



DSPACE

<https://dspace.org/>

Relationships between Pre-service Student Teacher's Teaching Practice Anxiety, Self-determined Personal Characteristic and Academic Achievement

Kamonjo, Florence W.; Nyambura, Rose

2023-03-11

European Journal of Education and Pedagogy

10.24018/ejedu.2023.4.2.484

Kamonjo, F. W., & Nyambura, R. (2023). Relationships between Pre-service Student Teacher's Teaching Practice Anxiety, Self-determined Personal Characteristic and Academic Achievement. European Journal of Education and Pedagogy, 4(2), 48-57.

Relationships between Pre-service Student Teacher's Teaching Practice Anxiety, Self-determined Personal Characteristic and Academic Achievement

Florence W. Kamonjo and Rose Nyambura

ABSTRACT

Teaching Practice (TP) is an essential and compulsory stage in teachers training, as it gives them a worthwhile opportunity to practice what they have learned during training. It involves real classroom teaching which leads to most students experience anxiety which interferes with their performance. This study was planned to examine the relationship between university student teachers' anxiety levels towards TP with their self-determined learner's personality and with academic performance in TP. The study involved two Kenyan universities; University of Kabianga and Laikipia University. Study population was 800 student teachers undertaking their TP exercise. A random sample of 105 students were involved. Research design was descriptive-correlational research design while research method was cross-sectional analytical survey. Three tools were used to collect data; The Student Teacher Anxiety Scale (STAS), Teaching Practice Assessment Score Sheet (TPASS) and Eysenck Personality Questionnaire (EPQ). Pearson correlation coefficient, r , was used to test the relationship between student teachers' anxiety, personal characteristics, and academic achievement. Results indicate that; academic achievement in TP exercise and TP anxiety are high, there is a weak statistically significant negative relationship between TP anxiety and academic achievement and the negative relationship is statistically significant in evaluation and professional preparation anxieties only. Furthermore, there is a statistically insignificant relationship between learner personality and academic achievement in TP.

Keywords: academic achievement, personal characteristic, teaching practice, teaching practice anxiety.

Published Online: March 11, 2023

ISSN: 2736-4534

DOI : 10.24018/ejedu.2023.4.2.484

F. W. Kamonjo *

University of Kabianga, Kenya

(e-mail: kamonjo2012@gmail.com)

R. Nyambura

Laikipia University, Kenya

(e-mail: nyamburur22@yahoo.com)

**Corresponding Author*

I. INTRODUCTION

Teaching Practice (TP) which is significant and compulsory component of teacher training serves as the pre-service teacher's introduction into the real-life world of the school. TP is a crucial component of teacher training since it is when student teachers experience real teaching that gives some form of teaching experience (Koerner *et al.*, 2002). In addition. During TP student teacher form general perspective regarding teaching career and responsibilities of a teacher (Ponte & Brunheira, 2001). Globally there is a general agreement that TP is fundamental to teacher education programmes (Kasanda, 1995; Ngidi & Sibaya, 2003, p. 18; Marais & Meier, 2004, p. 220; Perry, 2004, p. 2).

Literature proposes that student-teachers have mixed feeling about TP exercise such as; anxiety, nervousness and gladness. Perry (2004) mentioned two types of excitement experienced by student teacher; First a feeling of excitement that they are going to be a part of an actual classroom situation, where there is really interactions with students and real classroom management tasks. Secondly student-teachers have many uncertainties whether they will be able to cope

with unusual situations such as class control and management, how to establish a good and cordial relationship with university assessor and supervisor. This mixture of feelings leads to increase anxiety.

TP involves three personalities namely, The Student Teacher/teacher candidate, the Supervising Teacher/substantive/co-operating teacher and the University Supervisor/assessor which make up the Student Teaching Triad (IUPUC Division of Education Indiana University-Purdue University Columbus, 2015). A student teacher is defined as a student who is undertaking pre-service training in teaching. Some authors have embraced this definition in their studies (D. P. Ngidi & Sibaya, 2003; Davis, 1990; Hourcade *et al.*, 1988; Jianping, 2002).

However, it appears that the learner who is a very important component of TP is omitted in the Triad given by IUPUC, 2015. This study has added the learner at the center of the triad because the TP process revolves around the learner. It is the learner the student teacher engages with in the classroom. Without the learner the TP process will not take place since the student teacher cannot teach an empty classroom. Fig. 2 shows this study's conceptualization of the TP.

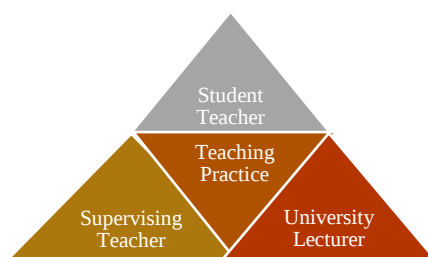


Fig. 1. Teaching Practice Triad.
Source: IUPUC Division of Education Indiana University-Purdue University Columbus, 2015).

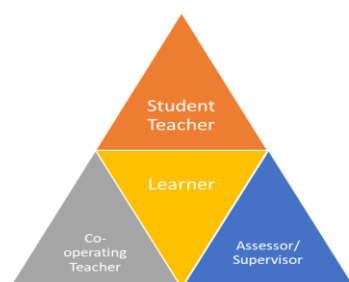


Fig. 2. Teaching Practice Triad (Source: Authors).

Similar view was given by Hoggson as early as 1965 when he ended his article titles “The Assessment of Teaching Practice: What criteria should we choose?” by stating that, TP could be seen as a co-operative, unending process of personal development and professional growth of the student-teacher where the supervising teacher/school, tutor/education department and student are mutually responsible (Hodgson, 1976). Therefore the learner should not be left out in the TP triad.

The simple role of the members of the triad is to work as a team through endless communication in order to support, boost, and prepare the Student Teacher to become an insightful professional. Each member has a specific set of responsibilities. Each triad member has specific roles that offer the groundwork for an efficacious student teaching experience (University of Minnesota, 2022). However each of these members of the triad can be a source of TP anxiety. The responsibilities and expectations for each member are as follows;

A. Cooperating Teacher's Role

Give assistance the student teacher feel contented and welcome in the school, Examination school policies and processes, Encourage student teacher get involved in school happenings, Share resources and thoughts, Assist the student teacher in the development of standards built lessons, Spot and offer constructive feedback, Identify and implement the co-teaching strategies among many others.

However, the relationship with the host school staff, and especially with the mentor teachers, can be another source of anxiety. Studies have shown that some respondents voiced bad experiences with their mentors (Kiggundu, 2007). A decent relationship with the mentor teacher may diminish anxiety in the practicum (Ngidi & Sibaya, 2003, MacDonald, 1993). Ngidi (1998) proposed that “effective supervision and guidance of student teacher from co-operating teachers also plays an important role in lowering anxiety among student teachers.”

