

INFLUENCE OF INSTRUCTIONAL LEADERS' PERSONALITY AND TRAINING ON  
THEIR PREFERENCE FOR ONLINE AND FACE-TO-FACE MODES OF TEACHING: A  
CASE OF THE UNIVERSITY OF NAIROBI, KENYA

BY

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## DECLARATION

This thesis is my original work and has not been presented for a degree or any other award in any other University.

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This thesis has been submitted for examination with my approval as University Supervisor

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## DEDICATION

I dedicate this research to my parents, siblings and daughter, who have been incredibly supportive of me emotionally, spiritually and financially in the course of my work. Receive my deepest gratitude for this show of love.

## ACKNOWLEDGEMENT

I would first like to thank God for His strength and wisdom which have guided me in this process of study.

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## DEFINITION OF KEY TERMS

**Blended learning:** Refers to learning that takes place partially through online media as well as the traditional face-to-face approach rather than applying only the former or the latter (Hew & Cheung, 2014).

**Instructional leader:** Jones (2012) states that they are people who are tasked with the role of imparting content knowledge of the curriculum to the students. In this study, lecturers do this work in their institution therefore are the instructional leaders within this context.

**Instructional leadership:** In line with Jones's (2012) definition of an instructional leader, instructional leadership is then the way in which these responsibilities of imparting content knowledge are carried out.

**Instructor:** Moore and Kearsley (2012) state that the terms teacher and instructor are often used interchangeably as is the case in this study. However, since the teachers in this case are those in higher education, they are called lecturers. Therefore, an instructor is a lecturer.

**Online learning:** Also called e-learning and refers to any teaching and learning that happens using the internet as the medium of communication whether or not that learner and teacher are separated by distance (Tayebinik&Puteh, 2012)

**Personality:** It refers to “the unique collection of attitudes, emotions, thoughts, habits, impulses, and behaviors that define how a person typically behaves across situations” (Pastorino and Doyle-Portillo, 2012, p. 462). In this study, we will explore the personality of the instructor

## ACRONYMS AND ABBREVIATIONS

CBT	Computer Based Training
CUE	Commission for University Education
FFM	Five-Factor Model
ICT	Information and Communication Technology
ODeL	Open and Distance e-Learning
ODL	Open and Distance Learning
PLATO	Programmed Logic for Automated Teaching Operations
UoN	University of Nairobi

## ABSTRACT

People's personalities significantly influence how they conduct their work. Specifically, studies have shown that instructors teach based much more on their teaching preferences than stipulated teaching guidelines. However, few studies have investigated the relationship between an instructor's personality coupled with relevant training, and its influence on their work. With the advent of technology that now facilitates distance learning, this study sought to investigate the extent to which instructors' preferences for online or face-to-face modes of teaching are a function of their personalities. The geographical scope of the study was the University of Nairobi, and the total available population was 33 faculty members who teach using both face-to-face and online modes. The study was guided by the Big Five Theory of Personality and the Role Theory of Leadership as its theoretical framework. It adopted a descriptive approach using a survey research design. Quantitative data was collected using questionnaires. Since the population was small, a census was taken and 19 respondents responded. After data analysis using Cost And McCrae's standardized tool for personality testing, the findings showed that personality seemed to have little or no influence on the instructional leader's preference for specific modes of teaching, and a majority of the respondents preferred blended modes of teaching as opposed to purely face-to-face or purely online modes. Finally, all the respondents stated that they had received training from the institution to facilitate online classes. However, 71% said that they had received 50-100% training, 21% said that they had received 20-50% training, and the remaining 21% claimed 10-20% training. Further, the respondents attributed 58% of the training they had received to the institution, 21% to their colleagues, and 21% to themselves. The study's recommendations were that national bodies regulating higher education teaching practices should research, analyze and set in place appropriate policies as the most effective ways of training university lecturers to facilitate emerging modes of teaching, other institutions of higher learning should conduct activities such as benchmarking in UoN as well as other well-performing schools, and universities and other higher learning institutions should also encourage internal training where lecturers who have knowledge on how to facilitate various modes of teaching can teach those who are still growing in the area of online learning facilitation.

## CHAPTER ONE

### INTRODUCTION AND BACKGROUND TO THE STUDY

#### Introduction

This study addresses the relationship between instructor personality and preference of an instructional leader's mode of delivery in a public university in Kenya. This chapter covers the background of the study, the statement of the problem, objectives of the study, the research questions, assumptions of the study, the justification of the research, its significance, the scope, limitations and delimitations of the study.

#### Background to the study

Online learning technology advanced in the 1970s when the communication between the teacher and student became interactive rather than one-way and later on in 1999, the term 'e-learning' emerged which referred to facilitated learning through correspondence via internet using platforms such as email for communication (Rooji, 2001). The Open University in Britain, established in 1969, took advantage of this technologically-facilitated mode of learning by specifically providing courses. Apart from Britain, the United States, Europe and Asia are also growing in the area of online learning. China through ChinaEdu, the United States through Phoenix Online and Korea through the Korean National Open University have some of the largest online student populations in the world with Indira Gandhi National Open University

(IGNOU) being the largest with an enrollment of over 3 million students by 2015 (Moreira & Ferreira, 2017) and over 4 million by 2017 (Barakat& Weiss, 2017).

According to Adkins (2013), Africa's online learning environment is so dynamic and growth rate is so high that data concerning the e-learning market and trends research becomes obsolete within 2 years of its collection. The University of South Africa was the pioneering university in Africa offering online learning courses with an enrollment of about 310,000 local and foreign students by 2017. It has students enrolled in its pan-regional online program through its virtual university platform which serves African countries such as Senegal, Kenya and Uganda (Barakat& Weiss, 2017). Using the growth rate of sale of e-learning products within the respective countries, Barakat and Weiss (2017) found that the four countries with the highest growth rates in online learning include Senegal, Zambia, Zimbabwe and Kenya with rates of 30%, 27.9%, 25.1%, and 24.9% respectively.

In Kenya,ODL was first addressed in the 1964/65 Ominde Commission. The commission gave a recommendation that Kenya should have an ODL advisory commission(Nyerere, 2016). To date, various others such as the 1976 Gachathi Report, the 1981 Mackay Report, the 1988 Kamunge Report, and the 2000 Koech Report advocated for the implementation of open and distance learning to supplement face-to-face modes of teaching in Kenya (Boit&Kipkoech, 2012). The Commission for University Education (CUE) was established in 2012 as an Act of Parliament to take over the oversight, regulation and quality assurance of university education in Kenya as a successor of the 1985 established Commission for Higher Education (Sanga, 2017).

With the rise in the need for online learning, the commission put in place regulations for open and distance learning in the fourth schedule of its 2014 universities standards and guidelines document (Commission for University Education, 2014). These regulations include guidelines such as principles, accreditation thresholds, strategies and objectives for ODL in universities. Some of the universities in Kenya which are well established in this form of learning include University of Nairobi, Jomo Kenyatta University of Science and Technology, Egerton University, Kenyatta University, MasindeMuliro University of Science and Technology, Maseno University, Moi University, and Multimedia University of Kenya (Nyerere, 2016). However, more and more universities are joining the ranks to offer alternative modes of learning apart from face-to-face learning.

Kenya has grown in its university enrollment from 240,551 in 2012/13 to 536,000 in 2015/16 particularly due to the advent of Free Primary Education in 2003 (Nyerere, 2016). In fact, the demand for university education in Kenya is much higher than any other country within East Africa (Boit&Kipkoech, 2012). In a bid to cope with this massive increase, there has been the introduction of online learning so as to reach more people using fewer resources. This shift from the traditional classroom learning to the online learning has brought with it the benefits of online learning including flexible access to education, especially to those who are working, live in distant areas or experience civil strife. Other benefits include inter-university collaboration and less strain on universities' physical facilities such as classrooms (Nyerere, 2016). Notably, a study by Makokha and Mutisya (2016) investigating ODL in Kenya shows that a significant proportion of both students and lecturers have a shared preference for blended or hybrid mode

learning which integrates online and face-to-face learning. Blended learning is very beneficial in the sense that it brings together the autonomy of online teaching and collaboration of face-to-face teaching (Sa'don&Iahad, 2017).

