

# Preparation of Teacher-Trainees in Pedagogy in Kenyan Universities

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## Abstract

There has been a concern about the quality of school teachers being prepared at the university especially in pedagogy. The main objective of the study was to investigate the preparation of teacher-trainees in pedagogy in Kenyan universities. The theoretical framework of the study was based on Shulman's concept of pedagogical content knowledge. The study was conducted in public and private universities in Kenya. Purposive, random and stratified sampling techniques were used to select the subjects for the study. The sample size comprised of 85 lecturers and 1100 fourth year students drawn from the selected universities. The research instruments included questionnaires, interview guide observation and document analysis. The study established that Teacher education programme is narrow in scope, conservative/conventional in nature and more or less irrelevant to the needs of modern Kenya. Lecturers and students have a good perception about Teacher preparation programme however they feel the present duration for preparing school teachers is perceived to be inadequate. Also, the established findings show that the quality of instruction in pedagogy good. The study recommended that given the need for modernization and broadening of the scope of this programme to meet the needs of modern Kenya, the duration/period of preparing school teachers be extended from the present four years to at least five years.

**Keywords:** Preparedness, Pedagogy, Instruction process

## 1.1 Introduction

Instructional beliefs of school teachers today have become a central issue of great concern in education. Many educators have argued that these beliefs have a strong impact on instruction (Handal, Bobis and Grimison, 2001; Cook-Sather and Youens, 2007; Lovat and Smith, 1995). These authorities claim that the beliefs held by school teachers shape their ability to seek and acquire knowledge and skills and the required attitudes to perform their pedagogical tasks.

In the last decade of the twentieth (20th) century there has been an increasing interest to study teachers' instructional beliefs and their influence on curriculum implementation. These studies have been conducted in the United States of America, Australasia and Europe (Sunnari and Rasanen, 2000; Baswas, 2005; Parkes and Griffiths, 2009; Yates, 1970). The low degree of success in many educational reforms has been seen as a major reason why teachers' instructional beliefs need to be considered, understood and taken seriously (Fullan, 1993).

It is unlikely that teachers can amend their own instructional practices if their beliefs on teaching and learning are not considered and/or addressed or worse, remain unexamined. There is more than just transferring resources to schools if educational change is to be attained. Teachers' instructional beliefs need to be confronted and re-appraised in terms of the beliefs and principles underpinning innovation in Teacher education. Otherwise, reforms in education will only be cosmetic, artificial or a travesty of the original innovation goals (Burkhardt, Fraser, and Ridgway, 1990).

Classroom teaching is a demanding job (Kafu, 2011). Most people outside education sector probably think teachers spend most of their time teaching. On the contrary, teachers are responsible for many tasks that have little to do with classroom instruction. Other than planning for and implementing instruction, teachers are also expected to serve as managers, psychologists, counselors, mentors, custodians of many things and processes in teaching, entertainers, arbiters and community "ambassadors". If teaching sounds like an unreasonable, almost impossible, job, perhaps it is.

The present study postulated that competent teachers should be produced in tandem with the needs of modern society. Kenya needs competent school teachers who have the initiative and ability to pioneer technological development for instruction. It is the belief of this study that teachers who are competent in instructional media technology can easily guide and equip learners with skills of modern technology. This is possible because instructional media technology is inherent of and concerns with practical manipulations which are reminiscent of all other engineering technological fields like Information and Communication Technology (ICT) and Engineering Technology. Professional studies courses of Teacher preparation programmes are the ideal facilitators of this development in learners (Kafu, 1999; Jamwal, 2012).

From the preceding discussion, the crucial question was, is the present crop of teachers adequately prepared in pedagogy and other related areas to meet the requirements of modern instructional technology and practices which emphasize development of the skills of creativity and innovativeness in learners? This is because there is a strong feeling in Kenya and elsewhere in the world that Teacher preparation programmes are not playing their expected major role of preparing and producing competent school teachers to serve the needs of

modern society (Aubuson and Schuck, 2013; Anees, 2015; Kafu, 2013). This deficiency is evident at the university Teacher preparation level in Kenya.