B. University Supervisor's Role

The role of supervisor is very important in success of a student-teacher during TP. Supervision is needed in making connections between theory and practice through experiencing teaching before going into an actual teaching profession (Kasanda, 1995). A supervisor: Provides an orderly and steady presence during the student teacher teaching experience, offers program information to the cooperating and teacher, Detects and offer feedback on a regular basis, acts as a confidant for both the cooperating and student teacher, be an advocate for the student teacher, Schedules pre and post conferences at the beginning and end of the teaching session to mention but a few. Student-teacher cannot do without the support of supervisor, since a student lack competence and proficiency in TP which impacts them negatively (Kanwal *et al.*, 2017)

However if these roles are not well understood they may be a source of anxiety on student teacher concerning supervisor. Research show that evaluation anxiety initiated by being observed and assessed by the supervisor is usually a major source of TP anxiety (Capel, 1997b). Anxiety could also be brought by the response of the supervisor to an unsuccessful lesson (Heeralal, 2014).

C. Role of the Learner

According to (HS-10 Responsibility of the Learner. Pdf, n.d.), a learner is an active participant during the teaching and learning process. Responsibilities of the learners are: To actively listen to classmates, reason, give comments, discuss ideas, ask questions, read, write, talk, observe and listen for understanding. The main role of the learner is to engage with the student teacher in the teaching and learning process. Engagement here includes Answer questions raised by the student teacher and other learners, ask questions to clarify what has been taught, do tasks given by the student teacher during and after teaching and Maintain discipline during the lesson.

These roles of the learner can cause anxiety in the student teacher because it is not obvious that the learner will ask and answer questions, do tasks given by student teacher or even maintain discipline during a lesson. It has been indicated that one of the main reason of anxiety in student-teachers is discipline/classroom management problems. This is because they lack sufficient ability to cope with discipline hitches like class management (Kanwal *et al.*, 2017).

D. Student Teacher Assessment during TP

The role of the college tutor/university lecturer during TP is essentially one of supervising, assisting, and inspiring the student teacher to do their work. However sometimes during TP, the tutor assesses the student teacher's ability to teach (Fletcher, 1958). The assessment varies from grades on a fifteen-point scale, to one of simply “satisfactory” or “unsatisfactory” occasionally accompanied by a written report according to Anders-Richards (1969). Various approaches are used to assess teacher quality which may include the process-product observational measures, evaluation checklists, professional standards, large-scale surveys, and commercially available observation systems (Blanton *et al.*, 2006).

However, according to (Morris, 1970), there are

difficulties integral in assessment of TP through grading. Some of these difficulties are; the teaching mark lack of validity, signifying that the score does not assess what it intended to assess. It only reveals a strictly limited number of teaching skills instead of a whole range of the student's teaching ability and further is undistinguishably linked with the discipline and organization of the school where TP is carried out. Assessment by grading lacks reliability which means that it is not reproducible and therefore termed as inappropriate. Assessment by grading gives little practical value and hinders student's realization of some of the objectives of TP and therefore can impair the student tutor relationship (Morris, 1970).

With regard to his and other criticisms, Morris recommended that assessment by grading should be disallowed and replaced with constant evaluation with unquantified assessment.

In an effort to offer an alternative mode of assessment from grading, Caspari and Eggleston in their article titled "A New Approach to the Supervision of Teaching Practice" proposed assessment where the supervisor did not go into the classroom in which the student teacher was teaching. Rather, the supervisor considers and discuss "case histories" submitted by the student teacher like in social workers (Caspari & Eagleston, 1965). Ryan in his document titled "Characteristics of Teachers," underscored the fact that no matter how good a rating schedule may be, the success of the measuring instrument depends, finally, on the skill of the observer (Ryan, 1960).

However in spite of the oppositions raised by Morris and various efforts to move away from assessments by grading, most student-teachers in TP are assessed, in the school system, by tutor/lecturers and supervising teachers (Hodgson, 1976).

According to Deering, n.d., little consideration has been paid to the evaluation of student teachers while one on the most important grade a student teacher receives during training is the TP score. In addition, teachers who receive an A grade gets a genuine expectation of obtaining a teaching job upon completion of training. A student who scores a B grade in TP their job prospects reduced dramatically while a grade C in TP removes a student teacher from serious consideration for most teaching positions (Deering, n.d.). This can cause anxiety on the student teacher when undertaking the TP exercise.

Placing a lot of weight on "The Grade" is unfortunate in lieu of several reasons according to Deering. To the student teacher, it can turn TP exercise into a race for grade, which can only be won by impressing the cooperating teacher and assessor/supervisor, while TP time should be spent learning by experimenting and risk taking. In some parts of the world evaluation of student teacher to assign a grade is done by both co-operating teacher and university supervisor, while in other institutions what accounts for the final grade is scores of the university supervisor. A case in point is the two universities in this study University of Kabianga and Laikipia University where assessment for a grade is solely the task of university supervisor. The co-operating teacher does not score the student teacher but only guides and assists the teacher during the TP period. This emphasis on the grade can result into student teacher being anxious towards TP.

At University of Kabianga a student teacher is evaluated 4 times during TP practicum by 4 different lecturers who score the student performance in the lesson observed. The overall grade for the TP exercise is got from averaging the scores of the 4 observed lessons. At Laikipia University a student teacher is evaluated 3 times by 3 different lecturers in classroom setting and the TP score will be an average of the 3 scores. However, Laikipia University students are also assessed a fourth time for teaching-learning resource materials preparation and their applicability for teaching. It is this scoring that tends to make student teachers have anxieties toward TP with the highest level of anxiety recorded in evaluation category because it is from evaluation that a grade is given. Literature reveals that student-teachers are apprehensive about TP (McBride, 1984, Cowden, 2009) and student teachers were more anxious about evaluation (D. P. Ngidi & Sibaya, 2003). The emphasis on a letter grade makes student teachers overly stressed about TP and also leads to grade inflation (Deering, n.d.). As a result, together university supervisors and cooperating teachers yield to the Halo and Leniency effects. Despite all these arguments on whether and how to score TP many institutions continue to score TP by awarding either a letter score A, B or number scores in percentage.

E. Academic Anxiety

Feeling of being distressed, fearful, or stressed out as a consequence of school pressures (4964104180009246281.Pdf, n.d.). It is mostly experienced during timed activities and in circumstances where students are expected to do their best, for example on the Scholastic Assessment Tests (SATs). It varies in severity from mild, momentary jitters, to a serious disorder in which a person experiences overpowering panic and has difficulty functioning normally.

