

## **Teacher Preparation in Public Universities in Kenya: Challenges and Mitigation**

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### **Abstract**

The diversity of today's school student body reflects the fact that households and the government view education as key to quality life and attainment of education goals. To achieve these goals teacher preparation programs must be responsive to the changes in the diversity and create confidence among the trainees. This study was designed to establish the adequacy of subject matter preparation for prospective teachers; determine the kinds of pedagogical preparation needed for prospective teachers and to compare performance of in-service and pre-service teacher trainees on teaching practice. A survey research design was employed. The study population was 283 student-teachers on teaching practice from Moi University. A sample size of 85 was obtained through proportionate sampling. The study found out that the training was comprehensive in content and pedagogy which made the trainees confident in class. However the student –teachers indicated that they were inadequate in dealing with cultural and ethnic diversity in their classes. The study further established that student-teachers on in-service program were more confident and effective in teaching practice as compared to their counterparts on pre-service program. The study therefore recommends preparing teachers to adapt to the diversified classroom composition. There is need to tap on the experience of the cooperating teachers to mentor the pre-service trainees and give the cooperating teachers an opportunity to give a comprehensive report on the trainees which should constitute a certain percentage of the total score. The study further recommends that University assessors should give more attention to pre-service trainees.

**Key words:** Teacher preparation, challenges, In-service, Pre-service, mitigation & mentoring

### **Introduction**

The question of what knowledge, attitudes, behaviors and skills teachers should possess is the subject of much debate in many cultures. This is understandable, as teachers are entrusted with the transmission to learners of society's beliefs, attitudes and deontology, as well as of information, advice and wisdom, and with facilitating learners' acquisition of the key knowledge, attitudes and behaviors that they will need to be active in society and the economy. Teacher education covers content-area and methods knowledge and skills—often also including ways of teaching and assessing a specific subject, in which case this area may overlap with the first ("foundational") area. There is increasing debate about this aspect; because it is no longer possible to know in advance what kinds of knowledge and skill pupils will need when they enter adult life, it becomes harder to

know what kinds of knowledge and skill teachers should have. Increasingly, emphasis is placed upon 'transversal' or 'horizontal' skills (such as 'learning to learn' or 'social competences', which cut across traditional subject boundaries, and therefore call into question traditional ways of designing the Teacher Education curriculum.

Teacher preparation requires a dual approach. On the one hand the student teacher must be helped to consider the educational basis of teaching, by thinking about the relationship between human knowledge, child development, learning and society with its various aims and values. On the other hand he must receive training in how to exercise the essential skills of learning and training. Farrant (2006) noted that during training, student teachers should be given time and opportunity to reflect on what the teacher's task really is. He further asserts that students must be trained to form habits that will make them capable teachers and shoulder assigned responsibilities. According to Farrant (2006):

Training requires two types of practice teaching experience. The first is observational; in it student may watch experienced teachers at work, or their own colleagues testing, perhaps for the first time, some method they have discussed. The second is experimental and is intended to provide experience...experimental practice teaching requires a more prolonged stay in a school so that the student can put into practice the methods learned (p.7)

One problem in the quest for quality is that accountability measures so far have been mainly quantitative, not qualitative. The Kenyan government, through the Ministry of Education, demands that, to be "highly qualified," teachers possess expertise in their subject matter and certification from their universities. This requirement assumes that certification ensures skill. In reality, the government generally focuses more on the number and type of candidates' training experiences than the quality.

All children no matter where they live or who they are deserve qualified teachers. There are serious disagreements about what it means for teachers to be well qualified and about what it takes to prepare teachers well. Opinions and exhortations about these questions abound, and decisions about teacher preparation are made on a variety of bases. According to Wilson, Floden & Ferrini-Mundy (2001) it is no surprise that research shows a positive connection between teachers' preparation in their subject matter and their performance and impact in the classroom. Subject-specific methods courses in education are useful too. But, contrary to the popular belief that "more subject matter study is always better," there is some indication from research that teachers can acquire subject matter knowledge from various sources, including subject-specific academic coursework and study in an academic major. However, there is little definitive research on the kinds or amount of subject matter preparation; much more research needs to be done before strong conclusions can be drawn.