The general held belief today is that school teachers prepared at university level are creative and innovative to manage the challenges of modern school teaching. This assumption is based on the fact that prospective teachers at university level are prepared by the best brains in the land and universities are cradles of sophisticated knowledge to prepare (Too, 2004; Kafu, 2014). Given that the majorities (90%) of teachers in Kenyan secondary schools are university graduates, there is interest to determine their quality of teaching and specifically their competence in pedagogical related issues.

## 1.2 Problem Formulation

The modern society expects school teachers to be competent enough in utilizing the emerging educational technologies in instruction. In other words, a competent school teacher should be that individual who is a solution to the emerging technologies in modern education and society. This raises the concern of the quality of school teachers being prepared and produced by institutions of teacher preparation programmes across the curriculum in Kenya. That is, are these institutions adequately preparing prospective teachers in pedagogy to be able to competently engage learners in the requirements for modern instructional situations? There is evidence, especially among the graduate teachers, that many learners do not benefit much from the instructional engagements with their teachers (Kafu, 1976; Perkins, 1992). It is on the basis of this realization that the present study on preparedness of teacher-educators in preparation of prospective teachers-trainees in pedagogy was designed, developed and conducted in selected Kenyan universities. The study therefore addressed the following objectives;

- i. To investigate the nature and scope of teacher education programme.
- ii. To establish students' and lecturers' perception towards teaching of pedagogy in selected Kenyan Universities
- iii. To establish the quality of teaching pedagogical courses in the faculties/schools of education in selected Kenyan universities.

## 1.3 Theoretical Framework

The current study is based on the model of knowledge growth in Teaching as espoused by Shulman (1986). This authority introduced the concept of pedagogical content knowledge (PCK). He raised the issue of the need for a more coherent theoretical frame-work with regard to what teachers should know and be able to do, asking important questions such as, what are the domains and categories of the content knowledge in the mind of teachers? And how are content knowledge and general pedagogical knowledge related?" That is the description of the relationship between content knowledge and pedagogical knowledge of a particular subject matter to know and use in instruction.

Generally, this preparation involves development and instilling in the prospective teachers the required competencies of efficient teaching which are acquired through the Professional areas (courses) and through teaching subject-matter components of the Teacher Preparation programme. Therefore, the adopted theory formed the main basis of this study since it focuses on pedagogical issues that were the focus of the conducted study. That is, the selected theory was quite relevant to the present study as it facilitated the in-depth study of the problem.

The adopted theory has some major implication to the conducted study. The theory advocates that teacher-characteristics have great influence on the teacher's conception of instruction, classroom practice and pedagogy. The main characteristics that were focused on in the present study were content knowledge, pedagogical knowledge and technology including instructional technology.

## 2.0 Nature and scope of teacher education programme

This is a programme of education that deals with preparation of teachers, professionalization of teaching career and other related issues (Kafu, 2011). But the National Council of Teacher Education of India defines Teacher education as a programme of education, research and training to teach from Pre-Primary to higher education levels (Mohanty, 2003). According to Lucas (1972), Teacher education is a critical and essential programme because it is the one that sets the development agenda of any society. It is the creator and nurturer of the culture of the society. Through the produced teachers, this programme also serves as the source of the required competencies for the development agenda of the society (Kafu, 2013).

In the same vein, Wilkins (1975) and Fenstermacher (2015) assert that Teacher education programme is the main "pillar" in the generation and development of education and the core values of the society. According to these authorities, this is the focal point of development of education and society. Teacher education programme is the power, driver and inertia of development agenda in the society. It lays the foundation of development and use of the required competencies for instruction in educational institutions and national developments. This

explains why this programme of education has been held in high esteem in many societies over time (Ole Ketitia, 2015; Ssekemwa, 1968, 1972). But is this programme of education seen in the same light in Kenya and more so, in Higher institutions of learning in this country? The available evidence gives/paints a contrary picture (Neville, 1985).