Students that experience academic anxiety feel worried over academic tasks and can be anxious to every academic task. Some may only feel anxiety related to test taking or other specific tasks (Hooda & Saini, 2017).

F. Effects of Anxiety on Academic Performance

Anxiety is not an evil thing according to (Sullivan, n.d.). It is a fact that high levels of anxiety can interfere with concentration and memory, which are needed for academic accomplishment. However, without anxiety, most of people would not have motivation to study for exams, write papers, or do daily class and homework particularly in classes and subjects we find unexciting. Therefore modest amount of anxiety essentially helps academic achievement by creating motivation. Anxiety is not always negative, it can motivate some students (Hooda & Saini, 2017)

G. Academic Performance in TP

TP is an academic exercise that is evaluated to determine academic achievement. Academic achievement is influenced by many factors. According to Khan *et al.* (2019), academic performance depends on a range of factors not restricted to intelligence, gender, teaching methods, study methods, socioeconomic status, and daily study hours. Literature has it that in adding to ability and intelligence, personality variables also have an important role in predicting academic achievement (O'Connor & Paunonen, 2007).

Literature reports high to average performance of student teachers in TP assignment. AKINWUMI *et al.* (2018) reported that academic performance of the student teacher in TP could be considered below average (AKINWUMI *et al.*, 2018). Others reported failure in TP (Morton *et al.*, 1997; Broadhead *et al.*, 1996). With this disagreement in finding it was important to find out TP academic performance of student teachers in LU and UoK universities in Kenya.

H. Student Teachers' Anxiety during TP

Due to the heavy responsibilities and temperaments of student teachers they tend to be anxious about the TP exercise. TP sometimes becomes a demoralizing and sometimes very frightening experience (Steyn & Killen, 2001). Anxiety is a sensation of worry, nervousness, or unease concerning something which has an unclear outcome. TP student teachers' anxieties then are a sense of worry, nervousness, or unease about the exercise because it normally has undefined outcome. Research shows that student teachers are anxious about TP (Cowden, 2009, McBride, 1984, Behets, 1990 and Wendt & Bain, 1989). According to Steyn and Killen, (2001) and Ngidi and Sibaya, (2003) student-teachers believe that teaching practice is the most challenging work, and they have countless doubts, fears and worries about TP.

Studies done in various countries have studied the extent to which student teachers experience anxiety towards TP related issues. Some of these studies show that student teachers experience high anxiety levels (Cowden, 2009; Kazu, 2001) while others showed that they experience moderate levels of anxiety (Morton *et al.*, 1997, Behets, 1990 and Wendt & Bain, 1989). Therefore different levels and causes of TP anxieties and concerns have been reported. Studies have revealed that area of anxiety expressed by student teachers are from evaluation or assessment, professional preparation, class control, and school staff factors (Capel, 1997a).

According to Donaldson *et al.*, (2002), evaluation anxiety can be beneficial as well as detrimental in the TP program evaluation context. Reasonable level of evaluation anxiety is said to motivate people to perform. It is only when anxiety become excessive that can undermine the quality of their performance. It is for this reason that this study was designed to establish levels of TP anxiety of student teachers that would probably undermine student's works with the intentions of mitigating against such anxieties.

I. Measuring Student Teacher Anxieties toward TP

Numerous research has used the student-teachers anxiety Scale (STAS) instrument to measure student teacher anxieties related to TP according to Morton *et al.*, (1997) and Capel, (1997). This scale was developed by Hart (1987) using samples of student teachers in England. This instrument was validated by these studies through factor analysis for the purpose of identifying those items that tended to form clusters. A five-point Likert-type scale was used. Respondents were asked to circle the number which best described how they perceived each of the statements with regard to practice teaching on a five-point Likert-type scale. The ratings were: Very much (4), Moderately (3), Somewhat (2), Rarely (1), Never (0).

This tool was adopted and modified to suit this study.

II. OBJECTIVES OF THE STUDY

The following were the specific objectives of this study:

1. To establish student teachers personal characteristic.
2. To determine the TP anxiety levels of university student teachers.
3. To find out academic achievement of university student teachers in TP exercise.
4. To determine whether there is statistically significant difference between TP mean scores of student teachers from LU and UoK.
5. To determine whether academic achievement in TP is influenced by student teacher's anxiety towards TP.
6. To find out whether there is a relationship between a student teacher's academic achievement and student personality.

III. HYPOTHESES OF THE STUDY

1. Ho1: There is no statistically significant difference between TP mean scores of student teachers from LU and UoK.
2. Ho2: There is no statistically significant relationship between student teacher's academic achievement in TP exercise and student personality.
3. Ho3: There is no statistically significant relationship between student-teachers' academic performance in TP exercise and their anxiety levels towards TP.

IV. THEORETICAL FRAMEWORK

This study is anchored on Situated Learning Theory which was first suggested by Jean Lave and Etienne Wenger. This is a model of learning in a community of practice. This is learning that takes place in the same context in which it is used or in the workplace. The workplace is considered as a discernible community of practice operating as a context wherein newcomers assimilate norms, behavior, values, relationships, and beliefs (Kemp, 2018). Lave and Wenger (1991) contend that learning is a social process where knowledge is co-constructed and as such learning is positioned in a precise context and entrenched within a specific social and physical environment. In this case the student teachers will be learning in a community of practice, the school environment which encapsulates both social and physical environment. Learning of student teacher will largely be supported by learners, cooperating teacher, assessor and school administration. Others social support will come from other teachers, support staff and parents.

V. CONCEPTUAL FRAMEWORK

The following was the conceptual framework of this study.

