Tutor Competence and Teacher Trainee Academic Performance in Primary Teachers' Colleges in the Southern Region of Uganda

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Abstract

This study examined the relationship between tutor competence and teacher trainee academic performance in Primary Teachers' Colleges in Uganda. The study sample was selected through simple random and purposive sampling techniques and it comprised of 09 college administrators, 29 tutors and 189 primary teacher trainees. Data were collected through a self-administered questionnaire. The study established that: there is a significant relationship between tutors' subject knowledge and primary teacher trainee academic performance, r = .161 at 0.05 level; there is no significant relationship between tutors' pedagogical competence and primary teacher trainee academic performance r = .325 at 0.05 level; and there is a significant relationship between tutors' mentoring competence and primary teacher trainee academic performance, r = -.146 at 0.05 level. The study concludes that the quality of primary teacher graduates is significantly determined by the quality of tutors. Thus recommend that tutors should be assisted to improve their competence levels.

Key words: Tutor competence, primary teacher trainee, academic performance, Uganda

1.0 Introduction

It is widely acknowledged that the quality of education of any given country, regardless of context, to a significant extent depend on the quality of teachers (Darling-Hammond, 1997, Kagoda & Ezati, 2013). Thus, the quality of any education system the world over, cannot exceed the quality of its teachers, as they (teachers) play an essential role in the delivery of quality education (Likoko, Mutsotso, & Nasongo, 2013). Apparently, voluminous literature indicate that the quality of education in most developing countries, Uganda being no exception is low. Various factors are responsible for this state of affairs, however, one of the most notable one is teacher quality. To this end, due effort is required to ensure that high quality teachers are produced who in turn can deliver quality education to the masses. Thus, the need to mitigate factors such as tutor incompetence which impair the effective implementation of the teacher education curriculum cannot be over emphasised. Besides, it is incontestable that those who teach others must possess the right characteristics and competence like teaching qualifications to enable them give knowledge that will have a durable effect on the lives of people they teach.

For instance, the Uganda- National Assessment of Progress in Education 2011 Report provides information on tutors' subject mastery among other things, as well as, the quality of teaching in the Primary Teachers' Colleges in recent years. The Report in question, further indicates that the pass rate of primary teacher trainees in Uganda, since 2006 is between 70%-85%. Besides, up to till now, a huge number of primary teacher trainees have continued to graduate with credits (below 80%). Conversely, the number of primary teacher trainees graduating with distinctions (above 80%) has remained marginal. Lydiah & Nasongo (2009) noted that the performance of students in any academic task has always been a special interest to the governments, educators, parents and the society at large. Besides, it is indisputable that competent principals, teachers and other school teams have significant impact on successful student learning. This therefore, begs the question whether Primary Teachers' Colleges have competent tutors, and what is the effect of this on primary teacher trainees' academic performance? This study was set to address this gap in the educational research literature in the context of Uganda.

1.1 Problem Statement

There is a growing concern about the type of graduates schools produce nowadays in Uganda. As such, the government, private sector employers, policy makers, educators and the parents are raising questions regarding the competence of the present day teachers. This is buttressed by the Uganda-National Assessment of Progress in Education (NAPE, 2011) Report which shows that the quality of newly recruited teachers and even those with five years and less teaching experience is wanting. NAPE (2011) also highlights major short comings in Primary Teachers' College instructional process. As such, Primary Teachers' College tutors are becoming the focus of interest in academic performance of primary teacher trainees because of the role they play in the delivery of quality education. In Uganda, just as it is the case with so many developing countries, particularly in Africa, there is a public outcry of declining Quality of primary education, especially, with the advent of Universal Primary Education (UPE) since 1997. According to the Uganda Service

Delivery Indicators 2013, one in five primary teachers in Uganda managed to score 80% in a test based on the subjects they teach. Only 20 percent showed adequate mastery of the curriculum they teach while only 26% passed a pedagogical test that tested methodological rigor for delivery of content. This poor quality of teachers might stem from a number of causes one of which is the quality of teacher training. It is upon this background that this study set out to investigate the effect of tutor competence on primary teacher trainees' academic performance in Primary Teachers' Colleges in the Southern Region of Uganda.

