(78) = -.389$, $p < .05$).

Post-test Classroom Observation t-test Results

A post-test independent t-test was calculated to find out whether the experimental and control groups were significantly different on all the dependent variables at the post-test. The results are as indicated in Table 1.3

Table 1.3 Post-test Independent Sample t-test Values

Dependent Variable		Lavene's Test for Equality of Variances		t-Test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
Instructional System Planning.	Equal Variances assumed	.040	.842	5.327	78	.000
Teacher-learner Interactions	Equal Variances assumed	.705	.404	2.458	78	.016
Learners' Motivation & Interest	Equal Variances assumed	3.807	.055	2.348	78	.021
Use of Instructional Resources	Equal Variances assumed	1.102	.297	2.807	78	.006
Classroom Management and Control	Equal Variances assumed	10.927	.001	1.143	78	2.425

From the table it is clear that Instructional system planning had an independent t-test value of $t(78) = 5.327, p < .05$ while teacher-learner classroom interactions recorded an independent t-test value of $t(78) = 2.458, p < .05$ as recorded in table 1.4. Learners' motivation and interest had an independent t-test value of $t(78) = 2.348, p < .05$. Use of teaching resources showed t-test value of $t(78) = 2.807, p < .05$ while classroom management and planning had a t-test value of $t(78) = 1.143, p < .05$.

These results reveal that all the independent t-test values obtained except for classroom management and control were significant. This means that the experimental group performed better than the control group on all the variables under study except on classroom management and planning which showed a non-significant t-test value. This illustrates that students who were trained by use of the context-based learning model that involved focus discussion groups(cooperative learning) and reflective practice, classroom learning & Micro-teaching and school-based learning(Teaching Practice) as components of the model performed better in their teaching than those students trained through the traditional concurrent content-based pedagogical model.

These results are clear testament that the components of the model were effective and operational and hence the difference in performance between the two groups. The main interest of this study was to identify the experiences and perceptions of pre – service teachers on focus discussion groups as a model of context - based learning. To achieve this, all the 40 pre-service teachers were issued with a questionnaire after their third and final teaching practice in their primary teacher education training.

Pre-service Teachers’ Perceptions and Experiences of Focus Discussion Groups as a Model of Context-Based Learning

The experimental group was issued with a questionnaire to identify experiences and perceptions of pre-service teachers on focus discussion groups as a model of context-based learning. Out of the 40 questionnaires issued, 37 of them were filled and returned. Analysis of questionnaire responses was done by use of frequency responses. Seven items made up of closed-ended and open-ended questions were used to find out this information. The frequencies for the closed-ended questions were calculated while the closed-ended responses were coded and put into main themes which were later used for calculation of frequencies and percentages for each specific theme.

Pre-Service Teachers’ Rating of the Focus Discussion Groups on Teaching and Classroom Practice

Pre-service teachers were asked to rate the focus discussion groups on teaching and classroom practice towards the development of their professional teaching career. Their responses are as shown in Table 1.4.

Table 1.4 Pre-Service teachers’ Rating of the Focus Discussion Groups on Teaching and Classroom Practice.

Ratings	Frequency N = 37	Percentage 100%
• Very useful	26	70.27
• Useful	5	13.51
• Somehow useful	3	8.11
• Not useful	1	2.70
• No response	2	5.41

From table 1.4 it is evident that 70.27% of the experimental group pre-service teachers rated focus discussion groups on teaching and classroom practice as very useful in their professional teaching career development. Thirteen point five one percent (13.51%) rated it as useful, 8.11% thought that FDGs on teaching and classroom practice were somehow useful, 2.70% felt that they were not useful while 5.41% did not respond to the question. This indicates that majority of the pre-service teachers (78.38%) rated the focus discussion groups they participated in as useful in their teaching career professional development.

When asked to give their reasons for the rating of the FDGs, their responses are as presented in Table 1.5.