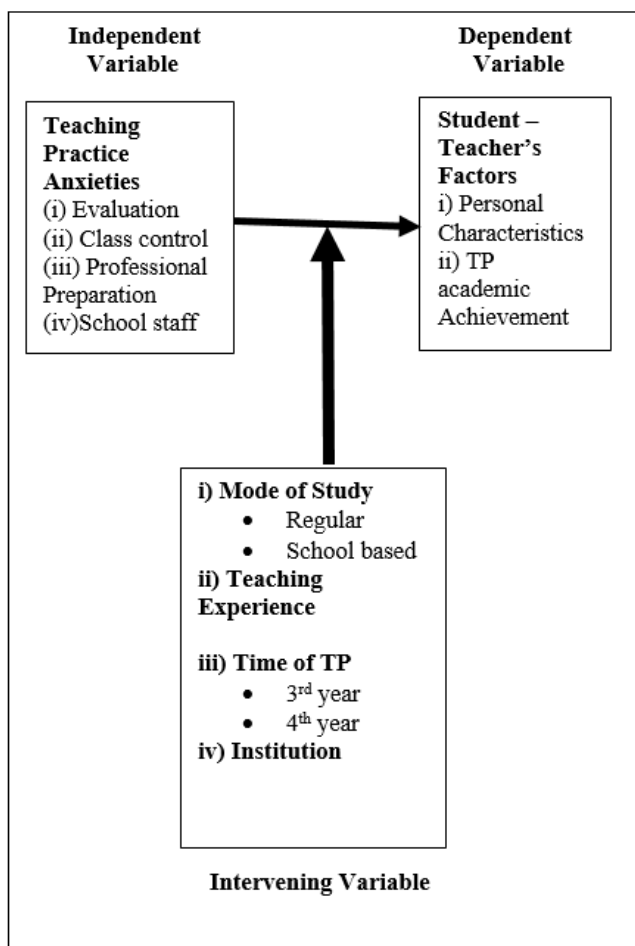


Fig.3. Schematic diagram showing the relationship between independent, dependent, and intervening variables of the study.

VI. RESEARCH METHOD AND TOOLS

Descriptive-correlational research design was employed in this research study. Research method was cross-sectional analytical survey which involves analyses of the relationship between different elements (variables) in a sample group (Yumpu.com, n.d.). Variables of the study are; dependent-TP anxiety, independent- students personal characteristic, teaching subject, student teacher category (pre-service or post-service) and gender.

The study population was all student teachers in proceeding for TP in Universities in Kenya. The accessible population was student teachers in UoK and LU in Kenya. The study sample size was 105 pre-service student teachers who enrolled for TP in the year 2021 in Faculty/School of Education. In the Kenyan Universities student teachers attend TP only once at the end of either third year of study (UoK) or at the end of fourth year (LU). The sampling procedure was stratified random sampling. The strata of sampling was the universities under study. Participants were then randomly sampled.

Tool for data collection were two:

- 1) One online questionnaire which collected information on:
 - a) Student teachers' anxiety, the Student Teacher Anxiety Scale (STAS). STAS is a five-point Likert-type scale with 26 items with options; Very Much (VM); Moderately (M); Somehow (SH); Rarely (R); and Never (N). This STAS has high reliability with

an internal consistency reliability coefficient of .92 and a retest reliability coefficient of .94. It was adopted for this study then modified to suit words that are commonly used in Kenya. The main modification was on somehow which was changed to somehow.

- b) Students' personal characteristics. Eysenck Personality Questionnaire (EPQ) was adopted and modified to suit this study. Additional information was on teaching subjects, student teacher category (post or pre-service).
- 2) Student academic achievement form which collected data on TP scores of student teachers.

VI. DATA ANALYSIS

Data gotten from the questionnaire were computer coded and analyzed by use of the Statistical Package for the Social Sciences (SPSS) version 16 with various statistical analysis techniques being executed. The following methods of analysis were employed:

- 1) Descriptive Statistics: frequency, percentage, mean, and standard deviation were used to describe student teachers' personal characteristics and their anxieties level towards TP.
- 2) Pearson correlation analysis was used to determine whether there is statistically significant relationship between student teachers' TP academic achievement and their TP anxiety levels. In addition, correlations between student teachers' academic achievement and personal characteristics were done.

VII. RESULTS

A. TP Anxiety Levels of Student Teachers

Student teachers' anxiety towards TP is shown in Fig. 4.

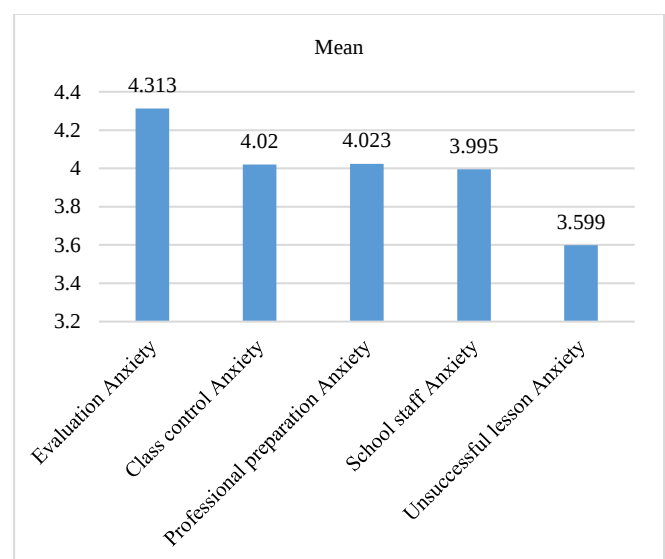


Fig. 4: TP anxiety levels by categories.

Fig. 4 reveals that TP anxiety levels are very high with evaluation and class control anxieties with the highest means of 4.313 and 4.02 respectively. Lowest mean is recorded in unsuccessful lesson anxiety. This results are consistent with

certain studies that show that student teachers experience high anxiety levels (Cowden, 2009, Kazu, 2001). However, other studies showed that student teachers experience modest levels of anxiety (Morton *et al.*, 1997, Behets, 1990 & Wendt & Bain, 1989).

This high levels of anxiety could be attributed to the fact that they were measured at the beginning of the TP exercise and TP exercise is considered a very important and has a high credit factor. It is document that, academic anxiety is experienced most often during timed exercises and in situations in which students are expected to perform their best when the stakes are very high, such as on the Scholastic Assessment Tests (SATs), or when in front of others (4964104180009246281.Pdf, n.d.). During TP student teachers are expected to perform their best and stakes are very high with TP course carrying a high credit factor than any other course in teacher training program in the two universities under study. This could make the students anxious. In addition, student teachers are expected to teach in a real classroom situation unlike in microteaching when they teach their peers. This could cause anxiety to the young students.

B. Student Teacher's Self-Determined Personal Characteristics

The descriptive statistics of students-teachers personal characteristics are shown in Table I.

TABLE I: LEARNER'S PERSONAL CHARACTERISTICS

Characteristics	Mean	Description
Easily influenced	3.00	Highly Positive
Take personal initiative	4.18	Very highly positive
Resourcefulness	4.30	Very highly positive
Optimistic and Positive attitude	4.48	Very highly positive
Justice and fairness	4.33	Very highly positive
Self-drive and Commitment	4.58	Very highly positive
Self-belief	4.58	Very highly positive
Ten work players	4.11	Very highly positive
Reliability and Dependability	3.92	Highly positive
Eloquent communicator	3.83	Highly positive
Set high standards for self and others	4.19	Very highly positive
Average Mean	3.72	Highly positive

Table I divulges the personal characteristics of the student-teachers. The general personal characteristics of the student-teachers is highly positive self-image. The result shows that the in 8 out of 11 characteristics student-teachers got high means of 4.11 and above, with the highest means of 4.58 for self-drive and commitment and self-belief. Attractiveness and pleasantness (4.18); resourcefulness (4.3); just and fairness (4.33); teamwork (4.11); setting high standard for self and others (4.19) and optimism and positive attitude (4.48) with a description of very highly positive. This implies that respondents were positive and good in relation with those personal characteristics. This are good characteristic to be held by a teacher.