The pedagogical preparation includes areas such as instructional methods, learning theories, foundations of education, and classroom management. The content and arrangement of such courses in programs of teacher education varies widely. Studies that have looked across several of the pedagogical parts of teacher preparation programs reinforce the view that the pedagogical aspects of teacher preparation matter, both for their effects on teaching practice and for their ultimate impact on student achievement (Wenglinsky,2000; Valli & Agostinelli, 1993). Some evidence suggests that coursework in content methods matter for teacher effectiveness. But since many studies use a weak

proxy for pedagogical preparation—possession of a teaching credential—the results give little insight into which aspects of pedagogical preparation are most critical.

Research by Miller & Silvernail (2000) shows that field experiences too often are disconnected from, or not well coordinated with, the university-based components of teacher education. Sometimes the field experiences are limited to mechanical aspects of teaching. Finding placements is challenging, and identifying schools that share educational perspectives with teacher education programs can be an issue. The norms of the schools in which prospective teachers are placed are crucial to shaping the experience. Yet research shows some promising practices can be developed: prospective teachers' conceptions of the teaching and learning of a subject matter can be transformed through their observations and analysis of what goes on in real classrooms. Stereotypical views can shift when student teachers work in classrooms that enable this to happen. In field experiences with focused, well-structured activities, more significant learning can occur. Cooperating teachers have a powerful influence on the nature of the student teaching experience.

Student teachers have many challenges that they face each day. Effective teacher training helps prepare student teachers for these challenges. While teacher training and student teaching won't completely prepare new teachers for every issue they will face, it can help them feel more confident about many common problems that arise for teachers each day. Without this background, teachers might feel like failures and eventually give up. Kelly (2012) observed that many inexperienced teachers focus on getting students to memorize and regurgitate success. However, does this show true student achievement? Without a background to what does and does not constitute authentic student learning, new teachers sometimes create lessons that don't lead to the results they were expecting. However, teacher preparation programs can help students understand how to find and apply effective benchmarks for student achievement.

The obligation to meet the needs of individual students creates challenges for all teachers but particularly for those with large class sizes. The large caseloads carried by teachers in diverse classroom settings prevent them from individualizing instruction (Moody et al., 2000). As teachers' responsibilities continue to grow, they are nevertheless increasingly called upon to assess and accommodate every student's individual approach to learning (Schumm, Vaughn, Gordon, & Rothlein, 1994; Schumm, Vaughn, Haager, McDowell, Rothlein, & Saumell, 1995). Inevitably, both general and special educators must adjust to taking on additional classroom responsibilities. They must assume new roles, develop new competencies, and become more aware of the philosophy and process of inclusion (Benner, 1998; Chow et al. 1999; Pugach & Johnson, 1995). These new roles include, but are not limited to, assessing and accommodating individual academic, intellectual, and emotional needs. Students must be prepared for participation in standards-based assessments, and teachers must adjust the curriculum and instructional approach accordingly. Teachers must also determine requirements for and access to resources and support systems and recognize the importance of positive attitudes toward students with disabilities (Chow et al. 1999). All of these expectations are set in a context of increasing concern with having all students meet the same standards through broad scale assessment systems.

As responsibilities expand and expectations increase, teachers' attitudes toward challenges vary. Negative attitudes can emerge among special educators (Cook, Semmel, & Gerber, 1999) when their validated practices do not transfer easily to general education classrooms (Chow et al., 1999).

When special educators are unfamiliar with the general education structure and curriculum, the coordination of special and general education teachers is made all the more problematic (Nolet & McLaughlin, 2000). Such unfamiliarity may make special educators reluctant to embrace the philosophy of inclusion (Hewitt, 1999). Moreover, when working in the general education classroom, special education teachers are noted in the research to, in some cases, be taking on the role of an instructional aide rather than that of a fully qualified teacher, with the unfortunate consequence of poor feelings about the situation. Additionally, this structure leaves special education teachers with less time for special education students (Hewitt, 1999). Klingner and Vaughn (1999) observe that these constraints can ultimately inhibit progress for students with learning disabilities. In fact, King-Sears (1997) states that inclusive practices may limit students with learning disabilities to “just getting by” from day-to-day.