Table 1.5 Pre-service Teachers' Reasons for the Rating of Focus Discussion Group on Teaching and Classroom Practice

Reason	Frequency N= 37	Percentage
• Increased my knowledge and skills in classroom control and management.	5	13.51%
• Made me more creative in the production and use of teaching and learning resources.	15	40.54%
• Helped me involve learners more in the lesson.	17	45.95%
• Enhanced my knowledge and skills in motivation and creation of interest in my lesson.	26	70.27%
• No response.	3	8.11%

Table 1.5 indicates that 70.27% of the experimental group pre-service teachers felt that FDGs enhanced their knowledge and skills in motivation and creation of interest in their lessons. Forty five point nine five percent (45.95 %) indicated that FDGs helped them involve their learners more in the lesson. Forty point five four percent (40.54%) were of the opinion that FDGs made them more creative in the production and use of teaching and learning resources. Thirteen point five one (13.51%) of the experimental group pre-service teachers felt that FDGs on teaching and classroom practice increased their knowledge and skills in classroom control and management while 8.11% of the pre-service teachers did not respond to this item. This analysis reveals that most of the experimental group pre-service teachers found the FDGs on teaching and classroom practice useful in their teaching professional development.

Pre-Service Teachers’ Rating of their Participation in the Focus Discussion Groups on Teaching and Classroom Practice

Pre-service teachers were asked to rate their participation in the FDGs. Their responses are as shown in Table 1.6.

Table 1.6 Pre-Service Teachers’ Rating of their Participation in Focus Discussion Groups.

Ratings	Frequency N = 37	Percentage 100%
• Very Active	19	51.35
• Active	10	27.03
• Moderately Active	4	10.81
• Not Active	2	5.40

Table 1.6 reveals that 51.35% of the experimental group pre-service teachers were very active during the FDGs, 27.03% rated their participation as active, and 10.81% indicated that their participation was moderately active while 5.40% noted that they were not active. Out of the six who indicated that their participation in the FDGs was either moderately active or not active, three (50%) identified lack of enough time for group activities and few FDG meetings as their reasons for lack of effective participation. Two (33.33%) indicated that the focus discussion groups were rather large and thus could not give everybody an equal chance to participate. One (16.67%) did not respond to this item. This analysis points out that majority (78.38%) of the pre-service teachers actively participated in the focus discussion groups. When asked how the focus discussion groups can be improved, their responses are as indicated in Table 1.7.

Table 1.7 Pre-Service Teachers’ Opinions on How the Focus Discussion Groups can be Improved

Ways of Improving Focus Discussion Groups	Frequency N= 37	Percentage
• Have focus discussion groups with fewer members	4	10.81%
• Need more discussion time for focus discussion group per session	12	32.43%
• Require more frequent focus discussion group meetings	15	40.54%
• Give all members equal chances	2	5.40%

From Table 1.7, it is evident that 40.54% of the experimental group pre-service teachers required frequent meetings as opposed to the weekly meetings employed in this study. Thirty two point four three percent (32.43%) identified the need for more discussion time per

session as a way of improving focus discussion group meetings while 5.40% felt that there was need to give every group member an equal chance to participate in the group.

These findings indicate that pre-service teachers had positive experiences and perceptions of the focus discussion groups as a model of context-based learning.

In order to provide information for focus discussion groups, pre-service teachers were expected to reflect on their teaching per day and record their reflections daily in a reflective practice diary. Their recordings were analyzed and the results are as indicated below.

Pre-Service Teachers' Reflective Practice Diary Recordings

Each of the 40 experimental group pre-service teachers was issued with a reflective diary every week where they were to record their reflections on their daily instructional experiences. The diary was then collected at the end of the week after the focus discussion group meetings. Reflective diaries were recorded for a total of 7 weeks spread over the first two teaching practice sessions of about one month each. The numbers of expected responses based on the diaries returned are as shown in Table 1.8. Out of 40 experimental group pre-service teachers 31 returned all the diaries. Two (2) pre-service teachers brought back dairies for 6 weeks, 4 of them returned 3 diaries while diaries for 2 weeks were collected from 3 pre-service teachers.

Table 1.8 Expected Responses per question as per the Diaries Returned

Number of Pre-service Teachers	Number of Weeks	Number of responses per Week	Total Responses Expected per question
31	7	5	1085
2	6	5	60
4	3	5	60
3	2	5	30
Total Responses			1235

The total responses for each question were varied from question to question since some of the pre-service teachers did not respond to some questions. The number of exact responses per question is as indicated in Table 1.9.

Table 1.9 Actual Reflective Practice Diary Responses

Question Number	Responses	Percentage
1	1226	99.27%
2	1153	93.36%
3	1192	96.52%

From Table 1.9, it is clear that question number one got 1226 responses (99.27%), question number two had 1153 (93.36%) responses and question number three attracted 1192 (96.52%) responses over the seven weeks period. Analysis of the reflective practice diaries is based on the responses per each question. As noted earlier, the responses by the pre-service teachers on each of the questions were analyzed and put into themes.