Moreover, only three characteristics have low means of between 3.0 and 3.91 with that of being easily influenced with the lowest (3.00). A mean of 3.00 has a description of "Neutral" which implies that this characteristic is hidden and only shown if the need arose. This means that they are moderately influence. This denotes that respondents are not sure of this characteristic for are not easily influence but can take a stand depending on the issue at hand. This would be very important of a teacher since they may need to take a stand especially to issues of learner discipline and class management. Reliability and dependability had (3.92) which means they are reliable and dependable and eloquent communicator (3.83) whose description is they are fairly good communicators.

C. C. Student Teacher Academic Achievement in TP Assignment

Student teachers' academic achievements are shown in Table II.

TABLE II: TP ACADEMIC ACHIEVEMENT SCORES BY GENDER

Scores	50-59	60-64	65-69	70-74	75-79	Total
Gender	C	B	B+	A-	A	
Female	N 1	9	30	20	1	61
	% 1	9	29	20	1	60
Male	N 1	4	19	13	3	40
	% 1	4	19	13	3	40
Total:	N 2	13	49	33	4	101
	% 1.98	12.9	48.5	32.7	3.9	100

Table II shows that student teachers achieve high grades in TP exercise; 36.6% score grade A, 61.4% grade B, 2% score grade C while none scored grade D. This would mean adequate preparation of student teacher through micro-teaching and other professional courses. This results are not in agreement with those of AKINWUMI *et al.* who stated that academic performance of the student teacher in TP could be considered below average (AKINWUMI *et al.*, 2018).

Table II also reveals that female students score better grades than male students in TP. 21(21%) of the female student teachers score grade A compared to 14 (16%) male students. Percentage of female student teachers who scored grade B is higher than that of male students at 38% and 23% respectively.

This good performance could be attributed to the high anxiety noted with this student teachers. The high anxiety could have served as a motivator for student teachers to work hard leading to this good performance. Anxiety is not always bad, some students can be driven by anxiety (Hooda & Saini, 2017).

D. TP Achievement Scores by Student Age

TP scores of students by their ages are shown in Table III.

TABLE III: TP ACADEMIC ACHIEVEMENT SCORES BY AGE

Age	TP scores					Total
	50-59	60-64	65-69	70-74	75-79	
21-25	2	11	42	33	4	92
26-30	0	1	7	0	0	8
More than 40	0	1	0	0	0	1
Total	2	13	49	33	4	101

Table III indicates that majority of the students in the study population ate with 21–25 years. This is the group of students that score highly in TP exercise 70–79% score.

E. TP achievement Scores by Institution

Student teachers' achievement scores by institution are shown in Table IV.

TABLE IV: TP ACADEMIC ACHIEVEMENT SCORES GRADES BY INSTITUTION

Institution	TP scores							Total
	41-49	50-59	60-64	65-69	70-74	75-79	>80	
	D	C	B-	B	B+	A-	A	
Laikipia	0	0	5	19	18	3	0	45
Kabianga	0	2	8	30	15	1	0	56
Total	0	2	13	49	33	4	0	101

Table IV indicate student teachers from Laikipia University generally performed better than those from University of Kabianga. This is well revealed in Table V which shows LU students had a mean score of 68.98% while those from UoK scoring a mean score of 67.57%.

F. Mean scores of TP Academic Achievement Scores by Institution

Student teachers TP mean scores by institution are shown in Table V.

TABLE V: MEAN SCORES OF TP ACHIEVEMENT BY INSTITUTION

Institution	Mean	N	Std. Deviation
Laikipia University	68.98	45	3.590
University of Kabianga	67.57	56	3.582
Total	68.20	101	3.636

Table V indicates that student teachers from LU had a higher mean score of 68.98% than those in UoK with 67.57%. Diagrammatic representation of the mean scores by institution are shown in Fig. 5.

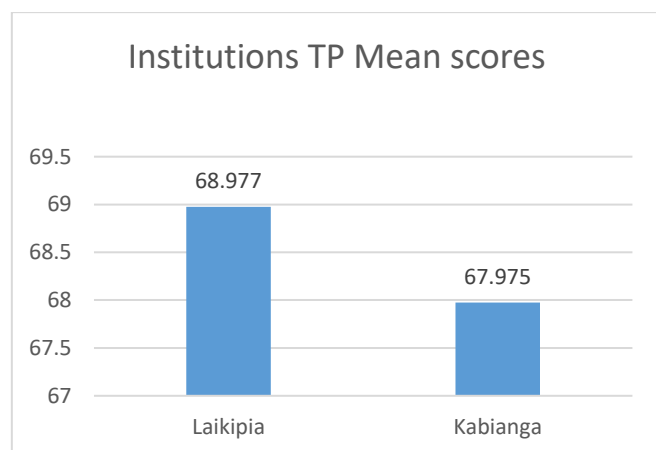


Fig. 5. TP means scores by institution.

Fig. 5 shows that student teacher from both institutions had a high mean score of B+. It should be noted that this mean score is got from averaging scores given by supervisors during a number of visits from the onset to the end of the TP exercise.

This result is inconsistent with other studies that have revealed that it is normal to experience concerns, restlessness and anxiety about teaching practice. It has also been shown

that the fears and anxieties occasionally lead to high levels of stress and failure in student teachers TP (Morton *et al.*, 1997; Broadhead *et al.*, 1996).

To check whether academic achievement in TP exercise of student teachers from the two universities was statistically significant, independent t-test was done and results are shown in Table VI.

TABLE VI: INDEPENDENT SAMPLES T-TEST AND UOK AND LU TP MEAN SCORES

University	N	Mean	SD	Df	T-value	P-value
Laikipia (LU)	40	69.25	3.59	39	1.978	0.055
Kabianga (UoK)	40	67.975	3.63			

The results in Table VI show that there are no statistically significant differences in TP mean scores of student teachers from LU and those from UoK. This is because $t(39)=1.978$, $p>0.05$, therefore, the null hypothesis (H_0) which stated that there is no statistically significant difference between TP mean scores of student teachers from LU and UoK is rejected.