Despite the continually evident growth of e-learning within the country, the status of Kenya's e-learning in universities shows that the country is still at the infancy stage of e-learning adoption (Nyerere, 2016). Makokha and Mutisya (2016) write that Kenya's development of e-learning is still in its early stages of adoption. This situation is due to various challenges including lack of sufficient or any training at all on online teaching; unclear, unimplemented or unapproved school and national e-learning policies; high cost of implementation such as setting up infrastructure; low usage of current e-learning technologies; lecturers' preferences for face-to-face rather than online mode of teaching (Makokha&Mutisya, 2016); poor course programme designs; and the dynamic pace with which technology advances making it difficult for universities to cope (Kigotho, 2013). However, for the sake of this study, the specific challenges that relate to the research problem include lecturers' preferences, dynamic pace of e-learning technology advancement, and insufficient training which limits instructors' skills for undertaking online teaching. Therefore, when instructors do not receive the necessary training, as is the case in Kenya, they fail to attain the level of effectiveness expected of them.

Ennis (2016) further argues that research is an effective way of finding possible ways of improving instructors' effectiveness. One such area of research would be the instructional leaders' personalities which have a significant bearing in their capacity to deliver the expected

outcomes in their teaching profession especially in student achievement (Campbell, Kyriakides, Muijs, & Robinson, 2005). Pastorino and Doyle-Portillo (2012) define personality as a unique combination of factors such as one's thinking, emotions, habits, attitudes, and behaviors which influence how a person reacts and behaves across varying circumstances or situations. It is a concept that can be explained and measured using various personality theories. For this study, there will be the use of the Big Five Personality theory which many scholars have used for similar studies (e.g. Costa, 1997; Chamorro-Premuzic, & Furnham, 2014). The five factors identified by scholars include openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism (Chamorro-Premuzic, & Furnham, 2014).

As stated earlier, one challenge that online learning faces in Kenya is inadequate training of its teaching staff on how to facilitate such classes using online platforms (Makokha & Mutisya, 2016) yet these instructors play a pivotal role in ensuring that learning outcomes produced are positive (Dhillal, 2017). In fact, Dhillal (2017) notes that these higher institution leaders need proper training in both developing and teaching instructional content since "online students' academic performance is a reflection of the quality of online courses" (p. 4). Ammenwerth (2017) goes on to argue that "university teachers seem to be strong in content knowledge and weaker in technology knowledge and pedagogy knowledge" which may impede their effectiveness in the teaching process (p. 3122). Therefore, unless there is sufficient training to enable instructional leaders to conduct face-to-face as well as online classes, there will still be the issue of precious knowledge slipping through the cracks which would render the learning process ineffective. Notably, this issue is particularly prevalent because teaching online in Kenya is often a matter of

job allocation rather than choice due to limitation in staff numbers in Kenyan universities (Boit & Kipkoech, 2012).

Closely related to the reasons stated above for the need of training, there is the issue of the changing roles of university lecturers particularly with the advent of online and blended teaching since retraining may be necessary due to changes in roles of instructional leaders. Biddle and Thomas (1966) argue that people's performance in their given roles depends on stipulations of behavior, others' performance, others' reaction to their work, and by the person's competence and personality. Ammenwerth (2017) argues that the shift from face-to-face to online teaching has the implication of changing the role of the instructional leader into four categories. They include the pedagogical role as the facilitator of the education process, the social role as the creator of a social and friendly learning environment, the managerial role of course content designer and finally, the technical role when it comes to "helping the students to master the technical course environments" (Ammenwerth, 2017, p. 3123). Evidently, the roles and responsibilities of lecturers are changing which necessitated the analysis of instructors' personalities as well as their training to gauge their fit for the changing roles while finding ways of equipping them with necessary skills to cope and succeed in their teaching responsibilities.

Finally, various studies have shown that there is a link between instructional leaders' performance and their personality which in turn has an impact on student performance (e.g. Kneipp, Kelly, Biscoe & Richard, 2010; Klassen&Tze, 2012; Bano, Ansari &Ganai, 2016). It would, therefore, be important to investigate whether their personality also affects their

preference of mode of teaching. Kaplan and Owings (2010), in a United States-based study found that teachers often taught according to their preferences rather than standards and benchmarks meant to guide their work. McKenzie (2011) further writes that one of the factors influencing student performance is the instructor's preference in teaching methods and techniques. Such evidence pointed to the need for studies concerning the preferences of teachers in online and face-to-face education so as to align their preferences to their job placement or equip them in areas of skill deprivation for the sake of improving student performance. Therefore, there was an urgent need for research, especially in the Kenyan context, where online learning is becoming increasingly popular.

#### Statement of the problem

There is a strain on the teaching staff in Kenyan universities. Boit and Kipkoech (2012) posit that this shortage of teaching staff is because the higher education crisis which dates as far back as 1987 and 1990 led to an explosive growth in enrollment of students in universities. To date, this shortage still exists which means that the available staff has been tasked with the responsibility of taking on the emerging forms of teaching including open and distance learning, a task for which they often do not choose and are not well equipped (Makokha & Mutisya, 2016). This then leads to a situation where their choice of teaching given earlier circumstances of face-to-face learning becomes overridden by the new roles allocated to them in open and distance learning.

Extensive empirical research exploring students' personality shows that it has a link with students' academic satisfaction and performance. For example, Bolliger and Erichsen (2013) studied 'Student Satisfaction with Blended and Online Courses Based on Personality Type' and found that students' personality differences influenced their perceived levels of satisfaction with specific facets of online and blended learning approaches. Kirwan and Roumell (2015) then studied online instructors' dispositions which included their "identified characteristics, beliefs, and behaviors" which was closely related to the aim of this study, and found that it would be important to find a model for online instructors to ensure that their work was effectively conducted (p. 32). However, the study had no specific emphasis on the disposition of one's personality which was the gap that this study focused on. In fact, Bolliger and Erichsen (2013) stated that fewer studies explored the relationship between instructor's personality, and their work performance, especially those who facilitate distance learning. Further, there are various disciplines within education which focus on studying the teaching profession. For example, in the field of pedagogy, there are areas such as deontology (teachers' rights and responsibilities regarding students) and pedeutology (features and roles of teachers) (Pusztai & Engler, 2014). Unfortunately, psychological sciences do not have an area studying the matter of teachers' personality yet it is a key component of the educational process (Göncz, 2016).

Interestingly, Holland (1997) writes that people choose careers which have an alignment to their personalities and the more the alignment, the higher the level of job satisfaction and performance effectiveness. Kemboi, Kindiki and Misigo (2016) add that people who gain employment in areas that are misaligned to their area of training, interests or personality often

encounter frustration and dissatisfaction which manifests through low productivity and demoralization. Similarly, when an instructor is allocated an online class yet their interest and personality are aligned to teaching face-to-face, they may exhibit such poor performance in their work. Also, studies have shown that instructors teach based on teaching preferences rather than teaching standards and benchmarks which is a practice that has a significant influence on their effectiveness and performance (Kaplan & Owings, 2010; McKenzie, 2011). Therefore, given the differences in the expectations of instructors facilitating face-to-face and online teaching environments, it was important to investigate the influence of personality on instructors' choice of either online or face-to-face teaching within the Kenyan context especially since there seemed to be little or no Kenya-based research linking instructor personality and teaching preferences.