Negative attitudes also develop among general practitioners, reflecting their frustration with systemic obstacles to effective instruction and inclusion. Many of the reviewed studies examined the factors that make general education teachers more or less receptive to inclusion, finding that the more teachers feel overworked and overwhelmed with trying to meet students’ individual

According to Kelly (2012), when it comes to teaching, reading a book is not enough. Even hearing teachers talk about teaching methods is not enough. New teachers need practice teaching combined with effective mentoring in order to help them understand what is required from them in their new position. This happens through student teaching in the classroom setting. However, it is imperative that student teachers are placed in appropriate classes that meet their interests. Further, the supervising teacher must be involved and provide feedback each day to help student teachers learn.

The process by which teachers are educated is the subject of political discussion in many countries, reflecting both the value attached by societies and cultures to the preparation of young people for life, and the fact that education systems consume significant financial resource. However, the degree of political control over Teacher Education varies. Where Teacher Education is entirely in the hands of universities, the government may have no direct control whatever over what or how new teachers are taught; this can lead to anomalies, such as teachers being taught using teaching methods that would be deemed inappropriate if they used the same methods in schools, or teachers being taught by persons with little or no hands-on experience of teaching in real classrooms.

### **Statement Problem**

Many studies have shown that training requires two types of practice teaching experience. The first is observational; in it student may watch experienced teachers at work, or their own colleagues testing, perhaps for the first time, some method they have discussed. The second is experimental and is intended to provide experience which requires a more prolonged stay in a school so that the student can put into practice the methods learned (Farrant,2006; Wenglinsky,2000; Valli & Agostinelli, 1993).

Teacher preparation in Kenyan Universities has traditionally adopted programs that are rigid. Many teachers have found it difficult to adopt new ways of dealing with emerging issues in the field such as cultural diversity and frequent changes in curriculum. Most studies to date have looked at particular programs, courses, and students in single institutions (Moody et al., 2000; Nolet & McLaughlin, 2000). We need more studies that relate specific parts of teachers’ preparation (subject

matter, pedagogy, clinical experiences) to the effects on their teaching practice. Studies that compare the relative importance of specific parts of teacher preparation could be useful to those designing and revising teacher education programs. The interplay between research about particular contexts and research that seeks general conclusions across programs needs to be stronger. This study therefore was designed to find out the interplay between subject matter, pedagogy and clinical experiences with their effects on teaching practice in Kenyan Universities.

### **Objectives**

- To establish the adequacy of subject matter preparation for prospective teachers in Kenyan Universities.
- To determine the kinds of pedagogical preparation needed for prospective teachers.
- To compare performance of in-service and pre- service teacher trainees on teaching practice

### **Research Methods and Materials**

The study adopted a descriptive survey study method through the means of administering questionnaire among the student- teachers on teaching practice. Kombo and Tromp (2006:71) notes, “the major purpose of descriptive survey is description of the state of affairs as it exists.” Jaeger (1988) cited in Ogulla (1998) further observed that survey design is suitable in describing specific characteristics of a large group of persons. Document analysis was also used to examine the student teacher scores in content, pedagogy and general performance. The study population was 283 student-teachers on teaching practice from Moi University. A sample size of 85 respondents was drawn from the study population through proportionate sampling. The respondents were selected from three groups namely; Bachelor of Education (Arts), Diploma in Education and Bachelor of Education (Early Childhood). The first two constituted pre-service group and the last was the in-service group. Their responses were collected with a view of establishing the adequacy of teacher preparation in Kenyan Public Universities.

### **Measures**

Participants completed a questionnaire that assessed teacher preparation. Respondents answered the following teacher preparation related questions: 1) if the subject matter preparation is adequate in making them confident to deliver content to learners; 2) what kinds of pedagogical preparation do they need as prospective teachers? 3) How do they rate themselves compared to their counterparts in in-service/ pre-service programs.

### **Findings and Discussion**

#### **1. Adequacy of Subject Matter in Teacher Preparation**

Respondents were asked to state the level of their agreement on whether subject matter was adequate in preparing them in content during their teaching practice. Their responses are presented in table 1.