G. Relationship between TP Academic Achievement Scores by Institution

To check whether there is a relationship between academic achievement in TP exercise of student teachers from the two universities and the institution of study Pearson correlation was done. Results are recorded in Table VII.

TABLE VII: PEARSON CORRELATION INSTITUTION AND TP SCORES

CORRELATIONS		
	Institution	TP Score
Pearson Correlation	1	-0.193
Sig. (2-tailed)		0.053
N	101	101

Table VII shows that there exists a weak negative relationship between institution attended and academic achievement in TP assignment with the magnitude of $r=-1.93$. This means institution where training is done influences TP performance negatively. It also means that student teachers who train at LU will tend to perform better in TP compared to those from UoK for just being in LU.

H. Relationship between TP Academic Achievement Scores and TP Anxiety

To check whether there is a relationship between academic achievement in TP exercise of student teachers from the two universities and their TP anxiety Pearson correlation was done. Results are recorded in Table VIII.

TABLE VIII: PEARSON CORRELATIONS BETWEEN TP ACADEMIC ACHIEVEMENT SCORES AND TP ANXIETY SCORES

	TP Score	Overall Anxiety
Pearson Correlation	1	-.227*
Sig. (2-tailed)		0.023
N	101	105

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

Table VIII shows that there is a weak negative correlation between TP Academic Achievement and TP Anxiety. The negative correlation means that when TP anxiety increases TP achievement decreases. In addition the correlation is statistically significant at 0.05. Therefore because TP anxiety reduces TP academic achievement with a statistically

significant margin then concerned institution should be intervene by looking for ways of reducing or better still eliminating TP anxiety. The universities should also seek to find out the causes of TP anxiety with the intention of mitigating against the causes. This leads to rejection of the Ho2 that there is no statistically significant relationship between student-teachers' academic performance in TP

exercise and their anxiety levels towards TP.

I. Relationship between TP Academic Achievement Scores and TP Anxiety Categories Scores

Additional analysis was done to the relationship between TP academic achievement scores and TP anxiety categories Scores. Results are shown in Table IX.

TABLE IX: PEARSON CORRELATIONS BETWEEN TP ACADEMIC ACHIEVEMENT SCORES AND TP ANXIETY CATEGORY SCORES

	TP Score	Evaluation	Class Control	Professional Preparation	School Staff	Unsuccessful Lesson
Pearson Correlation	1	-0.242*	-0.192	-0.254*	-0.195	-0.086
Sig. (2-tailed)		0.015	0.054	0.010	0.051	0.393
N	101	105	105	105	105	105

Table IX indicates that there exists a negative relation between the TP score and the five categories of TP anxieties. This means that when these anxieties increase TP scores decrease. Highest correlation exists between TP score and unsuccessful lesson anxiety though negative; $r=0.086$, $p>0.05$. However, the relationships between TP scores and two anxieties (evaluation and professional preparations) are statistically significantly different; $r=0.242^*$, $p<0.05$, $r=0.254^*$, $p<0.05$ respectively. Relationships of TP scores and three anxieties (class control, school staff and unsuccessful lesson) are not statistically significantly different $r=0.192$, $p>0.05$, $r=0.195$, $p>0.05$, $r=0.086$, $p>0.05$ respectively.

Anxiety on evaluation and professional preparation a weak with -0.242 and -0.254 respectively. However, only the correlations of TP scores with evaluation and professional preparation anxieties are statistically significant. This implies that anxieties from evaluation and professional preparation have a significant influence on TP scores, and need not be ignored. Institutions should seek to mitigate against these two anxieties. As for the other three though there is a negative influence the influence is not statistically significant to raise an alarm. However there would be need to mitigate against school staff, class control and unsuccessful lesson anxieties to ensure they do not grow to a level that they will significantly negatively influence the TP scores.

J. Relationship between Student Teacher's Academic Achievement in TP Exercise and Student Personality

To determine whether a student teacher's academic achievement is related to student personality analysis was done by correlating TP academic achievement with student personality. Results are shown in Table X.

TABLE X: PEARSON CORRELATION BETWEEN STUDENT TEACHER'S TP ACHIEVEMENT AND STUDENT PERSONALITY

	TP Score Mean	Personal Characteristics Mean
Pearson Correlation	1	-0.019
Sig. (2-tailed)	101	105
N	0.848	

Table X shows that there is a negative relationship between student personality and TP academic achievement $r=0.19$, $p>0.05$; therefore, the null hypothesis Ho3: There is no statistically significant relationship between student-teachers' academic performance in TP exercise and their

anxiety levels towards TP is rejected. However the negative relationship is not statistically significant meaning it is small.

The highly positive self-determined self-image of the student teacher impacts negatively on the TP academic achievement. This finding is consistent with those of Hayat et al., (2020) who discovered the relationships between personality traits, self-efficacy, and academic performance of medical students. The results revealed that individual differences in personality traits both directly and indirectly play a vital role, through self-efficacy, in contributing to the students' academic performance. Other scholars alleged that the other factors that significantly predict academic achievement are personality traits. (Poropat, 2009, Robbins et al., 2004, Brandt et al., 2020).

VIII. CONCLUSION

From the outcomes of this study the following were the conclusions.

Student teachers have a positive self-image that is not dependent or related to the institution of study. Student teachers experience high level of anxiety toward TP at the onset of TP exercise. The highest level of anxiety is related to evaluation followed by class control, professional preparation, school staff and finally unsuccessful lesson. There is need to study to establish why the level of anxiety is high and track it through the entire TP period. The student also performed highly in TP with a mean score of B+ despite the high anxiety they expressed. However it was also established that there was a weak negative correlation between TP Academic Achievement and TP Anxiety. This weak relationship was however statistically significant. This calls for investigation on why TP anxiety is high among student teacher at LU and UoK to a point that it impacts on their academic achievement in the TP exercise negatively.

This study also established that difference in academic performance in TP exercise in the two institutions was not statistically significant even though student teachers from LU had a higher mean score. It was also established that there exist a weak negative relationship between institution attended and academic achievement in TP assignment. Studying in one institution UoK will make the student teacher have a high anxiety towards TP. In addition it was also established that there is a negative relationship between student personality and TP academic achievement.

CONFLICT OF INTEREST

Authors declare that they do not have any conflict of interest.