Finally, it would be important to note that the choice of the University of Nairobi for this study was for two reasons. First, the institution has the longest standing history in ODeL dating back to 1966 (Nyerere, 2016). Secondly, its systems and structures are much better established as proven in its higher standing than other Kenyan universities. This establishment is in areas such as “access to facilities and computers with eLearning materials... availability of ICT infrastructure... adequate skills to use eLearning platforms... [and] level of interaction between lecturers and students in ODL platforms” (Nyerere, 2016, p.11).

## Objectives of the study

### *General objective*

To study the instructional leaders' personality and training, and their preference of online and face-to-face modes of teaching in Nairobi universities

### *Specific objectives*

- i. To investigate instructors' five personality traits and their influence on instructional leader's preference of online and face-to-face modes of teaching in the University of Nairobi
- ii. To establish the preference for online and face-to-face modes of teaching among the instructional leaders in the University of Nairobi
- iii. To establish the source and level of training instructors have received to facilitate both online and face-to-face teaching in the University of Nairobi

### Research Questions

- i. How does personality influence instructional leader's preference of online and face-to-face modes of teaching in the University of Nairobi?
- ii. To what extent do instructional leaders prefer online or face-to-face modes of teaching in the University of Nairobi?
- iii. What is the source and level of training received by instructors to facilitate both online and face-to-face teaching in the University of Nairobi?

#### Assumptions of the study

- i. Measuring people's individual personality differences is possible using various data collection techniques.
- ii. The research participants will have experience in both face to face and online modes of teaching
- iii. There is a difference in student and instructor experiences in online and face-to-face learning platforms.
- iv. The research participants will give honest descriptions of their personality.

#### Justification of the study

There has been a 320% rise in the use of online learning in Kenya's higher education over the last decade (Nyerere, 2016). Technology has been the greatest facilitator of these alternatives to face-to-face learning which enables schools to reach more students despite their geographical location. Given the dynamic nature of the evolution of technology today, more and more countries are adopting this new trend in education thereby contributing to the thinking that the world is becoming a global village (Srinivasan, 2017). Lack of development in the field of online learning would leave Kenya behind in development of its human resource capacity compared to the rest of the world. It would, therefore, be important to investigate underlying factors of effective teaching, such as personality and training of instructors, so as to couple the benefits of competent instructional leaders and advanced educational technology for the success of the country's education sector.

### Significance of the study

While it is apparent that various factors affect the choice of an instructor in their teaching career, the study aims to show how an instructional leader's personality and training plays a significant role in their choice of preferred teaching mode. Therefore, while the trend towards technology-driven teaching seems to be the direction that education is taking, it is imperative that universities take into account the personality traits of instructional leaders as well as their training, and how these two factors influence their choice of face to face or online modes of teaching. This kind of understanding will help the instructional leaders to understand their strengths and weaknesses, and the influence of both on their performance so as to gain necessary skills to cope and improve in their teaching responsibilities.

### Scope of the study

The research was confined to the University of Nairobi (UoN). The respondents were lecturers who teach both online and face-to-face classes in these institutions. This study focused on the influence of instructional leader's personality on their preference for online and face to face modes of teaching and explored the level of training in open and distance learning that they receive to facilitate these courses.

### Limitations

- i. Some respondents were not entirely open in revealing information about their personality which would adversely affect the results. By providing the questionnaire to as many instructional leaders as possible and making the study voluntary, it was possible to collect adequate relevant data from willing respondents.

- ii. Instructional leaders were often busy and making time participate in interviews was a challenge. The questionnaires were available over a period of time to allow respondents to find time suitable slots of time from their schedules to respond.
- iii. The unpredictability of university term dates due to factors such as strikes and examination dates made planning for data collection quite difficult. The researcher identified the study site and worked directly with respondents with regard to their availability which helped in navigating around the challenge.

### Chapter Summary

This chapter explored the background of the study concerning the history of distance learning globally, regionally and locally after which it showed the link between personality and work. There was then the identification of the problem which this study aims to solve as well as the objectives and research questions regarding the relationship between instructional leaders' preference for online and face-to-face modes of teaching. The chapter also outlined the assumptions of the study, its significance, scope and limitations. The next chapter reviews literature relevant for this study.

## CHAPTER TWO

### LITERATURE REVIEW

#### Introduction

This chapter presents a review of the history and diversification of learning environments, the concept of instructional leadership, the growth and state of distance learning in Kenya. It will then review personality, particularly the Big Five Theory of Personality since its five factors are the key independent variables for this study. The chapter will also present a review of literature on the influence of instructional leader's personality on instructors' preference for online and face-to-face teaching modes based on past and current research as well as local studies showing the level of training instructors receive in Kenya to facilitate ODL. Finally, there will be the theoretical and conceptual frameworks for this study.

#### Instructional Leadership

Over the past half a century, trends affecting management and leadership in education have become widespread and shown a strong correlation between school learning and its leadership (Hallinger & Wang, 2015). Consequently, some models that have emerged in educational leadership include transformational leadership (Saleh & Khine, 2014), instructional leadership (Hallinger & Wang, 2015), collaborative leadership (Forman, Jones & Thistlethwaite, 2015), and distributed leadership (Spillane, 2012). Notably, Tutt and Williams (2012) say that these models are not necessarily mutually exclusive. Therefore, it is possible to use more than one model simultaneously. However, of all the models, global literature points to the supremacy of instructional leadership saying that it "has demonstrated the strongest empirically-verified

impact on student learning outcomes” (Hallinger & Wang, 2015, p.2). It is, therefore, apparent that it is an area of study that requires intense research to build its effectiveness for the sake of students’ academic success.

The historical essence of instructional leadership was in the development of the competence of school principals to allow them to effectively lead their institutions towards better performance (Hallinger & Wang, 2015). The roles of instructional leaders include facilitating collaboration among stakeholders, guiding the teachers’ content alignment, and encourage text and resource selection by teachers. Further, there are three dimensions of instructional leadership: school mission definition, instructional program management, and promotion of a climate of learning that is positive (Hallinger & Murphy, 1985). Within these three dimensions, Hallinger and Murphy (1985) note that there are ten functions of an instructional leader. However, with the passing of time, there has been the need to share this responsibility so as to alleviate the stress that may be on school principals when they lead their schools individually. A study by Wells, Maxfield and Klocko (2011) showed that while instructional leadership leaned on the role of the principal, research has shown that principals believe in the impact that teachers can have in offering leadership even though there is yet to be the appropriate definition of what these leadership roles and responsibilities are. This shift has therefore brought into existence the concept of teacher leadership which has the potential to positively influence instructors’ effectiveness through the underlying principle of shared leadership (Klocko& Wells, 2013).

### *Teacher Leadership*

Adams (2018) posits that the concept of teacher leadership is a process whose history shows its development in four waves. The first wave took place in the 1970s where the leadership exhibited was a managerial kind of role where teachers took up their formally assigned leadership roles such as union representatives, head teachers and heads of departments and they led using micro-politics in a bid to collaborate and differentiate their roles. This phase had its focus on efficiency and effectiveness rather than the useful practice of instructional leadership. Adams (2018) stated that the shortcomings of this first phase led to the start of the second wave called instructional leadership where the focus was on giving responsibilities to teachers who had instructional knowledge who then assumed roles such as ‘team leader’. These responsibilities were undertaken in a collaborative way such that there were no hierarchies but rather, teachers and teacher leaders worked as peers. The third wave, distributed leadership, then came up and was very similar to the collaborative nature of the second wave. However, the third phase introduced new elements such as informal leadership and roles where teachers were then able to empower and grow other teachers. The fourth and final wave was transformational leadership where teachers were able to lead by initiating change from the bottom upwards (Adams, 2018). This analysis then shows that the choice to be a teacher is embedded within it the choice to be a leader (Kelley, 2011). Therefore, Kaplan and Owings (2013) propose that schools should develop leadership capacity in teachers through shared leadership so as to accomplish their purpose and achieve their set goals in growing the students.