2.0 Theoretical Framework

The study was mainly guided by the Teacher Competence Theory and supplemented by the Teacher Professional Development Theory. Teacher Competence Model as advanced by Yu, Luo, Sun & Strobel (2012) indicates that teachers' performance is comprised of subject matter and general pedagogy which is generally linked to the teachers' competence, characteristics and attitude. Competence can be presented from one of the three perspectives: the standards approach where by competence can be understood in reference to the quality of the outcome of an individual's performance; the input approach which aims at describing the knowledge, skills and abilities that an individual would require to produce efficient and competent performance; and the output approach which describes that competence is linked to observable performance (Stepich and Cox, 2006). The study mainly based on the aforementioned perspectives i.e. input, output and standards approach because they focus on tasks that a competent individual should be able to perform, thus, obtain accreditation as competent.

On the other hand, Teacher Professional Development theories included both Cognitive and Social aspects of learning (Borko, 2004). The mechanism of learning and the formation of an individual knowledge are through observation (Bandura, 1977). Observation learning has been found to be an important mechanism in teacher development (Lortie, 2002). Social learning perspective has considered professional learning through participation (Lave and Wenger, 1991). Social learning Theory provides a theoretical approach that integrates cognitive aspects and social effects in learning. The issue of tutor competence as a factor that affects student academic performance has received a lot of attention in the literature and findings have been mixed and inconclusive. As in any education system, teachers play a central role, being at the frontline in the transmission of knowledge. This explains why so much emphasis is given to academic and professional qualifications. It is irrefutable that poor content mastery by tutors make them unable to teach their students effectively. Crespo and Nicol (2006) and Hill, Rowan and Ball (2005) assert that teachers' knowledge of subject matter continues to draw an increasing attention from policy makers in recent years all over the world.

Research on learning to teach shows that teachers' existing knowledge and beliefs are critical in shaping what and how they learn from teacher education experiences. Borko and Putman (1996) similarly postulate that prospective and experienced teachers' knowledge and beliefs serve as a filter through which their learning takes place. Meanwhile, Reynolds, Hopkins, Potter, & Chapman (2001) asserts that it is the knowledge, beliefs and values of the teacher that are key in creating an

effective learning environment for pupils, making the teacher a critical influence in quality of education. This is in congruence with Shulman (1987) who stress the importance of subject knowledge and pedagogical content knowledge capacity building among teachers. Adediwura and Tayo (2007) further emphasises existence of high correlation between the teacher's subject knowledge and what they teach students. In line with these findings, the aforementioned authors further accentuated that the ability of a tutor to teach effectively depends on the depth of knowledge the teacher educator possesses. Therefore, it is fair to say that a tutor whose understanding of the subject content is thorough, uses clearer expressions comparative to those whose background of subject mastery is weaker.

MacDonald (2000) asserts that tutoring naturally creates a learning environment where knowledge is socially constructed, where tutors and students interact on an informal basis, and where material is clarified and understood with contributions made by both the tutor and the tutee. Furthermore, Thomas (2006) adds on that this type of learning environment inherent in tutoring which provides students the means to develop a relationship and a sense of belonging within an institution of higher education. Stephen, O'Connell and Hall (2008) stresses that students realise the importance of a good relationship with their tutor because the tutor provides both personal and academic support. Besides, Darling-Hammond, Holtzman, Gatlin & Heilig (2005) asserts that teacher quality is significantly and positively correlated with learners' attainment. This is supported by Sanders (1998) who confirms that the single largest factor affecting academic growth of a population of students is differences in effectiveness of individual classroom teachers. Concisely, most scholars seem to suggest that the most important factor affecting students' learning is the teacher since teachers are conduits for transmission of knowledge, values and skills in instructional process. This study was guided by the following research questions: I. What is the influence of tutors' subject knowledge competence on primary teacher trainees' academic performance? 2. What is the effect of tutors' pedagogical competence on primary teacher trainees' academic performance? 3. What is the influence of tutors' mentoring competence on primary teacher trainees' academic performance?