Pre-Service Teachers' Evaluations of their Teaching based on the Reflective Teaching Diaries

During their practice, the experimental group pre-service teachers were expected to record their evaluation of the lessons they had taught each day in terms of what they felt was done well and what was not done well and the reasons for their evaluations in each case. In addition, they were expected to suggest ways in which they thought each of their lessons could be improved. All the evaluations were aimed at serving as the content of discussions during the focus discussion groups. However, they were analyzed in this study in order to find out the experiences of pre-service teachers during their teaching practice as part of the supplementary findings. Respondents were asked to indicate areas they performed well during the teaching of their lessons each day for seven weeks. Their responses were as shown in Table 2.0.

Table 2.0 Experimental Group Pre-Service Teachers' Evaluation of the Well Performed Areas in their Teaching.

Well performed areas during the lessons.	Frequency N = 1235	Percentage
• Pupils were actively involved in the lesson.	997	80.73%
• Learners were motivated and interested in the lesson.	851	68.91%
• The lesson was presented logically and systematically.	801	64.86%
• The lesson objectives were achieved.	1016	82.27%
• The teacher-learner interactions were good.	252	20.40%
• No response.	9	0.73%

Table 2.0 points out that in 82.27% of the cases, the experimental pre-service teachers felt that their lessons objectives were achieved. In 80.73% of the responses, pre-service teachers indicated that their pupils were actively involved in their lessons. Sixty eight point nine one

percent (68.91%) of the pre-service teachers' responses showed that learners were motivated and interested in their lessons.

In 64.86% of the responses, pre-service teachers pointed out that they presented their lessons logically and systematically, 20.40% of pre-service teachers' responses indicated that their interactions with their learners were good while there were no responses in 0.73% of the cases. When asked why they thought that the areas they pointed out were performed well during their lessons, their responses were as indicated in Table 2.1.

Table 2.1 Pre-service Teachers' Reasons for the Good Performance in Their Lessons

Reasons	Frequency N = 1235	Percentage
• Had prepared well for the lesson.	1003	81.21%
• I provided appropriate and interesting examples and illustrations to the pupils.	851	68.91%
• Reinforced pupils Responses.	517	41.86%
• Provided stimulus variation.	411	33.28%
• No Response	9	0.73%

From Table 2.1, it is evident that, in 81.21% of the cases, pre-service teachers identified good preparation of their lessons as the reason for good performance in the areas they had identified in Table 2.0. Sixty eight point nine one percent (68.91%) of the responses indicated that pre-service teachers provided appropriate and interesting examples and illustrations to their learners. Forty one point eight six percent (41.86%) of the responses showed that pre-service teachers reinforced their pupils' responses in class while 33.28% of the responses pointed out that, pre-service teachers provided stimulus variation in their lessons. In 0.73 % of the cases, there were no responses.

When asked to identify the poorly performed areas in their lessons, their responses were as noted in Table 2.2.

Table 2.2: Pre-Service Teachers' Evaluation of the Poorly Performed areas in their Teaching

Poorly Performed areas during the Lessons.	Frequency N = 1235	Percentage
• Lack of effective classroom control.	843	68.26%
• Lack of adequate teaching resources.	703	56.92%
• Inadequate utilization of teaching and learning resources.	719	58.22%
• The lesson was not logical and systematic.	315	25.51%
• Did not use learners' experiences.	332	26.88%
• Teacher-learner interactions were not good.	117	9.47%
• No response.	82	6.63%

Sixty eight point two six percent (68.26%) of the pre-service teachers' responses to the poorly performed areas in their lessons indicated that they did not effectively control their classes. In 58.22% of the responses, inadequate utilization of teaching and learning resources was cited as one of the problems in the pre-service teachers' lessons. Lack of adequate resources followed with 56.92% of the responses. Non-utilization of learners' experiences had 26.88% of the responses while 9.47% of the responses showed that teacher-learner interactions were not good. In 9.42% of the cases, pre-service teachers did not respond to the question. This shows that lack of effective classroom control was a major challenge to the pre-service teachers followed by inadequate teaching and learning resources and inadequate utilization of the teaching and learning resources. Pre-service teachers cited the issues listed in Table 2.3 as their reasons for not doing well in the areas pointed out in Table 2.2.