Preparation of teachers at University and lower levels of Teacher preparation institutions in Kenya has generated mixed reactions since the nineteen seventies. In 1975 there was the cry and hue in the country about the performance of Primary school leavers in Certificate of Primary Education (C.P.E) examinations in the country (Court, 1975). The Daily Nation Newspaper of January, (1975) carried the banner reading that “Teachers have again failed the nation”. The message here was simple and clear about the quality and performance of school teachers. That is they did not know how to teach school children or rather they lacked academic and professional competencies of teaching to adequately prepare the learners to pass their examinations. Several years later, in 1996, Tuitok (Nation Media Group, 1996) echoed the same concern but in relation to the quality of University graduates when he asserted that the Kenyan universities were producing” half-baked” products. He was candid enough in the case of graduates of education who could not competently handle their teaching tasks.

Consequently, this weakness is negatively impacting on the development agenda of the country. This raises the concern whether these teachers and those who prepare them for teaching profession at university level are competent in pedagogy which is the processor and carrier of the essential competencies required for efficient instruction and by extension, the development of the individual and society. The scenario in Teacher preparation programme at university level is a complex one. There is “mixed grill” in this process (Donnelly, 2007)

Kafu (2013), asserts that there are individuals involved in preparing school teachers who, themselves, are not “trained and qualified” teachers and even those in the Faculties/Schools of Education directly involved in preparing school teachers in professional areas are not specialists in Teacher education programme. This creates complications in preparing school teachers in pedagogy and those to serve later as teacher-educators in the Faculties/Schools of Education at university level.

The produced school teachers at this level lack the some or all the identified thirteen characteristics of effective school teachers as espoused by Bond (2000). These characteristics focus on four central themes that are pedagogical in nature namely, Teaching which covers content knowledge, use of deep representation, use of problem-solving skills and improvisations; Planning which is a technical operation that includes setting up/establishing optional/conducive environments, provision of high expectations for students and imparting sensitivity to context; Attitude which covers promotion of inquiry and problem-solving skills, having passion for teaching and showing respect for learners/students (Bosire, 1995), Donnelly (2007) & Kafu (2013).

In response to the above observation, Bosire (1995) proposes the set of competencies school teachers and especially of English should be prepared in. She puts emphasis on pedagogical competencies since they are the basis of creativity and innovations in education in general and instruction in particular. This feature in preparing school teachers at university level is glaringly absent and this is the reason why the Commission for Higher Education in 2012 proposed that all university lecturers in Kenyan universities should be inducted in pedagogy (GoK, 2012).

The present state of affairs in Teacher preparation programme at university level is wanting worldwide (Kasule, 2015; Siping LIU, 2010). There is conviction that teaching involves and/or is a process of “pumping information in teacher-trainees” rather than mentoring, developing and instilling in them the required pedagogical competencies. Hence preparing and producing ill-prepared school teachers in pedagogical competence. This problem originates from the manner Teacher education programme is designed, organized and administered in the Kenya. This sector of education is casually treated by the authority in this country yet it is the most sensitive component of education (Karanja, 1978).

## 2.1 Quality of Instruction in Pedagogy

Ringa’s (1994) and Weidman (2014) observations that the future of this program is bleak or uncertain is relevant even today. There is therefore need to put in place survival mechanism for this programme. This also creates a dilemma for preparation of modern school teachers as advocated for by Moody et al (2000). That this is a crop of teachers who are expected to play various new roles in education and society. This dawn in Teacher Preparation Programme requires Teacher-educators to be familiar with these expected new roles of teachers which include but not limited to assessing and accommodating individual academic, intellectual and emotional needs of the learners. As Chow et al (1999) observe teacher-trainees must be prepared for participation in standards-based assessments and many other activities. The expanding responsibilities and expectations of the school teachers by the modern society piles pressure on Teacher preparation institutions to, reform their curriculum as observed by (Cook, Semmel&Gerber,1999).

There is adequate documented evidence to demonstrate that there has been consistent concern about the preparation of school teachers in pedagogy. The first evidence of this was in 1925 when the Phelps-Stoke education commission which pointed out that the quality of school teachers in British Tropical Africa including

the colony of Kenya was poor (Phelps-Stoke, 1925). This commission said the schools and Teacher Training Centres in this region were being handled by unqualified personnel, that is, these were individuals with no competence in pedagogy. The subsequent education commissions (Beecher, 1953; Ominde, 1965; Gachathi, 1976; Koech, 1999) noted this same weakness in administration of Teacher education programme in the country and made appropriate suggestions on how improvements should be made in this programme though not much attention has been paid to this programme by the state. The concern of UNESCO (1973) on the quality of Teacher Preparation programme which, in effect, was questioning the quality of preparing prospective teachers in Africa, was aptly picked up by the Gachathi education commission in 1976 on man-power development in Kenya. The focus of this education commission was on the quality of the existing crop of school teachers to implement the proposed Technical and Vocational education in the country. Technically these teachers were pedagogically incompetent and therefore, ill-prepared to carry out this task.