3.0 Methods

3.1 Research design

The study used a cross-sectional survey design to establish whether Tutor competence affect primary teacher trainee academic performance. This design was considered appropriate because in social science research, it is used to gather data from a sample of a population at a particular time in order to obtain information about preferences, attitudes, practices, concerns or interests of a group of people (Amin, 2005). A quantitative research paradigm was adopted because in social science research, the quantitative research method is widely accepted as being more reliable and objective; the method also enables the researcher to use statistics to generalise a finding; the method also often reduces and restructures a complex problem to a limited number of variables; the method also enable the researcher to look at relationships between variables and become able to establish cause and effect in highly controlled circumstances; the method is considered appropriate to test theories or hypotheses; the method furthermore assumes a sample as being representative of the population;

and subjectivity of researcher in methodology is relatively controlled (Amin, 2005; Creswell, 2013; Kumar, 2011).

3.2 Population and sampling techniques

The study's target population consisted of: 9 college administrators, 29 tutors; and 189 primary teacher trainees all from the three selected Primary Teachers' Colleges in the Southern Region of Uganda. The aforementioned categories of participants were considered appropriate for the study because they have first hand opinions, views and ideas regarding tutor competence and primary teacher trainees' academic performance. This was premised on the fact that they are key actors in the instructional process in Primary Teachers' Colleges in Uganda. The study employed simple random sampling and purposive sampling techniques to select participants in the study. The two sampling techniques were considered appropriate for the study owing to the fact that simple random sampling is a technique where a sample is selected in such a way that all the elements in the sample population have the same probability of being selected thus reducing bias in the selecting of respondents to participate in the study (Oso and Onen, 2005). Conversely, the purposive sampling is a technique where the researcher select a sample basing on personal knowledge and experience of the group that was sampled. This is based on the assumption that the respondents have the information one requires to answer the study research questions (Amin, 2005).

3.3 Research instrument

The study used Self-Administered Questionnaire (SAQ) to gather the study data. SAQ refers to a questionnaire that has been designed specifically to be completed by a respondent without intervention of the researcher (s) collecting the data (Amin, 2005; Kumar, 2011). The questionnaire had both open and closed items that enabled the respondents to give their perceptions, opinions, views, and feelings about tutor competence and primary teacher trainee academic performance in primary teachers' colleges in Uganda. The questionnaire was considered appropriate for this study due to the fact that it is a tool for data collection which is less expensive to administer (Amin, 2005). In addition, the questionnaire more often than not, is considered as being reliable for collecting information from respondents who are scattered in a vast area (Ghosh, 2007). Moreover, a questionnaire is also considered convenient for literate respondents who are able to fill it within a short time.

3.4 Data Analysis

The study data was checked for completeness, and entered into Statistical Package for Social Scientist (SPSS). Thereafter, the Independent variable aspects and the dependent variable aspects were correlated using the Pearson correlation Co-efficient Test Index. This aimed at establishing the relationship that exist between tutor competence and Teacher trainee's academic performance in the selected Primary Teachers' Colleges in Uganda. The correlation results were interpreted as follows: Very weak = 0-.19; Weak = .20-.39; Moderate = .40-.59; Strong = .60-.79; and Very strong = .80-1.00 (Evans, 1996).

4.0 Results and Discussion

Influence of tutors' subject knowledge competence on teacher trainees' academic performance in Primary Teachers' Colleges in the Southern Region of Uganda

Table 1: Correlation results between tutors' subject knowledge competence and primary teacher trainees' promotional results (N=189)

Item		Subject knowledge competence	Promotional examinations results
Subject knowledge competence	Pearson Correlation	1	.161(*)
	Sig. (2- tailed)		.027
	N	189	189
Promotional examinations results	Pearson Correlation	.161(*)	1
	Sig. (2- tailed)	.027	
	N	189	189

^{*} Correlation is significant at the 0.05 level (2-tailed)

The Pearson Correlation Co-efficient results in Table 1 show that there is a significant relationship between tutors' subject knowledge and primary teacher trainees' promotional results. The r = .16*, n = 189, p < .05, $r^2 = .02$. The relationship though significant is perceived as being very weak (Evans, 1996) The results of this study concur with Akpo & Jita (2013), where in their study they found that teachers' academic qualifications and subject specialisation had a significant and positive relationship with students' academic achievement in junior secondary school certificate mathematics in Namibia. This therefore implies that the more the tutors attain higher academic and professional qualification in their subjects of specialisation, the higher the chances that primary teacher trainees' are likely to perform better in their academics.