Table 2.3 Pre-service Teachers' Reasons for Poor Performance during their Lessons

Reasons	Frequency N = 1235	Percentage
• Ineffective time management.	507	41.05%
• Non-utilization of locally available resources.	722	58.46%
• Inadequate preparation of the lesson.	172	13.93%
• Did not relate the topic to learners' experiences.	319	25.83%
• Lack of effective motivation and creation of interest in learners.	413	33.44%
• Lack of appropriate learner activities.	143	11.58%
• Unclear objectives.	57	4.62%
• Learners did not understand the concepts.	97	7.85%
• No response.	115	9.31%

As pointed out in Table 2.3, non-utilization of locally available teaching and learning resources was identified by pre-service teachers as the major reason for poor performance in their teaching by attracting 58.46% of the responses. Ineffective time management came second with 41.05% of the responses. Lack of effective motivation and creation of interest had 33.44% of the responses. Twenty five point eight three percent (25.83%) of the responses indicated that pre-service teachers did not relate the topic to learners' experiences. Thirteen point nine three percent (13.93%) of the responses showed that pre-service teachers did not effectively prepare for their lessons while 11.58% of the responses pointed out that the lessons lacked appropriate learner activities. Seven point eight five percent (7.85%) of the pre-service teachers' responses indicated that pupils did not understand the concepts taught. Unclear objectives had the lowest responses (4.62%) while there were no responses in 9.31% of the cases.

These findings point out that majority of the pre-service teachers had major challenges in the design, production and utilization of teaching and learning resources as collaborated by what is cited in Table 2.3. Ineffective time management was also noted as a major challenge and perhaps that is why some pre-service teachers' lessons were evaluated as not logical and systematic as noted in Table 2.3. In addition, some pre-service teachers had problems with motivation and creation of interest in their lessons did not relate the topic to learners' experiences and had no appropriate learner activities.

In addition, to identify the well and poorly performed areas in their teaching, pre-service teachers were asked to mention ways in which they could improve their teaching knowledge and skills. Fifty seven point three percent (57.33%) of their responses cited the need for mastering the content of instruction before the lesson. Fifty three point two zero percent (53.20%) felt that they needed to be more creative and innovative in the production and utilization of instructional resources through use of available resources while (68.18%) were of the opinion that they needed to create interest and motivate their learners through use of appropriate examples and illustrations related to pupils' experiences and more involvement of the pupils in the lessons. Forty eight point eight three percent (48.83%) of the responses indicated that pre-service teachers needed to prepare adequately for the lesson.

Discussion

The independent t-test results clearly indicate that there was a significant difference between the experimental and control groups. The experimental group which used the focus discussion groups as a component of context-based learning model performed better than the control group that used the traditional content-based pedagogical model. The main objective of this study was to find out the pre-service teachers' perception and experiences of focus discussion groups as a model of context-based. From the findings obtained majority of the pre-service teachers found focus discussion groups useful in their professional development. They provided various reasons for their positive rating of the focus discussion groups which include; enhancing their knowledge and skills in motivation and creation of interest in their lessons, helping them involve their learners more in the classroom, making them more creative in the production and use of teaching and learning resources and increasing their knowledge and skills in classroom control and management. These results in addition to the pre-service teachers' feedback gave strong indicators that focus discussion groups were useful to pre-service teachers and gave them an opportunity to independently and individually reflect on their classroom teaching experiences and collaboratively seek solutions to classroom problems they faced. However, a number of pre-service teachers felt that the time for group activities was short. The following pre-service teachers' excerpts further provide some insights on the pre-service teachers' focus discussion group experiences and perceptions.

At first I did not think the discussion group was necessary. The work was too much to bear. I even came in late during the group discussions but I later realized the group members were talking about the same problems I had experienced in my classroom teaching. This gave me hope that I was not alone and motivated me to participate in the group discussion. I finally found out that sharing with my colleagues helped me learn how to solve my classroom problems. (Beth, Group 2).

I think the benefit of a group discussion is that you are not focused on the outcome like in a classroom situation. You are more concerned with seeking solutions to a problem. You are able to connect what you were taught in the classroom with what is happening in schools. I think I learnt more during the discussions than when I attended lectures because the lectures were mainly focused on exams unlike the discussion groups. However, the sessions were rather short. (Odindo, group 2).

When I joined college I was not interested in teaching at all. It was not my choice, but my discussions with my fellow students and the reflection on what I do as a teacher in addition to the classroom experiences with pupils made me see teaching in a different way. I am now a little bit interested in it. I wish we had more discussion time. (Lagat, Group 3).