The quest for promoting the quality of preparing school teachers in pedagogy came up in the Kenyan government sessional paper number 2 of the year 2002 that called for promotion of quality in Teacher education programme (GoK, 2002). The paper expressed the fear that Kenya may not be able to fully participate in modern international developments without putting in place modernized Teacher education programme. This sessional paper took cue of the rapid economic development in the “Tigers of Asia” which was attributed to the administration of high quality Teacher preparation programmes by these countries. Unfortunately, like the previous attempts to promote the quality of Teacher education programme and especially preparation of prospective teachers in pedagogy across the Teacher education curricular (Primary, Diploma through to University Teacher education programmes levels) the recommendations of this sessional paper were never implemented. The major recommendation of this sessional paper number 2 of 2002 was that there was urgent need to over-haul the existing Teacher education programme so as to prepare and produce school teachers who can support the move towards modern development agenda in Kenya and especially industrialization process.

### 3.0 Research Methodology

The study employed a descriptive research survey design. Descriptive survey research designs was fit in this study because it describes records and analyzes situations in attempt to investigate preparation of teacher-trainees in pedagogy in Kenyan universities. The target population was lecturers teaching and preparing prospective school teachers in pedagogy in the selected universities and fourth year students pursuing degree programmes in education. The sample size comprised of 85 lecturers and 1110 fourth year students drawn from the selected universities. Purposive, random and stratified sampling techniques were used to select the subjects for the study. The research instruments included questionnaires, interview schedule/guide observation checklist and document analysis.

### 3.1 Data Analysis and Presentation

Data was analyzed using descriptive statistical techniques. Descriptive statistical techniques included mean, frequency counts and percentages. The results were presented in frequency tables. (0.05 level of significance)

### 4.0 Findings and Discussions

This section presents findings from the study about the nature and scope of teacher education programme, students’ and lecturers’ perception towards teaching of pedagogical courses and quality of teaching pedagogical courses in the faculties/schools of education in selected Kenyan universities.

#### 4.1 Scope of Teacher Preparation Programme in Kenyan Universities

Data collected on this item found that 32(37.67) lecturers indicated that the present programme for Teacher Preparation is broad and inclusive enough to produce competent school teachers for Kenya; 45(52.94) of them felt the programme is narrow and limiting in scope while 8(9.41) said they had no idea. However, when the data collected on the same item was analyzed on the basis of sex of the subjects, it was found that 29(44.62) male and 5(25) female lecturers indicated that the programme was broad and inclusive enough and therefore appropriate while 31(47.69) male and 12(60) female lecturers thought otherwise. The rest of the respondents, 5(7.69) male and 3(15) female lecturers indicated they had no opinion or could not determine the scope of the practiced Teacher Preparation programme in the present form in Kenyan universities. From these results, a large proportion, 36(55.38) male and 15(75) female lecturers consider the present Teacher preparation programme in Kenyan universities inappropriate, inadequate, irrelevant and conservative to serve the needs of modern Kenya. The programme is incapable of preparing and producing modern school teachers for Kenya with ability and capacity to participate productively in the development agenda of Kenya. Table 4.1 presents the discussed results.