REFERENCES

4964104180009246281. PDF. (n.d.). Retrieved July 12, 2022, from <https://www.tvusd.k12.ca.us/cms/lib/CA02208611/Centricity/Domain/9537/4964104180009246281.pdf>.
- Akinwumi, F. S., Emerole, E. N., & Oyarekua, M. (2018). *Anxiety and student-teacher performance in teaching practice in the federal colleges of education in southwest; Nigeria*. Afribary.
- Anders-Richards, D. (1969). Teaching practice: assessment procedures. *Education for Teaching*, 80, 71–72.
- Behets, D. (1990). Concerns of preservice physical education teachers. *Journal of Teaching in Physical Education*, 10, 66–75.
- Blanton, L. P., Sindelar, P. T., & Correa, V. I. (2006). Models and measures of beginning teacher quality. *The Journal of Special Education*, 40(2), 115–127. <https://doi.org/10.1177/00224669060400020201>.
- Brandt, N. D., Lechner, C. M., Tetner, J., & Rammstedt, B. (2020). Personality, cognitive ability, and academic performance: Differential associations across school subjects and school tracks. *Journal of Personality*, 88(2), 249–264. <https://onlinelibrary.wiley.com/doi/abs/10.1111/jopy.12482>.
- Broadhead, P., Cuckle, P., Hodgson, J., & Dunford, J. (1996). *Improving primary schools through school development planning*. Sage Journals. <https://doi.org/10.1177/0263211X9602400305>.
- Capel, S. A. (1997a). Changes in students' anxieties and concern after their first and second teaching practices. *Educational Researchers*, 39(2), 211–228.
- Capel, S. A. (1997b). Changes in students' anxieties and concerns after their first and second teaching practices. *Educational Research*, 39(2), 211–228. <https://doi.org/10.1080/0013188970390208>.
- Caspari, I. E., & Eagleston, J. (1965). A new approach to the supervision of teaching practice. *Education for Teaching*, 68, 42–52.
- Cowden, P. (2009). Communication and conflict: Social anxiety and learning. In the *Proceedings of Academy of Organizational Culture: Communications and Conflict*, 14(2), 16–19.
- Davis, J. B. (1990). Stress among secondary school student teachers: factors which contribute to it and ways of reducing it. *The High School Journal*, 73(4), 240–244. <https://www.jstor.org/stable/40364874>.
- Deering, T. (n.d.). How should we evaluate student teachers? *Critical Questions in Education Volume*, 2.2.
- Donaldson, S. I., Gooler, L. E., & Scriven, M. (2002). Strategies for Managing Evaluation Anxiety: Toward a Psychology of Program Evaluation. *American Journal of Evaluation*, 23(3), 261–273. ISSN: 1098-2140.
- Fletcher, C. (1958). Supervision and Assessment of Practical Teaching. *Education for Teaching*, 47, 17–23.
- Hart, N. I. (1987). Student teachers' anxieties: Four measured factors and their relationships to pupil disruption in class. *Educational Research*, 29(1), 12–18. <https://doi.org/10.1080/0013188870290102>.
- Hayat, A. A., Kohoulat, N., Amini, M., & Faghihi, S. A. A. (2020). The predictive role of personality traits on academic performance of medical students: The mediating role of self-efficacy. *Medical Journal of the Islamic Republic of Iran*, 34, 77. <https://doi.org/10.34171/mjiri.34.77>.
- Heeralal, P. J. H. (2014). Student teachers' perspectives of qualities of good mentor teachers. *The Anthropologist*, 17(1), 243–249. <https://doi.org/10.1080/09720073.2014.11891434>.
- Hodgson, C. P. (1976). The assessment of teaching practice: what criteria should we choose? *Australian Journal of Teacher Education*, 1(2). <https://doi.org/10.14221/ajte.1976v1n2.1>.
- Hooda, M., & Saini, A. (2017). Academic anxiety: An overview. *Educational Quest: An Int. J. of Education and Applied Social Science*, 8(3), 807–810.
- Hourcade, J. J., Parette, H. P., & McCormack, T. J. (1988). Stress Sources among Student Teachers. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 61(8), 347–350. <https://doi.org/10.1080/00098655.1988.10113968>.
- HS-10 Responsibility of the Learner.pdf. (n.d.). Retrieved July 26, 2022, from <https://www.northwoodtech.edu/sites/default/files/inline-files/HS-10%20Responsibility%20of%20the%20Learner.pdf>.
- IUPUC Division of Education Indiana University-Purdue University Columbus. (2015). *Student Teaching Handbook Elementary*. Indiana University-Purdue University Columbus. <https://www.iupuc.edu/education/student-teaching/files/student-teaching-handbook.pdf>.
- Kanwal, N., Akhter, D. N., & Kanwal, N. (2017). A mixed method approach to explore student-teachers' anxiety in relation to their teaching practices at school placement. *Merit Research Journal of Education and Review*, 5(2), 6–15.
- Kazu. (2001). Anxiety in college Japanese language classroom. *Modern Language Journal*, 85, 547–567.
- Kemp, N. (2018). The Palgrave international handbook of alternative education. Edited by Helen E. Lees and Nel Noddings. Pp 528. London: Macmillan Publishers Ltd. 2016. £126.50 (hbk). ISBN 978-1-137-41290-4. *British Journal of Educational Studies*, 66(2), 267–269. <https://doi.org/10.1080/00071005.2017.1381432>.
- Khan, A. (2017). Communication Skills of a Teacher and Its Role in the Development of the Students' Academic Success. *Journal of Education and Practice*, 8(1), 18–21.
- Khan, M. S., Malik, A. R., Butt, A. U. A., Khalid, A., Maqbool, S., Khan, H., & Younas, M. W. (2019). Personality dynamism and academic performance among boarders and non-boarders studying in a Medical University. *Cureus*, 11(7). <https://doi.org/10.7759/cureus.5072>.
- Kiggundu, E. (2007). Teaching practice in the greater VAAL triangle area: the student teachers experience. *Journal of College Teaching & Learning (TLC)*, 4(6), Article 6. <https://doi.org/10.19030/tlc.v4i6.1572>.
- Koerner, M., Rust, F., & Baumgartner, F. (2002). Exploring roles in student teaching placements. *Teacher Education Quarterly*, 29(2), 35–58.
- Lampert, N. (2006). Critical thinking dispositions as an outcome of art education, studies in art education. *Taylor & Francis*, 47(3), 215–228. DOI: 10.1080/00393541.2006.11650083.
- Lave, J., & Wenger, E. (1991, September 27). *Situated Learning: Legitimate Peripheral Participation*. Higher Education from Cambridge University Press; Cambridge University Press. <https://doi.org/10.1017/CBO9780511815355>.
- Lynch, M., & Capalbo, L. (2009). Judging Competence. *Faculty Publications*. <https://digitalcommons.ric.edu/facultypublications/256>.
- MacDonald, C. J. (1993). Coping with stress during the teaching practicum: the student teacher's perspective. *Alberta Journal of Educational Research*, 39(4), 407–418.
- McBride, R. (1984). Perceived teaching and program concerns among preservice teachers, university supervisors, and cooperating teachers. *Journal of Teaching in Physical Education*, 3, 36–43.
- Morris, S. (1970). The assessment and evaluation of teaching practice. In 9 towards evaluation: some thoughts on tests and teacher education. *Educational Review*, 4, 64–70.
- Morton, L. L., Vesco, R., Willium, N. h., & Adwender, M. A. (1997). Student Teacher anxieties related to class management, pedagogy, evaluation, and staff relations. *British Journal of Educational Psychology*, 67, 69–89.
- Ngidi, D. (1998). Towards a model for determinants of occupational stress among teachers in Kwazulu -Natal. *Undefined*. <https://www.semanticscholar.org/paper/Towards-A-Model-For-Determinants-Of-Occupational-In-Ngidi/cd9e127781d5ac8f070d4a6fada3a2006210a2d8>.
- Ngidi, D. P., & Sibaya, P. T. (2003). Student teacher anxieties related to practice teaching. *South African Journal of Education*, 23(1), 18–22. <https://doi.org/10.4314/saje.v23i1.24841>.
- O'Connor, M. C., & Paunonen, S. V. (2007). Big Five personality predictors of post-secondary academic performance. *Personality and Individual Differences*, 43(5), 971–990. <https://doi.org/10.1016/j.paid.2007.03.017>.
- Perry, R. (2004). *Teaching practice for early childhood: a guide for students* (2nd ed.). Routledge. <https://doi.org/10.4324/9780203392324>.
- Ponte, J., & Brunheira, L. (2001). Analysing practice in preservice mathematics teacher education. *Mathematics Education Research Journal*, 3, 16–27. https://www.researchgate.net/profile/Joao-Ponte-2/publication/255602452_Analysing_practice_in_preservice_mathematics_teacher_education/links/0c96052b88ab3c2cc0000000/Analysing-practice-in-preservice-mathematics-teacher-education.pdf.
- Poropat, A. E. (2009). A meta-analysis of the five-factor model of personality and academic performance. *Psychological Bulletin*, 135(2), 322–338. <https://doi.org/10.1037/a0014996>.
- Robbins, S. B., Lauver, K., Le, H., Davis, D., Langley, R., & Carlstrom, A. (2004). Do psychosocial and study skill factors predict college outcomes? A meta-analysis. *Psychological Bulletin*, 130(2), 261–288. <https://doi.org/10.1037/0033-2909.130.2.261>.
- Ryan, D. G. (1960). *Characteristics of Teachers*. American Council on Education, Washington, D.C.
- Steyn, P. D. G., & Killen, R. (2001). Reconstruction of meaning during group work in a teacher education programme. *South African Journal of Higher Education*, 15(1), 61–67. <https://doi.org/10.4314/sajhe.v15i1.25381>.