The study findings also herein are in agreement with Goe & Stickler (2008:3) who advance that: "
stronger correlations exist between the achievement of secondary school students and their
teacher's subject-area expertise (as reflected by various credentials) than exist between the success
of younger students and their teacher's subject knowledge". Similarly, Muyosola & Ademola
(2013) affirms that it is a well-known fact that; teacher subject knowledge competence has an
influence on students' learning in the classroom settings. This is buttressed by Obot (2014) who
advance that teachers' knowledge of subject matter has much influence on interest in learning. As it
can be seen, the preceding findings of aforementioned authors correspond with the findings of this
study.

Effect of tutors' pedagogical competence on teacher trainees' promotional results in Primary Teachers' Colleges in the Southern Region of Uganda

Table 2: Correlation results between tutors' pedagogical competence and primary teacher trainees' promotional examination results

		Tutors' Pedagogical	Promotional examination results
Tutors' pedagogical competence	Pearson Correlation	1	.072
	Sig. (2-tailed)		.325
	N	189	189
Promotional examination results	Pearson Correlation	.072	1
	Sig. (2-tailed)	.325	
	N	189	189

The study results in Table 2 indicate that there is no significant relationship between tutors' pedagogical competence and primary teacher trainees' promotional results. The r = .32, n = 189, p > .05. This implies that in the Teacher Training College context, pedagogical competence of tutors, though important, single-handedly does not significantly affect primary teacher trainees' academic performance. This presuppose that there are other key factors that influence primary teacher trainees' academic performance.

The study results in Table 2 concur with the work of Akiri (2013) that teachers' classroom effectiveness has only a minimal influence on the academic performance of students. However, this does not necessary mean that pedagogical competence is not vital in the instructional process, if we want to attain improved learners' learning outcomes. This is buttressed by Ganyaupfu (2013) who avow that in order to facilitate the process of knowledge transmission, teachers should apply appropriate teaching methods that best suit specific objectives.

Influence of tutors' mentoring competence on teacher trainees' school practice results in Primary Teachers' Colleges in the Southern Region of Uganda

Table 3: Correlation results between tutors' mentoring competence and school practice results for Grade III student teachers' performance

		Mentoring competence	School practice results
Mentoring competence	Pearson Correlation	1	146(*)
	Sig. (2-tailed)		.045
	N	189	189
School practice results	Pearson Correlation	146(*)	1
	Sig. (2-tailed)	.045	
	N	189	189

^{*} Correlation is significant at the 0.05 level (2-tailed).

The study results in Table 3 show that there is a significant relationship between tutors' mentoring competence and primary teacher trainees' school practice results. The r = -.14 (*), n = 189, p < .05, $r^2 = .01$. The relationship though significant is perceived as being very weak (Evans, 1996). This means that tutors' mentoring competence has influence on primary teacher trainees' school practice results. This finding therefore tend to suggest that if primary teacher trainees' are not mentored sufficiently, their school practice performance is significantly impaired and vice versa.

The study results herein agree with Crisp and Cruz (2009) that in higher education, mentoring yield positive effects for mentees (better academic performance), as well as for mentors (more satisfaction) and the institution itself. This is in line with Alos, Caranto, & David (2015) study, where it is postulated that several factors pose a high impact on the academic performance of students in a higher education institution, with teacher-related factors topping the list. This is in accord with Metzler & Woessmann (2010) assertion that there is clear evidence that teacher quality is a key determinant of student learning. As such, tutors as mentors of primary teacher trainees, need to possess high academic and professional qualifications. This concur with Fakeye (2012) affirmation that teachers' teaching qualification has a significant relative contribution to students' academic achievement.