I felt involved in my learning. I believe this was the main advantage of the discussion groups and the reflections I made. Teaching practice was good though quite involving. (Maluki, Group 1).

The main observations that emerged from these pre-service teachers' excerpts indicate that pre-service teachers valued learning from each other and reflecting on their teaching. However, the focus discussion group meetings needed more time and more control as noted by the following pre-service teachers' excerpts.

The discussions did not help me much. They were short and moreover what matters is (sic) the grades awarded by our tutors and the external examiner. (Maureen, Group 1).

I did not feel like I was in control of my teaching practice. It always felt like I was being judged by everybody and I had to report my experiences. I was also not given enough time to express my opinions. Some of my colleagues were dominating the discussions and I felt left out. (Wanyama, Group 1).

Reflective practice diaries revealed the areas pre-service teachers felt they did well in their classroom teaching and those they thought they did not do well. From the analysis of the reflective diaries, it is evident that most of the pre-service teachers felt that they achieved their lesson objectives and actively involved their learners in their lessons.

However, they cited lack of effective classroom control, lack of adequate teaching and learning resources and inadequate utilization of teaching and learning resources as the main issues that were not good in their lessons. These findings point out that, pre-service teachers were actively reflecting on their classroom teaching. The findings also illustrate this source of learning was operating well. Issues indicated in the reflective diaries were the main points of discussion during the focus discussion groups. The following pre-service teachers' quotes during the focus discussion group meetings and in their answers to the questionnaire on their perceptions on the focus discussion groups illustrate their experiences on the reflective practice and point to the fact that pre-service teachers were engaged in reflections of their teaching experiences.

I did not think teachers do anything beyond, planning for teaching, teaching in class and marking students work. The issue of recording what I think about my lesson was new to me and confusing but I found it useful in making improvements on my next lessons. (Chege, Group 3).

I think all teachers should be asked to record their reflections on their teaching. I found myself thinking of what I had recorded in my diary over and over again even at night. Though the work was too much, I think this helped me seek solutions to the problems I encountered during my lessons and in making my lessons better. (Peter, Group 2).

Nevertheless, it is clear focus groups discussion as a source of learning was functional but needed more time and more control in some groups as indicated in the pre-service teachers' excerpts. The students' comments are in line with the observation made by Kiggins (2007), (Cheany & Ingebritsen, 2005), Hammond (2006), Tiwari, Wong and Lai (2005), and Choi and Johnson (2005) in which they argue that the 21st century teacher requires not only to reflect on his/her teaching but also work in collaboration with other professional colleagues in order to solve classroom problems he/she encounters to meet the needs of the contemporary society that requires more knowledge and skills to survive and succeed. Through reflection and cooperative learning (Focus discussion groups), the pre-service teacher is able to relate course-work and the practical work. The community of learners also provide support and encouragement to each pre-service teacher. Hammond (2006) further points out that on a daily basis, the 21st century teachers are confronted with complex decisions that rely on many different kinds of knowledge and judgement. To make good decisions, the teacher must be aware of the context in which learning is to take place and accommodate the social, environmental and the psychological conditions in his/her teaching

taking into consideration the demands of the fast changing world. This is only possible if the teacher has acquired knowledge and skills in relating teaching and learning to the classroom context. It is also interesting to note that a majority of the pre-service teachers indicated that they were active during the focus discussion group meetings. This clearly shows their enthusiasm in participating in the focus discussion groups and further supports their positive experiences and perceptions of the focus discussion groups.

Based on pre-service teachers' perceptions of the focus discussion groups and the findings from the t-test conducted, it is evident that use of focus discussion groups as a component of context-based learning model promotes learner-centred learning through problem-solving, learner independent learning, group discussion and sharing. In addition, it improves learners' decision-making skills, active participation in their learning and stimulates their curiosity in seeking solutions to the professional problems they face. It also helps pre-service teachers to relate teacher education theory to practice as well as basing their teaching on the context in which they teach. The reflective diary records clearly indicate that pre-service teachers were able to diagnose their strengths and weaknesses in classroom teaching and in some cases provided solutions to the classroom teaching problems they faced. In addition, their views as supported by the excerpts mentioned and the responses from the questionnaires reveal that they valued the aspect of reflecting on their teaching and the subsequent discussions on their reflections. This is in contrast to the current primary teacher education model in Kenya which is based on the concurrent content-based pedagogical model.