**Table 4.1: Scope of Teacher Preparation Programme in Kenyan Universities**

Scope of Teacher Preparation Programme	Respondents (Lectures)		Grand total
	Male	Female	
Broad and Inclusive	29(44.62)	5(25)	34(40)
Narrow and Limiting	31(47.69)	12(60)	43(50.59)
Cannot determine/say	5(7.69)	3(15)	8(9.41)
<b>Total</b>	<b>65(76.47)</b>	<b>20(23.53)</b>	<b>85</b>

#### 4.2 Students' and Teachers' Perception on Relevance of Pedagogical Course.

The analysis of the data collected on these items shows that a large proportion, 880(80), of students thought the offered courses are relevant to the degree programmes they pursued in education at university while 220(20) thought otherwise and/or could not comment on the quality of the courses. Of great interest, the lecturers' views were similar to those expressed by students. Fifty-eight (60) of the lecturers indicated that the offered courses are relevant for Teacher preparation, 12(15) said they are not relevant but 20(25) said they were unable to comment on this matter. The emerging picture from the students and lecturers' observations concerning the relevance of the taught courses in teacher education programmes is an approval of the offered courses for the degree programmes in education. To them, notwithstanding the limitation of the scope of the of Teacher preparation programme, these courses are good and relevant for Teaching Profession. Table 4.2 presents the discussed details.

**Table 4.2: Relevance of pedagogical Courses to the Degree Programmes**

Opinion	Respondents		Grand Total
	Students	Lecturers	
Relevant Courses	880(80)	53(62.35)	933(78.73)
Not Relevant Courses	200(18.18)	27(31.76)	227(19.16)
No Comment	20(1.82)	5(5.89)	25(2.11)
<b>Total</b>	<b>1100(92.83)</b>	<b>85(7.17)</b>	<b>1185</b>

#### 4.3 Students' and Teachers' Perception on the Duration of Teacher Preparation Programme

On the duration of preparing prospective teachers, the analysis of the collected data on the relevant item shows that 540(49.09) students and 56(65.88) lecturers thought the duration was inadequate while 380(34.55) students and 16(18.82) lecturers thought otherwise. However, 180(16.36) students and 13(15.30) lecturers indicated they had no opinion on this issue. Therefore, it appears that the present duration of four years of Teacher preparation program in Kenyan universities is inadequate which agrees with the finding of (Biswas, 2005). Imam, (2011) makes a similar proposal of extension in the Teacher preparation programme duration. Table 4.3 presents the discussed details.

**Table 4.3: Students' and Teachers' Perception on the Duration of Teacher Preparation Programme**

Opinion on Duration	Respondents		Total
	Students	Lecturers	
Adequate	380(34.55)	16(18.82)	396(33.42)
Not adequate	540(49.09)	56(65.88)	596(50.30)
No opinion	180(16.36)	13(15.30)	193(16.28)
<b>Total</b>	<b>1,100(100)</b>	<b>85(100)</b>	<b>1,185(100)</b>

#### 4.4 Quality of Instruction in Pedagogy

The analysis of the collected data on of this item shows that 712(64.22) students indicated that these courses are competently taught, 290(26.36) thought otherwise while 98(8.91) had no opinion. This observation is instructive because students are the main beneficiaries of instruction in pedagogical courses. Therefore, their views on the quality of instruction in pedagogy in Kenyan universities must be taken seriously. Scrutiny of Table 4.22 shows that female students (81.66) feel that pedagogy is competently taught in their respective institutions as compared to the male (42.28) students. This observation is not surprising since female students are most likely to take interest in pedagogical courses in Faculties/Schools of Education in Kenyan universities (Biswas, 2004). These results are presented in Table 4.4.

**Table 4.4: Quality of Instruction in Pedagogy**

Quality of Teaching	Respondents (students)		Grand Total
	Male	Female	
Well Taught	200(42.28)	512(81.66)	712(64.72)
Not Well Taught	190(40.17)	100(15.95)	290(26.36)
Difficult to Say	83(17.55)	15(2.39)	98(8.91)
<b>Total</b>	<b>473(43)</b>	<b>622(57)</b>	<b>1100</b>

### 5.0 Conclusion and Recommendations

In terms of the scope of the programme; the study established that this programme is narrow in scope, conservative/conventional in nature and more or less irrelevant to the needs of modern Kenya. From the above finding, this study concludes that the concept of Teacher preparation programme in Kenyan universities is grossly misconstrued, not clear and misunderstood. On the basis of the established findings and conclusions stated above, this study recommended that the concept of Teacher preparation programme be clarified to the Kenyan universities offering this programme by the Ministry of Education as provided by Michael, (1987). Further, the study recommended that the programme be modernized by broadening its existing curriculum. This can be done by including new areas of study that a modern school teacher needs to be equipped with.