5.0 Conclusion

Tutors' subject knowledge and mentoring competence has been found out as key aspects that determine primary teacher trainees' academic performance. Conversely, it has been established that tutor's pedagogical competence single-handedly does determine primary teacher trainees' academic achievement. This therefore implies that tutors should adequately possess all the core competence aspects such as: subject matter knowledge; pedagogy; and mentoring competence if they want to significantly contribute to high primary teacher trainees' academic performance during their trajectory.

6.0 Recommendation

It is hereby recommended that tutors in primary teacher training colleges in Uganda should be encouraged to upgrade and acquire higher qualifications, attend seminars, workshops to update their knowledge, pedagogy and mentoring competence so as to be efficient and effective. In addition, the Ministry of Education and Sports should have a standardized system of recruitment of tutors to avoid incompetent tutors being recruited in teacher training colleges. This can be done by considering only those who have done Bachelors of Teacher Education or a Post Graduate Diploma in Education or any other higher academic and professional qualification in Teacher Education.

7.0 References

Adediwura, A. A., & Tayo, B. (2007). Perception of teachers' knowledge, attitude and teaching skills as predictor of academic performance in Nigerian secondary school. *Academic Journal on Educational Research and Review*, 2(7), 165-171.

- Aduwa-Ogiegbaen, S. E., & Iyamu, E. O. S. (2005). Using Information and Communication Technology in Secondary Schools in Nigeria: Problems and Prospects. *Educational Technology & Society*, 8 (1), 104-112.
- Akiri, A. A. (2013). Effects of Teachers' Effectiveness on Students' Academic Performance in Public Secondary Schools; Delta State Nigeria. *Journal of Educational and Social Research* 3(3), 105-111.
- Akpo, S. E., & Jita, L. C. (2013). The influence of selected teacher inputs on students' academic achievement in the junior secondary school certificate mathematics in Namibia. *The Journal for Transdisciplinary Research in Southern Africa*, 9(3), 465-479.
- Sunshine, B. Alos, S. B., Caranto, L.C., & David, J. J. T. (2015). Factors Affecting the Academic Performance of the Student Nurses of BSU. *International Journal of Nursing Science* 2015, 5(2): 60-65.
- Amin, M. E. (2005). Social Science Research concepts, Methodology and Analysis. Kampala: Makerere University Press.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. Psychological Review, 84(2), 191-215.
- Borko, H. (2004). Professional Development and Teacher Learning: Mapping the Terrain Educational Researcher, 33(8), 3-15.
- Borko, H., & Putnam, R. (1996). Learning to teach. In D. Berliner & R. Calfee (Eds.), *Handbook of educational psychology (673-708)*. New York: Macmillan.
- Crespo, S. & Nicol, C. (2006). Challenging pre-service teachers' mathematical understanding: The case of division by zero. *School Science and Mathematics*, 106(2) 84-97.
- Creswell, J. W. (2013). *Qualitative, quantitative, and mixed methods approaches (4th ed.*). Thousand Oaks, CA: Sage.
- Crisp, G., & Cruz, I. (2009). Mentoring College Students: A Critical Review of the Literature between 1990 and 2007. *Research in Higher Education*, 50, 525-545.
- Darling-Hammond, L. (1997). *Doing What Matters Most: Investing in Quality Teaching*. New York: The National Commission on Teaching and America's Future.
- Darling-Hammond, L., Holtzman, D. J., Gatlin, S. J., & Heilig, J. V. (2005). Does teacher preparation matter? Evidence about teacher certification, Teach for America, and teacher effectiveness. *Education Policy Analysis Archives*, 13(42)
- Fakeye, D. O. (2012). Teachers' Qualification and Subject Mastery as Predictors of Achievement in English Language in Ibarapapa Division of Oyo State. *Global Journal of HUMAN SOCIAL SCIENCE*, 12(3), 1-6.
- Ganyaupfu, E. M. (2013). Teaching Methods and Students' Academic Performance. *International Journal of Humanities and Social Science Invention*, 2 (9), 29-35.
- Ghosh, B. N. (2007). *Scientific Method and Social Research* (Revised edition). New Delhi, Sterling Publishers Pvt. Ltd.
- Goe, L., & Stickler, L.M. (2008). Teacher Quality and Student Achievement: Making the most of Recent Research. National Comprehensive Center for Teacher Quality. Available a: www.NCCTQ.org.
- Hill, C. H., Rowan, B., & Ball, D. L. (2005). Effects of Teachers' Mathematical Knowledge for Teaching on Student Achievement. American Educational Research Journal, 42(2), 371-406.