This study promotes the view that learners need to take responsibility of their own learning and thus, enhance the pre-service teacher's effectiveness in the classroom. Another implication of this study is that pre-service primary teachers should be given room by their tutors to effectively participate in their learning and creatively seek solutions to the problems they face in their learning through individual reflections and cooperative learning processes. Their responses from the questionnaires, reflective practice diaries and the excerpts mentioned provide evidence that pre-service teachers value effective participation in their learning. The third implication of this study is that pre-service teachers should be given an opportunity to reflect on their teaching through an established process that involves recording of their reflections and discussion of the same through support groups.

These findings are in agreement with the observations and findings of Kiggins (2007), Cheany and Ingebritsen, 2005), Tiwari, Hammond (2006), Wong and Lai (2005), and Choi and Johnson (2005 who found that pre-service teachers were motivated and interested in participating in a community of learners which not only helped them discuss their classroom problems but provided them an avenue for support and encouragement in their professional development.

The findings of this study revealed that, pre-service teachers faulted their tutors for non-utilization or inadequate utilization of instructional resources in their classrooms. This point out a possible limitation on the knowledge and skills of primary teacher education tutors with regard to pedagogical knowledge and skills or lack of effective teaching methods. There is need to research on primary teacher education tutors classroom teaching practices. As noted by Feiman-Nemser (2001) and UNESCO (2005) in most cases, teacher educators do not practise what they preach and as a result, a large proportion of primary school teachers lack adequate training especially in developing countries. The influence of primary teacher educators is critical in the quality of pre-service teachers.

This study focused on two primary teacher training colleges as the accessible population. There is need for a replicated research that incorporates more primary teacher training colleges.

References

- Armour, L. and Booth, E. (1999). Analysis of a Questionnaire to Primary Educators at Schools Accepting Students' for the Six Week extended practicum. *Report by the Faculty Education*, University of Wollongong: Australia.
- Bogonko, S. (1992). *A History of Modern Education in Kenya (1895 – 1991)*. Nairobi: Evans Brothers Kenya Limited.
- Borg, W.R., Gall, D.M and Gall J.P. (2003). *Educational Research: An Introduction* (6TH ed.). New York; Longman Inc.
- Broudy, H.S. (1977). Types of Knowledge and Purposes of Education. In R.C. Anderson, R.J. Spiro & W.E. Montage (Eds), *Schooling and the Acquisition of Knowledge*. Pp. 1-17, Hildale, NJ: Erlbaum
- Cambourne, B. and Kiggins, J. (2004). *The Development of a Literacy of Pedagogy for Pre – service Teacher Education Students*. Faculty of Education, University of Wollongong : Australia. <http://www.aare.edu.au/99php>
- Carter, R. (2000). Teacher Education; The First Step in Accountability, *Teacher Education Papers*. <http://crystal.rah.edu/carter/papers/teacher>.
- Cheany, J. and Ingebritsen T.S. (2005). Problem-based Learning in an Online Course: A Case Study. *Journal of International Review of Research in Open and Distance Learning*, Volume 6, (3) Pp 1-11
- Choi, H.J. and Johnson S.D. (2005). The Effect of Context-Based Video Instruction on Learning and Motivation in Online Courses. *The American Journal of Distance Education*, 19(4) Pp 215-227.
- Colin, R (2002). *Real World Research*; (2nd ed.). UK: Blackwell.
- Dembele, M and Miaro – II, R. (2003). *Pedagogical Renewal and Teacher Development in Sub – Saharan Africa: A Thematic Synthesis*. Paris; A Paper Commissioned for 2003 Association for the Development of Education in Africa (ADEA);
- Farrell, J.P. (2002). The Aga Khan Foundation Experience Compared with Emerging Alternatives to Schooling. In S.E. Anderson (eds). (2002). *School Improvement Through Teacher Development: Case Studies of the Aga Khan Foundation Projects in East Africa*, pp.247 – 270; The Netherlands: Swets and Zeltinger Publishers.
- Feiman–Nemser, S. (2001). From Preparation to Practice; Designing a Continuum to Strengthen and Sustain Teaching. *Teachers College Record* 103, Pp. 1013 - 1055.