**Table 1: Subject Adequacy**

Subject	Responses			
	Agree	Undecided	Disagree	Total
	%	%	%	%
Humanities	68	2	30	100
Kiswahili	70	3	27	100
English	77	4	19	100
Mathematics	74	2	24	100
Applied Sciences	69	3	28	100

The results in table 1 shows that subject preparation at the university is adequate since majority of the respondents agreed that they were adequate in subject content. This observation is important in that studies that have looked across several of the pedagogical parts of teacher preparation programs reinforce the view that the pedagogical aspects of teacher preparation matter, both for their effects on teaching practice and for their ultimate impact on student achievement (Wenglinsky,2000; Valli & Agostinelli, 1993). Some evidence suggests that coursework in content methods matter for teacher effectiveness.

It was necessary to establish the respondents' performance in content of their teaching subjects. Table 2 shows performance of the various groups.

**Table 2: Student teacher scores in content**

Program	No. Respondents	Scores %
B.Ed (Arts)	42	68.6
B.Ed (EPE)	24	66.3
Diploma (EPE)	19	65.7

Subject content provides support for the importance of solid subject matter knowledge in creating confidence among the trainees.

Educators and policymakers also must find ways to ensure that prospective teachers acquire not only adequate knowledge of a subject, but also some knowledge of how to teach it. The research suggested that preparation in a given subject does not necessarily develop understanding of how particular concepts and procedures related to that subject are best learned. The pedagogy plays key role in teacher preparation.

## 2. Kinds of Pedagogical Preparation Needed for Prospective Teachers.

Instructional methods, learning theories, foundations of education and classroom management were identified as the required pedagogical preparation needed. When asked to rank the pedagogical skills in order of the emphasis during training at the university, they came up with the following:



**Table 3: Pedagogical Preparation Emphasized During Training.**

Pedagogical Skills	Frequency	Rank
Instructional methods	85	1
Learning theories	79	2
Student Assessment	76	3
Classroom management	70	4

This ranking shows that less emphasis was put on classroom management. When the observation tools were analyzed it revealed that student teachers scored low in classroom management. It further revealed that pre-service teachers scored lower than the in-service teachers. In order to strengthen pedagogy in the field there is need to involve the cooperating teachers since they have a powerful influence on the nature of the student teaching experience. This finding is in agreement with Nolet & McLaughlin (2000) who observed that special educators are unfamiliar with the general education structure and curriculum, the coordination of special and general education teachers is made all the more problematic.

It was necessary to establish the respondents' performance in pedagogy of their teaching subjects based on the programs. Table 4 shows performance of the various groups.

**Table 4: Student Teacher Scores in Pedagogy**

Program	No. Respondents	Scores %
B.Ed (Arts)	42	65.5
B.Ed (EPE)	24	71.4
Diploma (EPE)	19	64.8

Student teachers in B.Ed (EPE) program are in-service teachers while B.Ed (Arts) and Diploma (EPE) are pre-service teachers. From table 4 in-service teachers tend to perform better in pedagogy (71.4%) than pre-service teachers (B.Ed (Arts), 65.5% and Diploma (EPE) 64.8%). The difference in performance may be attributed to the experience that in-service teachers have and the diversity of the students in schools. It thus implies that student teachers need to be given more opportunity to practice and receive constant encouragement while in the university. Farrant (2006) observed that practice makes perfect when student teachers are given more prolonged stay in a school so that the student can put into practice the methods learned and also so that he can gain experience in dealing with teaching, not as individual lessons, but as a continuous dynamic relationship between teacher and pupils.

Preparation in pedagogy can contribute significantly to effective teaching, particularly subject specific courses and those designed to develop core skills, such as classroom management, student assessment and curriculum development.

### 3. Performance of In-Service and Pre- Service Teacher Trainees on Teaching Practice

**Table 5: Student Teacher Scores in Observed Lessons**

Program	No. Respondents	Scores %
B.Ed (Arts)	42	66.5
B.Ed (EPE)	24	69.8
Diploma (EPE)	19	64

From table 5 it is clear that in-service student teachers, B.Ed (EPE) scored higher (69.8%) than their counterparts in pre- service programs. This is also due to the experience that in-service teachers have over their counterparts in pre- service programs.