Kagoda, A. M & Ezati, B. A. (2013). Contribution of Primary Teacher Education Curriculum to Quality Primary Education in Uganda. In Problems of Education in the 21st Century. ISSN 1822-7864 Volume 52, 2013.

- Kumar, R. (2011). *Research methodology: a step by step guide for beginner* (3rd ed.). London: SAGE Publication Ltd.
- Lave, J., & Wenger, E. (1991). Situated learning: legitimate peripheral participation. Cambridge: Cambridge University Press.
- Likoko, S., Mutsotso, S., & Nasongo, J. (2013). Tutor Competence and its effect on quality of teacher preparation in emerging private primary teacher training colleges in Bungoma County- Kenya. *Journal of Education and Practice*, 4(2), 95-102.
- Lortie, D. C. (2002). *Schoolteacher* (2nd ed.). Chicago and London: The University of Chicago Press.
- Lydiah, L. M., & Nasongo, J.W. (2009). Role of the Head teacher in Academic Achievement in Secondary Schools in Vihiga District, Kenya Masinde Muliro University of Science and Technology, Kenya.
- MacDonald, R. B. (2000). *The master tutor: A guidebook for more effective tutoring* (2nd ed.). New York, NY: Cambridge Stratford.
- Metzler, J., & Woessmann, L. (2010). The Impact of Teacher Subject Knowledge on Student Achievement: Evidence from Within-Teacher Within-Student Variation. Discussion Paper No. 4999
- Muyosola, B., & Ademola, B. (2013). Influence of cognitive performance on mathematics student's level of achievement. *International Researcher*, 2 (1), 142-150.
- Obot, I. M. (2014). Influence of teachers' competence in subject matter on students' interest the learning of social studies education in Akwa Ibom State in Nigeria. 03 June 2014, 10th International Academic Conference, Vienna, ISBN 978-80-87927-02-1, IISES.
- Owolabi, O.T., & Adedayo, J.O. (2012). Effect of Teacher's Qualification on the Performance of Senior Secondary School Physics Students: Implication on Technology in Nigeria. *English Language Teaching*, 5 (6), 72-77.
- Oso, W., & Onen, D. (2000). A general guide for writing research Proposal and Report. A HandBook for Beginning Rearchers. Kampala: Makerere University Press.
- Reynolds, D., Hopkins, D., Potter, D. & Chapman, C. (2001). School improvement for schools facing challenging circumstances: A review of research and practice. London: Department of Education and Skills.
- Sanders, W. L. (1998). Value added assessment. School Administrator, 11(55), 24-27.
- Shulman, L. S. (1987). Knowledge and Teaching: Foundations of the new era. *Harvard Educational Review*, *57*(1), 1-21.
- Stephen, D. E., O'Connell, P., & Hall, M. (2008). 'Going the Extra Mile', 'Fire-fighting', or 'Laissez-faire'? Re-evaluating Personal Tutoring relationships within mass higher education'. *Teaching in Higher Education*. *13*(4): 449-460.
- Thomas, L. (2006). 'Widening participation and the increased need for personal tutoring'. *In* Thomas, L. and Hixenbaugh, P. (eds) *Personal Tutoring in Higher Education*. Stoke-on-Trent: Trentham.
- Uganda National Examinations Board (2011). NAPE- The Achievement of Primary school pupils in Numeracy and Literacy in English.
- Yu, J. H., Luo, Y., Sun, Y., & Strobel, J. (2012). A Conceptual K-6 Teacher Competency Model for Teaching Engineering. *Procedia Social and Behavioral Sciences* 56 (2012) 243 252.