Katzenmeyer and Moller (2001) show that teachers are leaders because they have the responsibility to improve educational practice through their influence over their students and fellow teachers both within and outside the classroom. The authors add that the three primary facets of teacher leadership include leadership of students or other teachers, leadership of operational tasks, and leadership through decision-making or partnership (Katzenmeyer & Moller, 2001). Frost and Durrant (2003) then show the four benefits of focusing on teacher leadership which include: development of school effectiveness through better consistency and more internal coherence; collaboration of teachers enhances their teaching practice which leads to school improvement; focus on professionalism instead of financial incentives such as better salaries improves teacher morale; and autonomy is upheld through democracy which remedies the adverse effects of dictatorial leadership. However, for schools to realize these benefits, the senior leadership team must be willing to share their power to promote a sense of ownership among the teachers, and the difference in teachers' responsibilities means that they must be willing to collaborate and negotiate effectively (Frost & Durrant, 2003). These two conditions are the limitations of teacher leadership.

Within the Kenyan context, Mwiria, Ng'ethe, Ngome, Ouma-Odero, Wawire and Wesonga (2007) advocate for teacher leadership saying that it democratizes decision-making which ensures that school staff members are included in universities' governing bodies. Unfortunately, there are some issues that present themselves as obstacles to realizing the full benefit of teacher leadership. First, the perpetuation of hierarchical management coupled with the culture of 'political meddling' renders decentralization of leadership ineffective. Mwiria et al.

(2007) say that this kind of meddling involves interference in proper governance procedures, such as promotions and leadership appointments, which, in effect, undermines the principle of meritocracy. This problem causes institutions to end up with a system of centralized leadership which then suppresses shared leadership that would have otherwise taken place through processes such as consultation, discussions, and delegation of responsibility (Mulinge, Arasa & Wawire, 2017).

Another problem which has hampered the effective and beneficial practice of teacher leadership is the immense strain on universities' teaching staff due to issues such as disproportionately massive student enrollments compared to available instructors, unattractive remuneration and brain drain (Mwiria et al., 2007). Such strain due to burnout from heavy workloads causes stress which impairs their ability to be effective leaders in their institutions, both inside and outside the classroom environment. Owour (2012) adds that in Kenya, particularly in public universities, the inadequate staff numbers leads to the problem of filling vacant positions with unqualified people such as post-graduate students. Lack of proper qualification of instructors in critical areas of university education such as thesis supervision can lead to even more problems such as poor quality of research since the lecturer may lack mastery in the student's field of research (Owuor, 2012).

The teaching staff may also not get the needed training to perform their teaching duties effectively. The most worrying fact about this is that as the country's education tends towards more ICT-based learning, training is essential to ensure proper use of the available technologies

especially since most online and distance learning classes are given to instructors through allocation rather than choice (Inegbedion, 2017). Therefore, this issue of lack of qualification coupled with heavy workload jointly causes other problems which adversely affect the quality of teacher leadership, if any, that the instructor can offer.

Finally, despite the gravity of the issues that are an obstacle to effective teacher leadership in Kenya in the ODL context, cultural factors have played a critical role in perpetuating and intensifying the degree to which these problems continue to plague the education system. Kerubo (2016) write about the vehemence with which people hold onto their culture. The authors give the example of the way in which formal education came to take the place of what young people were taught after initiation as part of their rite of passage process. While it is true that formal education has been embraced in many communities, there are some communities which still hold onto their culture, some of which rejects the idea of formal education (Filmer & Fox, 2014). How much more, therefore, would they reject the issue of virtual learning? Nonetheless, Filmer and Fox (2014) argue that in Sub-Saharan Africa younger generations are more open to technology than the older generation of people, such as the university lecturers. Therefore, there is a clash between the youth's tendency towards innovation and the older generation's conservatism with regard to introducing ICT in education.

#### History and Diversification of Learning Environments

The concept of education began many thousands of years ago where, in many communities, children would receive information from the older generations or their curiosity

would breed exploration which would result in knowledge gain. The latter is entrenched in the historical roots of Western-European pedagogy for early childhood education (Cutter-Mackenzie, Edwards, Moore, & Boyd, 2014). However, with the passing of time, there have come up more innovative ways of educating people which remedy the shortcomings of face-to-face education such as the inconvenience of sparse geographical distances. It is from this need that the concept of distance learning arose (Zawacki-Richter & Anderson, 2014).

According to Zawacki-Richter & Anderson (2014), the rise of technology, especially the widespread use of the internet, has manifested the rising demand for high quality education all around the world for two reasons. First, economically, the job market is becoming more knowledge intensive and science-based making high quality education a necessity. Secondly, socio-politically, there is intense pressure on universities to facilitate access to education to groups of people who do not have the opportunity to attend school in the conventional face-to-face classroom environment. Nyerere (2016) writes that an example of such a group of people who cannot access learning through mainstream platforms are those who live in remote areas. Therefore, ODL facilitates the provision of such education to “diverse learners in varied geographical and socio-cultural contexts and increase intercultural awareness and communication” (Zawacki-Richter & Anderson, 2014, p. 75).

#### Instructional Modes of Content Delivery

Within the sphere of the use of technology for educational purposes, there are three primary concepts and modes of learning which have arisen and are different from the traditional

face-to-face approach: online learning, distance learning, and blended learning. Online and distance learning have been two concepts that have often been confused to mean the same thing and therefore, been wrongfully used interchangeably. Moore and Kearsley (2012) distinguish these two terms by arguing that distance learning, also called distributed learning, refers to learning that takes place when the teacher and student are in separate geographical locations which then necessitates the use of technology to facilitate communication between the two parties. It is characterized as asynchronous since the two parties may not be communicating at the same time but distributed because the information is available at any place and time. On the other hand, online learning, also called e-learning, refers to any teaching and learning that happens using the internet whether or not that learner and teacher are separated by distance (Tayebnik & Puteh, 2012). The third concept is that of blended learning which Starr-Glass (2014) says may be defined as education which takes place partly online and partly face-to-face such that it blends the convenience of online access and human interaction. Lim and Morris (2009) believe that the integration of the strengths of both online and face-to-face teaching is the answer to better learning outcomes through improved learning experiences.

One other distinction that Murray and Christison (2017) make between the various modes of learning is the degree to which the learners gain exposure from each of the provided modes. The author notes that the issue of 'exposure' may be relative and therefore, gives typography on the basis of percentage of time allocation for each mode. For traditional mode of delivery, there is 0% exposure to web-based technology since instruction takes place purely face-to-face. The next is the web-facilitated mode where 1-29% of the course content is provided online, an

example of which is Course Management System (CMS) contains information such as assignments and curriculum making its function merely administrative. The third mode is blended where 30-79% of the instruction takes place online such that both face-to-face and online modes significantly contribute to the overall course. Finally, when 80-100% of the instruction occurs online, then the mode is online since very few activities, such as introductory meetings which are often optional and minimally instructional, take place face-to-face (Murray & Christison, 2017).

There are a wide array of benefits of blended learning some of which include more social interaction compared to pure online learning which creates a sense of community, it provides more time for instructors to prepare course content and deal with students in smaller groups than pure face-to-face learning, the inclusion of web-based resources gives a deeper understanding of course content, and the learning outcomes and experiences of blended learning are better than that of using face-to-face or online independently (Tayebinik & Puteh, 2012). In all, a blended learning environment enables both the student and instructor to get the best of both worlds (Snart, 2010) which then means that as the world tends towards technology-based education, instructors will need to be equipped with the skills to employ a diverse range of modes of teaching despite personal preferences (Kizilag & Adnan, 2017).