To both lecturers and students perceive that notwithstanding the limitation of the scope of the of Teacher preparation programme, these courses are good and relevant for Teaching Profession while the present duration for preparing school teachers is perceived to be inadequate. Consequently, the study recommended that given the need for modernization and broadening of the scope of this programme to meet the needs of modern Kenya, the duration/period of preparing school teachers be extended from the present four years to at least five years. The established findings of the quality of instruction in pedagogy indicated that these courses are competently and well taught. The researcher concludes that presently Teacher preparation programme in Kenyan universities is managed by specialists in this programme.

### REFERENCE

- Anees A. 2015. Teacher Education and Human Rights. *Research in Education and Review*
- Anna Hickey-Moody et al., *Pedagogy Writ Large: Public, Popular and Cultural Pedagogies in Motion*, 51 critical stud. In educ. 227, 232–33 (2000)
- Aubusson, P., Schuck, S., Kearney, M., & Burden, K. (2013). Mobilising teacher education: A study of a professional learning community. *Teacher Development*, 17(1), 1–18.
- Biswas, G., Leelawong, K., Belyne, K., Viswanath, K., Vye, N., Schwartz, D., et al. (2004). *Incorporating self regulated learning techniques into learning by teaching environments*. Paper presented at the Twenty Sixth Annual Meeting of the Cognitive Science Society
- Biswas, G., Leelawong, K., Schwartz, D. L., & Vye, N. (2005). Learning by teaching: A new agent paradigm for educational software. *Applied Artificial Intelligence*, 19, 363-392
- Biswas, G., Schwartz, D. L., Leelawong, K., Vye, N., & TAG-V. (2005). Learning by teaching: A new paradigm for educational software. *Applied Artificial Intelligence*, 19(3), 363-392
- Bond, L. (2000). *A distinction that matters: Why national teacher certification makes a difference*. Arlington, VA: National Board for Professional Teaching Standards.
- Bosire, E. S. (1995). *Proposals for the Improvement of Training Teachers of English for Primary Schools in Kenya*. Master of Philosophy Thesis. Eldoret. Moi University
- Burkhardt, H., Fraser, R., & Ridgway, J., (1990). The dynamics of curriculum change. In *Developments in school mathematics education around the world*, Vol. 2, pp. 3-29. Reston, VA: NCTM
- Chow, J. Y., Davids, K., Button, C., Rein, R., Hristovski, R., & Koh, M. (1999). Dynamics of multi-articular coordination in neurobiological systems. *Nonlinear Dynamics, Psychology and Life Sciences*, 13, 27–52.
- Cook, B.G., Semmel, M.L., & Gerber, M.M. (1999). Attitudes of principals and special education teachers toward the inclusion of students with mild disabilities. *Remedial and Special Education*, 20(4), 199-207
- Cook-Sather, A., & Youens, B. (2007). Repositioning Students in Initial Teacher Preparation: A Comparative Case Study of Learning to Teach for Social Justice in the United States and in England. *Journal of Teacher Education*, 58(1), 62-75.
- Donnelly, R. (2007). Exploring lecturers' self-perception of change in teaching practice. *Teaching in Higher Education*, 11(2), 203-217
- Donnelly, R., & O'Rourke, K. (2007). What now? Evaluating e-learning CPD practice in Irish third-level education. *Journal of Further and Higher Education*, 31(1), 31-40.
- Fenstermacher, Gary D. 2015. Nobility, Competence, and Disruption: Challenges to Teacher Education. *Teacher Education Quarterly*, v42 n2 p5-15 Spr
- Fullan, M. (1993). *Changing forces: Probing the depths of educational reform*. London, UK: Falmer