- Steyn, P., & Killen, R. (2001). Reconstruction of meaning during group work in a teacher education programme. *South African Journal of Higher Education*, 15(1), 61–67. <https://doi.org/10.4314/sajhe.v15i1.25381>.
- Sullivan, B. (n.d.). *Understanding academic anxiety*. Cornell University Learning Strategies Center, p. 2
- University of Minnesota. (2022). Teaching Handbook–Office of Teacher Education. *Teaching Handbook*. <https://academics.cehd.umn.edu/teaching-handbook/>
- Wendt, J., & Bain, L. (1989). Concerns of preservice and inservice physical educators. *Journal of Teaching in Physical Education*, 8, 177–180.
- Yumpu.com. (n.d.). *Introduction-to-Research-and-Research-Methods*. Yumpu.Com. Retrieved October 25, 2021, from <https://www.yumpu.com/en/document/view/46492228/introduction-to-research-and-research-methods>.



Florence W. Kamonjo was born in Nakuru County-Kenya in late nineteen sixties. She attained her Basic Education in the County of birth then proceeded to Machakos County for high school Education. She then returned back to Nakuru County for her high education at Egerton University. It is at Egerton University (1990–1992) that she studied Bachelor's degree in Science General (Chemistry & Biology), then Post graduate Diploma in Education (1998–1999), Master's degree in Science Education (2002–2009) and finally PhD in Science Education (2012–2016). She is also studied diploma course in Education Management at Kenya Education Management Institute (KEMI) in 2018. My major field of study is science education.

She is taught sciences in secondary school in Kenya for 23 years (1994–2017) before joining university as a lecturer in 2016. She is currently a teacher educator and a researcher at University of Kabianga Kenya. Her area of specialization is science education. She has published two books and 14 journal articles. Some of her current publications include:

1. Hungi Njora, Kamonjo W. Florence & Waweru Muriithi (2022). Work-related Burnout Levels among University Lecturers in Kenya. IICBA UNESCO International Institute for Capacity Building in Africa. Strengthening Teacher Development in Africa. <http://www.iicba.unesco.org/>
2. Kamonjo, Florence & Ngatia, David (2022). University Students' Preferences, Perception and Challenges of Online Learning. A Case of University of Kabianga, Kenya. Pan-Commonwealth Forum 10 (PCF10), 2022 Calgary Canada. Commonwealth of Learning (COL). <https://doi.org/10.56059/pcf10.6074>.
3. Mihindo W. Jane & Kamonjo W. Florence (2022). Effects of computer-based simulations teaching approach on chemistry self-concept among high school students in Kenya. *International Journal of Integrating Technology in Education (IJITE)*, 11(2), June 2022.

Dr. Kamonjo is a member of organization of Women in Science in Developing Countries (OWSD) and Nakuru Christian Professional Association.



Rose Nyambura was born in late sixties, raised, and attended early schooling around the slopes of Mt. Kenya. Nyambura holds a PhD degree in Science Education from Laikipia University where she is a teacher educator. Research interests are majorly in the learning of science and women empowerment.

She is Chair of Board of management (BOM) and Chair academic committee in various schools across several counties in Kenya. She has published various articles on factors influencing students' attitude to learning of science for example -Influence of students' self-perception on Biology achievement among secondary school students in Nakuru County-Kenya.

Dr. Nyambura is the vice chairperson of Organization of women in science in developing countries (OWSD-Kenya chapter) and Organizing secretary of Christian Scientific Association of Kenya (CSAK). She is one of the directors of Home Care supporters (HOCASU) which trains caregivers for the elderly and aging citizens in Kenya. Dr. Nyambura is an ambassador of Teacher Education in Sub-Saharan Africa (TESSA) and a reviewer of journal articles with various journals like International Journal of Research and Innovation in Social Science (IJRISS). Dr. Nyambura has facilitated MOOCS

offered by Open University in collaboration with COL.