#### Growth of Online and Distance Learning in Kenya

According to Nyerere (2016), Kenya's universities have increased by 320% over the last ten years or so which shows evidence of the rapid expansion of higher education and points to the

need for alternatives for teaching and learning methods. One such option is open and distance learning (ODL) which is an alternative to the conventional face-to-face classes (Zawacki-Richter & Anderson, 2014). Some of the advantages of such an alternative include knowledge creation through the interaction of students from dispersed geographical distances, flexible learning hours especially for working students, and saving money required to get to class from geographically distant places (Tynan, Willems, & James, 2013).

Unfortunately, there are a myriad of challenges that hamper effective online learning especially in Kenya such as Kenyans' skepticism concerning the quality of the education on an online platform causing lower than expected enrollment into online courses, unreliable technological infrastructure due to poor funding (Nyerere, 2016), and loss of the human connection which may adversely affect student experiences (Keengwe, Schneller & Kungu, 2014). However, in a bid to improve the provision of distance learning services, schools undertake activities such as training staff, educating people on ODL programmes, improving and expanding student support services (Nyerere, 2016). Notably, even if there was adequate provision and remedies for such issues, the instructional leaders' effectiveness would still be adversely affected by personal matters such as personality.

#### Preference for Modes of Teaching

As stated earlier, instructors' teaching techniques often align more with their preferences than set standards of teaching practice (Kaplan & Owings, 2010) which in turn influence their students' performance (McKenzie, 2011). In a Kenya-based research exercise studying seven

public universities, Makokha and Mutisya (2016) found that lecturers who used virtual and face-to-face modes of teaching accounted for 32% and 68% of the study population respectively. However, within the same population, lecturers who preferred e-learning, face-to-face, and blended modes accounted for 34%, 20%, and 25% respectively while the remaining 21% had no preference. The reasons the authors identified as being behind lecturers' preferences included easy reference offered by hard copy course materials, possibility of technology failure during a lesson which caused fear, and technical inability to convert teaching materials from hard copy to soft copy (Makokha & Mutisya, 2016).

Interestingly, of those who preferred the virtual mode of teaching, most of their use for the platform was for uploading notes and relevant course material for the students (Odhimbo, 2009). In the following table, Nyerere (2016) shows how University of Nairobi (UoN), Kenyatta University (KU), Moi University, Maseno University (MU), and Jomo Kenyatta University of Science and Technology (JKUAT), Masinde Muliro University of Science and Technology (MMUST), Multimedia University of Kenya (MMU), Karatina University, and St. Paul's University (SPU) most preferred to use their ODL facilities.

Table 1: *Table showing preferred use of ODL facilities among nine Kenyan universities*

Mode of delivery	UoN	KU	Moi	MU	JKUA T	MMU ST	MMU	Karati na	SPU
Course modules									

Lecture notes									
Online/eLearning									
Blended									
Videoconferencing									
Skype									

From the table, six and four out of the nine universities prefer to use their ODL facilities for sending course content and lecture notes respectively while only three out of the nine preferred e-learning and blended learning. Along with the nine universities, Nyerere (2016) conducted the study to include Kenya Methodist University (KeMU), Africa Nazarene University, and Kenya College of Accountancy University (KCAU). The following chart shows this analysis:

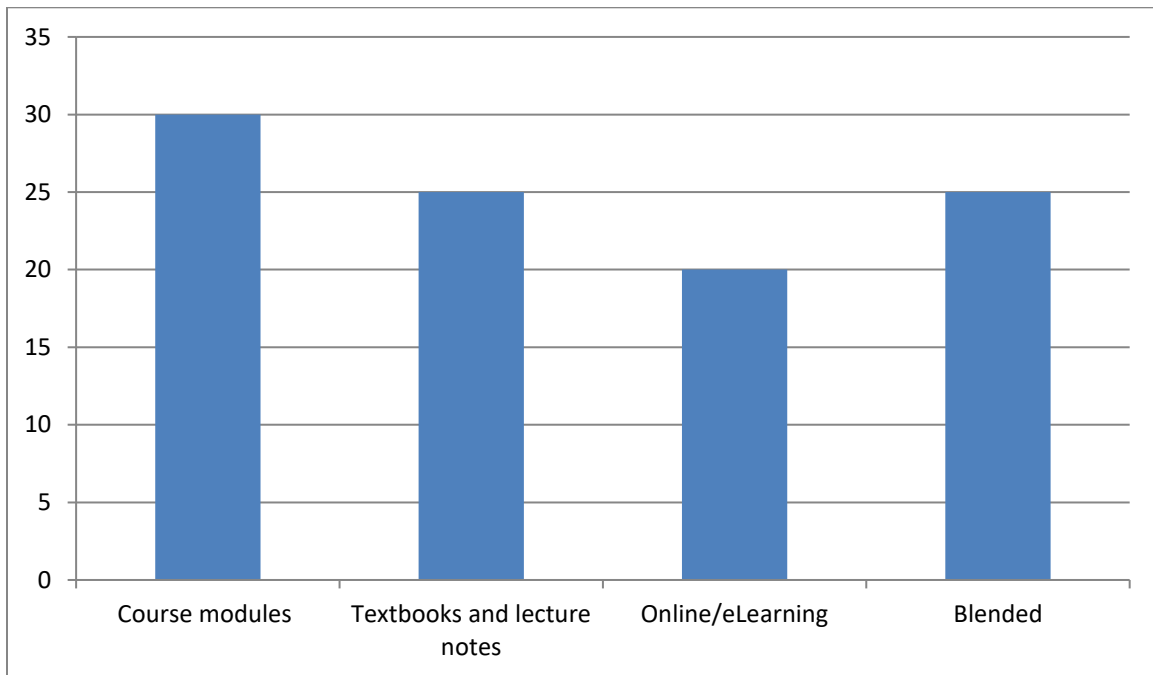


Figure 1: Graph showing preferred use of ODL facilities among twelve Kenyan universities

While there were only four preferences shown in the chart, Nyerere (2016) also analyzed videoconferencing and Skype but they were not a most preferred use of ODL facilities in any of the 12 universities. In all, Makokha and Mutisya (2016) found that while 59% of Learning Management System (LMS) content contained uploaded notes, only 37% was interactive which the remaining 4% had other content. Barasa (2017) adds to this finding by saying that some instructors used educational technology to prepare classroom course content such as online research, PowerPoint presentations, and use of Skype for student feedback. Therefore, even though some instructors may opt for online and distance mode of teaching, their use of the available educational technology is very basic.

Makokha and Mutisya (2016) went on to show that this basic use of learning ICTs was due to poor collaboration with technical staff, lack of adequate time to develop modules which offered an interactive learning experience, and most institutions in the study had infrastructure which could not facilitate development of interactive content. Another reason which may explain the preference may be a negative cultural attitude towards computer-based modes of teaching. In Tanzania, for example, Ndume, Tilya and Twaakyondo (2008) say that there is a learning culture that is negative in that it resists digital learning. Since attitudes significantly influence one's behavior (Mudasir & Ganai, 2017) as shown by teachers' inclination to teach depending on preference rather than standards (Kaplan & Owings, 2010), then such attitudes would affect one's preference for or against ODL.

Nyerere (2016) further writes that there is skepticism surrounding the quality of education offered through online and distance education which has created a negative attitude towards virtual learning as well. This negative attitude may not only be with potential students, but also with those who are tasked with the responsibility to facilitate it, that is, the ODL instructors. Humbert (2007) argues that ODL instructors who share perceived values concerning distance learning have a higher motivation to participate in the new mode of teaching than those who lack understanding concerning the process. Therefore, to promote positive attitudes towards ODL thereby making its implementation and practice successful, training should be a core part of empowering ODL instructors to perform effectively as is shown in the next section.