#### Conclusion and Policy Implication

In an era of standards-based reform, where great emphasis is placed on schooling outcomes, scientifically validated instructional interventions and teaching approaches must be made palpable so that practitioners can apply them in their own learning environments. The realities of classrooms and the residuals of barriers, however, suggest that to solve these longstanding challenges students, teachers and administrators must invest heavily. Techniques used in both general and special education settings frequently complement one another to produce environments and create opportunities conducive to optimal learning.

Solid field experience can have an influence on prospective teachers. High-quality field experiences appear to share several characteristics. Among the most common characteristics identified are (1) strong supervision by well-trained teachers and university faculty, and (2) prospective teachers' solid grasp of subject matter and basic understanding of pedagogy prior to student teaching.

Educators and policymakers must find ways to ensure that prospective teachers acquire not only adequate knowledge of a subject, but also some knowledge of how to teach it. The research seems to suggest that preparation in a given subject develops confidence in prospective teachers.

Policymakers should support beginning teachers' acquisition of whatever critical knowledge and skills they can gain prior to teaching full time. The uncertainty about the ability of pre-service preparation to ensure the solid acquisition of core pedagogical skills opens the door to the consideration of alternative preparation routes, which emphasize on-the-job training, as an option. In addition, the placement of newly minted teachers in challenging situations that require the exercise of well-developed pedagogical skills and knowledge should be avoided.

Experienced and pre service teachers alike see clinical experiences (teaching practice) as a powerful—sometimes the single most powerful—element of teacher preparation. Research documents significant shifts in attitude among teacher candidates who work under close supervision in real classrooms with children. Whether that power enhances the quality of a teacher's preparation seems to depend on the specific intent and characteristics of the field experience. Field experiences are sometimes intended to show what the job of teaching is like, sometimes to help teachers learn about classroom management, and sometimes to give practical opportunities to apply concepts encountered in university coursework



Field experiences are often limited, disconnected from university coursework, and inconsistent. The integration of experiences in the field with university coursework is complex work. Universities want to honor the knowledge of experienced teachers, yet there are often differences in views across schools and universities that are difficult to resolve. Further, teacher education programs—especially ones at large public institutions must place hundreds of student teachers in schools. The need to find enough placements is sometimes in tension with maintaining standards for the quality of those placements.

### **Recommendations and Further Research**

Educators and policymakers must find ways to ensure that prospective teachers acquire not only adequate knowledge of a subject, but also some knowledge of how to teach in a diversified classroom setting. This can be done by requiring program accreditation, increasing the amount of teacher testing and holding teacher education programs accountable for results of teacher testing. There is therefore need to significantly strengthen field experience and ensure its solid integration with pre service coursework. Thus, a prudent course of action would be to ensure that, whatever model of field experience is incorporated into a teacher preparation program, it reflects the characteristics of the diversified student population.

More attention should be given to pre service student teachers as compared to in service teachers. The universities should therefore draw their schedules that are flexible so as to enable supervisors have more clinical time with student teachers during teaching practice. Both observational practice teaching and experimental practice teaching should be strengthened in teacher education colleges

The period of student teacher supervision is too short and most university supervisors feel they could do much more if only they could have some continuing contact with their students. Do enhance supervision we recommend that cooperating teachers during teaching practice be assigned to every student on teaching practice and be given a special role to mentor the student teacher. The supervising teacher must be involved and provide feedback each day to help student teachers learn practical pedagogy and develop skills learned while in training. A coherent policy of in service training can be developed by the Ministry of Education as a follow-up strategy between Ministry of Education supervisors, institutions engaged in teacher education and the various support services such as teachers' professional associations.

Given the variability of requirements for subject minor, and uncertainty about the competence of even those teachers with subject majors, the most surefire way of determining competence would be to require teachers to demonstrate knowledge of a subject through an examination or portfolio. The next - best alternative would seem to be to require a subject major, particularly for secondary school teachers. As for primary school teachers, who teach multiple subjects, policy alternatives to some demonstration of subject-matter competence are less apparent. The research seems to suggest that preparation in a given subject does not necessarily develop understanding of how particular concepts and procedures related to that subject are best learned.

Future research should include longitudinal studies that examine the impact of teacher preparation over time, as well as the connections between teacher preparation, induction programs, and professional development opportunities.

Our study also suggests several potentially fruitful domains for future research. The subject matter preparation of teachers needs more attention, with close looks at both content and quality and at differences across subject areas.

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