- Handal, B., Bobis, J., & Grimison, L. (2001). Teachers' Mathematical beliefs and practices in teaching and learning thematically. In J. Bobis, B. Perry, & M. Mitchelmore (Eds.), *Numeracy and Beyond. Proceedings of the Twenty-Fourth Annual Conference of the Mathematics Education Research Group of Australasia* (pp. 265–272), Sydney: MERGA
- Imam, E. (2011, December). *Getting better at teacher preparation and state accountability: Strategies, innovations, and challenges under the federal Race to the Top program*. Washington, DC: Center for American Progress. [http://www.americanprogress.org/issues/2012/01/pdf/teacher\\_preparation.pdf](http://www.americanprogress.org/issues/2012/01/pdf/teacher_preparation.pdf)
- Jamwal, B.S. (2012). *Teacher Education: Issues and their Remedies International Journal of Educational Planning & Administration. Volume 2, pp. 85-90*
- Kafu, P. A (2013). 'Teacher Education: The Incubator of Science and Technology for Development in Africa'. *African Journal of Education, Science and Technology (AJEST)*. Vol. 1, No. 1 ISSN 2309 – 9240
- Kafu, P. A. (1976). *Analysis of Elementary School Teachers' Rationale Concerning their use of Various Instructional Media in the Bungoma District and Eldoret Municipality*. Unpublished M. Ed Thesis, Kenyatta University.
- Kafu, P. A. (1999). Challenges Facing Area Supervisors in the Management of Moi University Teaching Practice Exercise in the context of the Teacher as Facilitator of Learning. A Paper presented at Teaching Practice Workshop.
- Kafu, P. A. (2011). 'The Challenges of Investing in New and Emerging Educational Technology in Africa in the Twenty First (21<sup>st</sup>) Century'. *The Educator*. Vol. 3 No. 1.
- Kafu, P.A. (2014). Teacher education: Its implications to quality of teachers in Kenya (Unpublished paper). Moi University, Kenya.
- Karanja, J. (1978). 'Development of Quality Education in Kenya in this Decade and Beyond: The case of Teacher Training Programme'. Nairobi. 'Daily Nation'. July Issue.
- Kasule, D. & Mapolelo, D. (2015) Teachers' strategies of teaching primary school mathematics in a second language: A case of Botswana, *International Journal of Educational Development*, 25, 602-617
- Lovat, T & Smith, D. [1995]. *Curriculum: Action on Reflection Revisited*. Wentworth Falls: Social Science Press.
- Lucas, Eric (1972). 'Development of Teacher Education in Africa'. Kampala. *Makererean Newsletter* No 41. teaching. Acta Universitatis Ouluensis E 45
- Michael, N. H. (June 1987). The Impact of Selected Methods of Instruction on Students' Performance in the history of 'A' Level Secondary Schools in Kampala: Kampala. Unpublished Masters Thesis. Makerere University
- Parkes, R. J., & Griffiths, T. G. (2009). *Comparative education, border pedagogy, and teacher education in an age of internationalisation*. Refereed paper presented at 'Teacher education crossing borders: Cultures, contexts, communities and curriculum' the annual conference of the Australian Teacher Education Association (ATEA), Albury, 28 June – 1 July
- Perkins, D. (1992). *Smart Schools: From Training Memories to Educating Minds*. Free Press.
- Ringa, Mercy K. (1994). *Organisation and Management of Teaching Practice (Exercise) in Kenya: A Case of Moi University and Kenyatta University*. Master of Philosophy Thesis. Eldoret. Moi University
- Siping LIU 2010. Teachers' knowledge: Review from comparative perspective. *New Horizons in Education*, Vol.58, No.1, May 2010
- Ssekemwa, E. (1968). *Comparative Education and Development in Africa. Makererean Magazine, No.3*. Kampala. Makerere University College.
- Ssekemwa, J. (1972). *History of Education in East Africa*. Nairobi. Longman. United Nations (UN) Charter of 1949. Washington. UN Publications.
- UNESCO (1973) *Technical and Vocational Teacher Education and Training*. Bristol: John Wright.
- UNESCO, 1973, *New UNESCO Source Book for Science Teaching*, 3rd impr. 1979, p.270. English, French, Spanish.
- Weidman, J., 2014 "Socialization of Students in Higher Education: Organizational Perspectives," *The Sage Handbook for Research in Education: Engaging Ideas and Enriching Inquiry*, p. 253-262,
- Wilkins, E. (1975). *Education in Practice: A Handbook for Teachers*. London. Evans Brothers Ltd
- Yates, L. (1970). Postmodernism, feminism and cultural politics: Or if master narratives have been discredited, what does Giroux think he is doing? *Discourse*, 13(1), 124-141