### Training Instructors for ODL Modes

One of the challenges facing the development of ODL is that there is little or no training given to instructors who are allocated online and distance learning classes. Makokha and Mutisya (2016) note that this issue is of grave concern since an instructor's prior experience when it comes to using technology as well as the training that develops their ICT skills boosts lecturers' confidence in using ICT tools to impart knowledge. Lack of such training leads to a situation where instructors misuse technology or fail to use it at all (Makokha & Mutisya, 2016). In Zimbabwe, for example, Mpofu, Samukange and Kusure (2012) write that about 97% of ODL lecturers lack any relevant experience in facilitating distance education. In Uganda, Kasse and Balunywa (2013) report a similar case arguing that full scale adoption of ODL in high ranking institutions was hampered by various reasons, one of which is technical incompetence brought about by lack of relevant training.

In Kenya, Nyerere (2016) writes that one of the reasons for the skepticism surrounding the quality of distance learning is the fact that there are no clear policies concerning its practice in various areas of learning one of which regards training of its instructors. The author surveyed 12 universities and found that 11 of them had ODL policies but on an institutional level. However, there lacked national policies to guide and oversee the institutions employing ODL. Makokha and Mutisya, (2016) mention the development of the Kenya Education Sector Support Program (KESSP) by the Ministry of Education and the 2006 national ICT policy developed to promote the access, efficiency and availability of ICT services. Despite their existence, there is

still no national policy on e-learning in Kenya which would then dictate the training content and requirements for ODL instructors (Makokha & Mutisya, 2016).

Makokha and Mutisya (2016) further conducted an analysis on the level of training and the means through which instructors gained skills on facilitating distance education. The following table shows the results of the analysis.

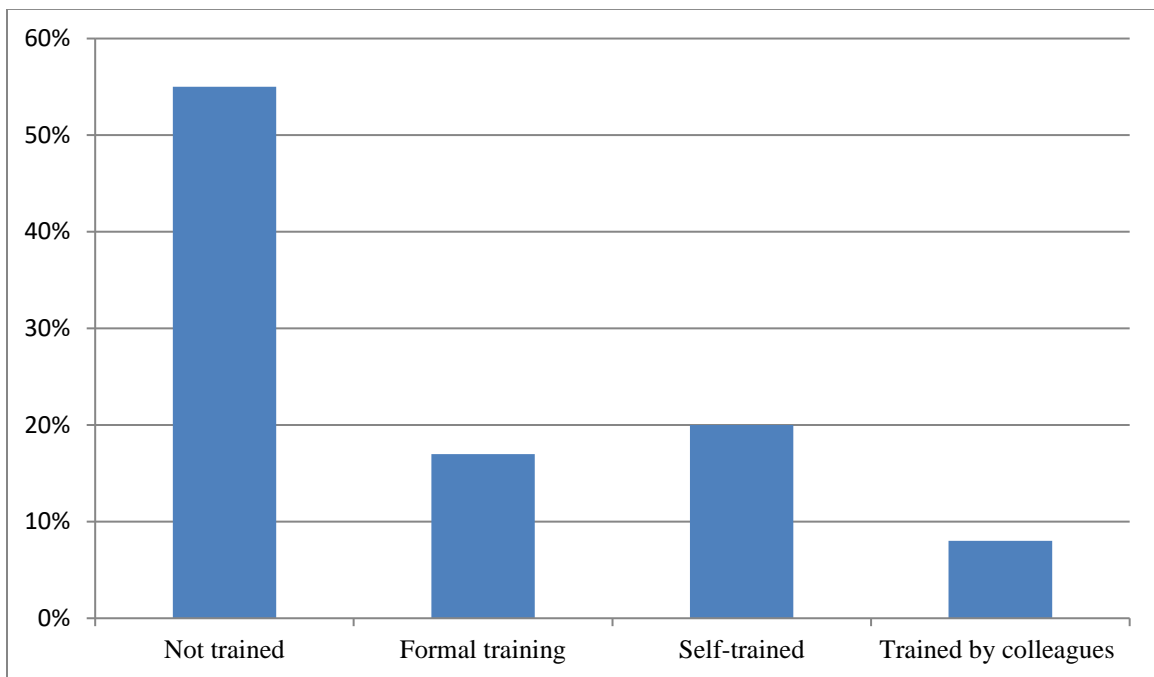


Figure 2: Graph showing the mode of training for ODL instructors among selected Kenyan public universities

The study found that an astounding 55% of ODL instructors had no training on how to facilitate e-learning. Additionally, only 17% had undergone formal training, 20% trained themselves while 8% received training from colleagues. Comparatively, in a study by Nyerere (2016), the researcher investigated the level of training of ODL instructors on the basis of application of ICT

in teaching, course modules development, assessment of ODL learners, and development of interactive course content. The range of the scale had five categories: 0%, 1-10%, 10-20%, 20-50% and 50-100%. The results showed that in the four areas investigated, the level of training was at 0%, 8%, 8%, 44% and 40% in the five respective categories as shown in the following table (Nyerere, 2016).

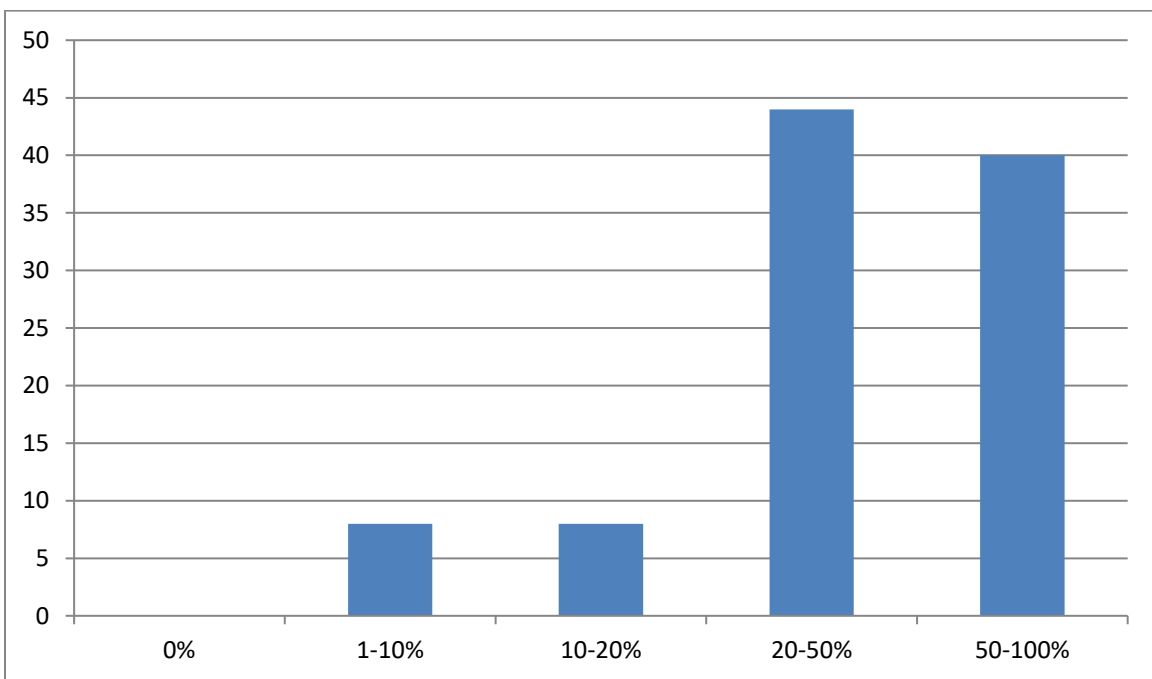


Figure 3: Graph showing the level of training for ODL instructors among selected Kenyan public universities

Evidently, the training is below average since of the twelve institutions studied, a majority of the universities reported the highest level of skills training received to be 20-50% for ODL instructors. Therefore, the 20% of the instructors who Makokha and Mutisya (2016) found to have trained themselves may be effective only through gradual development of their skill following continuous exposure to and use of the ODL technologies.