- Fraenkel, J.R. and Wallen, N.E. (2009). *How to Design and Evaluate Research in Education*. (6th ed). New York; McGraw-Hill.
- Galea, S. (2012). Reflecting Reflective Practice. *Educational Philosophy and Theory*. Vol. 44, No. 3 doi: 10.1111/j.1469-5812.2010.00652.x
- Hammond, L.D. (2006). Constructing 21st – Century Teacher Education. *Journal of Teacher Education*; 57; 300. American Association of Colleges for Teacher Education (AACTE).
- Hoban, G (1999). Using Metacognitive Framework to Guide Experiential Learning in Teacher Education Classes. *Journal of Experiential Education*, V2, 16.
- Hoban, G. (2005). The Missing Links in Teacher Education Design: Developing a Multi-Linked Conceptual Framework. *Springer* .Pp 75-94;
- Hopkins, D. (2001). *School Improvement for Real*, Pp 16- London; Routledge
- KESSP (2005): *Kenya Education Sector Support Programme 2005 – 2010* (KESSP). Nairobi; Government Printer.
- Kiggins, J. (1999). *Towards Authentic Context – Based- Learning in Teacher Education. The Knowledge Building Community Project*: Graduate School of Education, University of Wollongong; Australia. Retrieved from <http://.aare.edu.au/99php/kig99.590.html>
- Kiggins, J. (2007). The Underpinning Knowledge Bases of Alternative Teacher Education Model: *The International Journal of Learning*, 14 (1), 221-228. University of Wollongong; Australia. Retrieved from <http://ro.ouw.edu.au/edupapers/50>
- Kinyanjui, L. (1997). *Availability and Utilization of Instructional Media in Teaching and Learning of Physical Education in Some Selected Primary Teacher Training Colleges in Kenya*. Unpublished MEd Thesis, Kenyatta University: Nairobi.
- Lave, J. & Wenger, E. (1991). *Situated Learning: Legitimate Peripheral Participation*. Cambridge: Cambridge University Press.
- Merriam, S. and Caffarella R. (1999). *Learning in Adulthood* (2ndEd).San Francisco; Jossey-Bass.
- Ministry of Education, Science and Technology (MoEST) (2003).National Education Conference Report. *Meeting the Challenges for education in Kenya in the 21st Century*, 26th – 29th November 2003, Nairobi; Government Printers.
- GoK. (2012). Sessional Paper No.14 of 2012: *A Policy Framework for Education and Training*. Nairobi; Government Printers
- GoK. (2005). *Sessional Paper No.1 of 2005 on Policy Framework for Education, Training and Research*. Nairobi; Government Printers

- MoEST (2015). *National Education Sector Plan 2013-2018*. Nairobi: MoEST
- Scheerens, J. (2000). *Improving School Effectiveness: Fundamentals of Education Planning*, No. 68) Paris; *IIEP- UNESCO*:
- Mourshed, M.; Chijioke, C. & Barber, M. (2010). *How the World's Most Improved Schools Systems Keep Getting Better*. London: Mckinsey & Company
- Schon, D. (1983). *The Reflective Practitioner*, New York: Basic Books.
- Shaffer, D.W. (2006). EPISTEMIC Frames for Epistemic Games. *Science Direct*. Vol. 46, Issue 3 PP. 223-234. Retrieved from; <http://www.sciencedirect.com/science/article/pii/>
- Shiundu, J. and Mohammed, A. (2005). *Issues in Social Studies Teacher Education in Africa*. Retrieved from <http://www.ncsu.edu/ncsu/aern/socstd.html>.
- Tiwari, A., Wong C.M and Lai P. (2005). The Effectiveness of Context-Based Learning Model in Promoting Learner Learning. *The Medical Journal*_Pp. 1-4. Hong Kong; University of Hong Kong.
- UNESCO. (2005). *Guidelines and Recommendations for Reorienting Teacher Education to Address Sustainability*. (Technical Paper No. 2). Paris; UNESCO.
- Wanzare, O.Z. (2002). *Rethinking Teacher Evaluation in the Third World: The Case of Kenya: Educational Management Administration Leadership*. Pp213. London; Sage Publications.
- Wenger, E. (1998). *Communities of Practice: Learning, Meaning and Identity*. Cambridge; Cambridge University Press.
- Williams, P. (2008). Assessing Context-based Learning: Not only Rigorous but also Relevant. *Assessment & Evaluation in Higher Education*. Vol. 33 Issue 4. Retrieved from Taylor and Francis: <http://www.tandfonline.com/doi/full/10.1080/0262930701562890>.