## Theoretical framework

This study employed the Big Five Theory of Personality and the Role Theory of Leadership with the former as the primary theory.

### *The Big Five Theory of Personality*

Although developed by Lewis Goldberg, Engler (2013) states that much of the theoretical groundwork for the Big Five Personality Theory was laid by Raymond Cattell in his renowned 16 Personality Factor Trait Theory. The five factors that later formed Goldberg's theory include extraversion, agreeableness, conscientiousness, neuroticism, and openness each of which have differing descriptive characteristics which form an inventory(Engler, 2013).

According to Vorkapic, Vajicic and Cepic (2014), the Big Five Theory of Personality developed by Lewis Goldberg allows for the understanding of an individual as a whole through its integrative framework since it incorporates the most current empirical and theoretical trends thereby delivering relevant data. Secondly, the theoretical framework is one that enjoys consensus concerning its employment of universal personality dimensions as agreed on by various researchers (Costa, 1997; Busato, Prins, Elshout, & Hamaker, 2000) (Chamorro-Premuzic & Furnham, 2014). Thirdly, since the theory shares a framework and even variables with other theories especially Raymond Cattell's 16 "fundamental factors" of personality from which it was derived, it is possible to replicate and compare studies regarding personality (Chamorro-Premuzic, 2015).

Conversely, some critics fault the Big Five theory as one that lacks concrete explanations concerning its development the processes that led to the identification of the personality factors

(Murphy, 2013). However, its excellent reliability and validity has made most researchers agree on the five dimensions of personality and the advantages of its thorough assessment technique (Beckmann & Wood, 2017). Finally, like currency exchange, the Big Five theory is one that allows other systems of personality to translate their data into its five personality dimensions which is advantageous due to its diverse use rather than narrow scope (Chamorro-Premuzic & Furnham, 2014). Notably, there are two other theories which scholars have used to evaluate personality in the educational context: Eysenck's model and Cattell's 16 factors model. However, the Big Five Theory is most preferred since Eysenck's model is said to be "excessively bound with the physiological research data" while Cattell's 16 factors is not sufficiently reliable due to its complexity (Abdelsalam, 2013, p. 60).

#### *Influence of Personality on Instructor's Preferred Teaching Mode*

Past studies have evidenced the importance of instructor's personality in determining students' behavior and achievement. Lorentz and Coker (1977), in a study investigating the relationship between teachers' MBTI Types and their behavior, found that teachers' personalities affect their students' reactions in class. Another research by Fisher and Kent (1998) using the MBTI instrument found that there was a relationship between the instructor's personality and the existing classroom environment perceptions. In essence, certain character traits and personality attributes have a significant bearing on the ease or difficulty with which an instructor will create and sustain a learning environment which encourages the development and nurturing of skills such as problem solving and creative thinking (Hamza & Griffith, 2006; Zhou, 2017). In fact,

Northcote (2010) argues that personality plays a crucial role in creating and sustaining a conducive online learning atmosphere.

There are also current studies proving this phenomenon. A study investigating the relationship between student performance and teacher personality showed that there is indeed a link between the two variables in that students performed differently based on their instructor's personality (Mudasir & Ganai, 2017). Bano, Ansari & Ganai (2017) further argue that in a study conducted to investigate student-teacher relationships, "students seemed to be more concerned with the behaviors and treatment from their teachers than with the physical appearance of their teachers" (p. 57). These results show the importance of an instructor's 'internal' attributes as being more superior to their 'external' or physical qualities. Factors such as instructor personality will then affect students' attitudes and consequently, their academic performance (Mudasir & Ganai, 2017; Wirth & Perkins, 2013; Zhang, 2015; Berliner & Calfee, 2013).

The results of past research allude to the undeniable importance of personality in instructional leadership since it has a significant impact on students' perception and even more importantly, their academic performance. In fact, Arif, Rashid, Tahira, and Akhter (2012) write that "personality influences the behavior of the teacher in diverse ways, such as...teaching methods...The effective use of a teacher's personality is essential in conducting instructional activities" (p. 163). There was, therefore the need to identify the implications of the five factors in the Big Five Theory of Personality on an instructional leader's preference for online or face-to-face modes of teaching.

### *Influence of Extraversion on Instructor's Preferred Teaching Mode*

Moneta (2014) argues that extraversion goes beyond one's talkativeness and encompasses emotions and behaviors such as "sociability, affection, friendliness, and spontaneity" (p. 114). Holman, Wall, Clegg, Sparrow and Howard (2005) discuss the issue of teleworking and its relationship with personality in light of the minimal or inexistent degree of supervision which is a defining characteristic of online work. The authors say that when it comes to interaction within and outside the organization, extroverted people are very successful in such jobs. Further, teleworking would also be a good option for extraverted people since it involves little or no supervision which "is an attractive option for teleworkers" (Holman et al., 2005, p. 183).

Contrary to the view that extraverted people may prefer online interaction due to the low level of supervision, a study by Blau and Barak (2012) found that "extraverts preferred taking part [in conversations] via more revealing communication mediums (for example, spoken, face-to-face discussions) whereas introverts preferred holding discussions via text chat" (Barnes, 2018, p.72). However, this view is true only to the extent to which there is ongoing conversation on the online platform which keeps them engaged. Hew and Cheung (2014) argued that students were motivated to engage in online discussions when their instructors had a high degree of involvement. Similarly, extraverted teachers may prefer online rather than face-to-face teaching if their students are adequately responsive. Otherwise, they may prefer face-to-face communication where there is instant feedback (Gamble & Gamble, 2013; Kadushin & Harkness, 2014).

### *Influence of Agreeableness on Instructor's Preferred Teaching Mode*

Robins, Judge, Millett and Boyle (2013) argue that “agreeable people tend to be kinder and more accommodating in social situations” which then explains why “they are more pleasant to be around” (p.108). Therefore, people who score highly in agreeableness have a tendency to create and sustain positive interpersonal relations and resolve conflicts quickly through “use of compromise, avoidance of physical force and threats” (Matthews, Deary & Whiteman, 2003, p. 229). A study showed that instructors who score highly in agreeableness prefer to work in environments which uphold the spirit of community where people get along well with each other. Since agreeable people conform, comply and strive to be liked (Robins et al., 2013), they may tend towards attaining social approval (Kenrick, Neuberg & Cialdini, 2010; Leary & Tangney, 2012).

Given the literature studied, an instructor's tendency towards online or face-to-face learning may greatly depend on what the colleagues or peers say about what would be better between online or face-to-face modes of teaching rather than what they think about it. In all, unlike other personality traits that would often show a clear link between personality and teaching preferences, agreeableness seems to rely more towards external factors such as social approval, rather than internal determinants for instance, self-efficacy.

### *Influence of Conscientiousness on Instructor's Preferred Teaching Mode*

Highly conscientious people are those who plan thoroughly for their tasks and have set objectives for what they intend to do as well as the outcomes of their work processes (Robbins et

al., 2014). This inclination to have positive attitudes towards their work through thorough preparation and planning contributes to high levels of self-efficacy, a characteristic in highly conscientious people (Kozlowski & Salas, 2010; Nelson, Quick, Arstron & Condie, 2012).

Conversely, the problem comes in when the school environment is as dynamic as it is now. Davis and Arend (2013) write that the emergence of online learning and consequent changes in the teaching scene has made it such that “conscientious professors can hardly keep up anymore with what they are supposed to do to be successful” (p. iv). Robbins et al. (2014) add that while conscientious people are very organized in their work, they often face the challenge of adapting to changing situations due to their orientation towards performance rather than learning, which further confounds the negative relationship between conscientiousness and creativity (Mumford, 2012). Conscientious people therefore, have an inclination towards stability rather than adaptation since “they get into routine and maintain precedent to provide order and predictability” (Fink & Capparell, 2013, p. 29). Consequently, they may choose the familiar face-to-face teaching rather than the dynamic nature of online learning, especially for those who have been teaching in the physical classroom environment for a long time.

#### *Influence of Neuroticism on Instructor’s Preferred Teaching Mode*

Instructors who tend to be neurotic (low emotional stability) often are pessimistic, worry a lot, and doubt their self-efficacy and decision-making capabilities which then makes the overly frustrated or even suffer burnout (Fives & Gill, 2014). Chamorro-Premuzic and Ahmetoglu (2012) write that “people high on neuroticism are generally anxious, stressed, pessimistic, and

fearful and tend to have lower self-esteem” while “people who are low on neuroticism are emotionally stable, calm, and optimistic” (p.29). Schreuder and Coetzee (2007) agree and add that “reduced professional efficacy [is] related to neuroticism” (p. 296) since highly neurotic people have low self-esteem thereby have little belief in their ability to produce the desired outcomes in the course of their work.

Apart from a low sense of confidence in their work, Christiansen and Tett (2013) write that individuals with high neuroticism scores become adversely affected by differences in their training and transfer environments. Therefore, teachers whose training is based on the traditional face-to-face environment may have a difficult time trying to transfer their acquired skills on an online platform since it is different from what they are familiar with (Charles, 2016). Notably, the element of fear (Fives & Gill, 2014) may play a crucial role in this difficulty in adapting to change. Therefore, instructors who have high neuroticism scores may prefer the familiar classroom environment rather than the online mode of teaching.

#### *Influence of Openness on Instructor’s Preferred Teaching Mode*

Instructors who score highly on the openness scale have a high tolerance for ambiguity (Gijbels, Donche, Richardson, & Vermunt, 2014), prefer new experiences, and are intellectually curious (Biles & Flint, 2013). Conversely, “people lower on this dimension tend to have narrower interests and stick to the tried-and-true ways of doing things” (Daft, 2015, p.105). Therefore, people who score highly on openness are dynamic and adventurous in how they carry out their

work while people who score lowly here are much more conventional and prefer to maintain status quo (Mondak, 2010).

Given the nonconventional nature of online teaching compared to the traditional classroom teaching, it would be right to say that teachers who score highly on the openness scale would have a preference for the online rather than the face-to-face mode of teaching. Chammoro-Premuzic and Furnham (2007) argue that since openness relates to intelligence in people, it may have a significant effect on one's competence thereby allowing them to perform effectively in assigned tasks. Further, people who score highly on the openness scale have interests which are extensive (Cheung, Kwok, Ma, Lee, & Yang, 2017). Such a finding would allude to the ease of adoption of the use of the online mode compared to the traditional face-to-face teaching. Further, since people who score highly in openness prefer to explore new things (Daft, 2015; Cheung, Kwok, Ma, Lee, & Yang, 2017) and exhibit high levels of creativity in their tasks (Zhou, 2017), online learning would, therefore be an avenue through which they can dig into the revolutionary use of technology in teaching.

*Influence of age and gender on the relationship between personality and instructors' preferred teaching mode*

Although the definition of personality concerns the stability and enduring nature of one's traits, studies have shown that these traits often change as people grow older for various reasons which may include gaining new experience, the nature of one's work, influence of one's social environment, and a more mature sense of self-identity (Hedge & Borman, 2012). Pastorina and Doyle-Portillo (2013) note that while there is a dramatic difference in culture, language and even

historical experiences among people in different nations across the world, studies have proved that cultural differences did not affect the manner in which age influenced personality.

Foos and Clark (2016) write that “[personality] traits are far more stable in older adults than younger adults” with the differences in stability of traits being evident specifically in neuroticism and extraversion in the younger adults while the older ones showed stability in all five traits (p. 181). An analysis of the authors writing shows that over time, openness and extraversion decrease while conscientiousness and agreeableness increase. Hedge and Borman (2012) agree with this view but note that neuroticism would possibly decrease as Pastorina and Doyle-Portillo (2013) confirm that people indeed tend to become more emotionally stable as they age. Therefore, while this study may show the relationship between an instructor’s personality and their preferred mode of teaching, their age may play a significant role in this study’s finding.

Gender plays a vital role in one’s personality as well (Hedge & Borman, 2012; Pastorina & Doyle-Portillo, 2013) such that women score higher in extraversion, agreeableness, and neuroticism compared to the men (Weisberg, DeYoung & Hirsh, 2011; Jarecka-Zyluk & Holz, 2014). Pastorina and Doyle-Portillo (2013) say that although studies have shown that there is a difference in personality based on gender, people of the same gender have been found to have more differences among themselves than people of the opposite genders. However, these differences became fewer as people of both genders aged showing that age is a moderator of the relationship between gender and personality (Weisberg, DeYoung & Hirsh, 2011). As such, an

instructor's gender may determine their inclination to either face-to-face or online teaching since gender significantly influences one's personality. Unfortunately, this area may prove difficult to measure to a possible inadequacy in respondents as K'Odipo (2013) argues that women in high decision-making levels are very few in Kenya.

### *The Role Theory of Leadership*

Given the shift from the traditional mode of teaching to the less conventional one which involves the employment of technology for teaching, there have emerged changes with regard to an instructor's role in the learning process (Greener, 2015). Therefore, this study's theoretical framework included the role theory of leadership to explain the changing leadership role of the instructor during the shift from the conventional face-to-face to distance learning.

The role theory, developed in 1970s, came up to explain the emerging behavioral patterns which different states across the world exhibited during the Cold War. The theory then evolved over time to encompass various fields of study, particularly social sciences. Scholars then found that social roles, such as leader and follower, defined people's behavioral patterns and determined the part they had to play within a group to reach their intended goal (Harnisch, 2011).

In the context of the education, teachers are leaders both informally and formally and, therefore, play certain roles within their schools to ensure that they carry out their responsibility of imparting knowledge in the students. This role of teachers as leaders is so significant that scholars have begun to explore the area of teacher leadership and its implications in the context of the school as well as a function of leadership (Adams, 2018).

Simonson, Smaldino and Zvacek (2015) state that one significant change experienced as a result of the growing popularity of distance education is the shift from teacher-centered to student-centered learning as advocated for by John Dewey. The teacher-centered approach to learning was one where the teacher came up with content and taught it primarily through lecturing after which students took down notes and studied for their tests. This approach had minimal interaction. Conversely, in the student-centered approach, there is much more interaction such that technology not only allows for student-teacher communication from a distance, it also requires teachers to engage their students through collaboration which produces active learning (Simonson, Smaldino & Zvacek, 2015). This shift shows that the teacher's role evolves from a mere conduit of information to a facilitator of active communication through increased student-teacher interaction in the education process. As the driver of the curriculum (Wiles, 2009), the teacher is therefore faced with the task of role adaptation which is a facet of the role theory which explains the process through which an individual changes the strategies and means of achieving their goal.

Ammenwerth (2017) was more specific in the concept of changing roles of lecturers stating that the shift from face-to-face to online teaching has the implication of changing the role of the instructional leader into four categories. They include the pedagogical role as the facilitator of the education process, the social role as the creator of a social and friendly learning environment, the managerial role of course content designer and finally, the technical role when it comes to "helping the students to master the technical course environments" (Ammenwerth, 2017, p. 3123).Dhillia (2017) adds that factors which contribute to the success of experiences on

online learning platforms include course consistency, in its structure, design and cross-platform navigation; quality and consistency in interaction with course facilitators; instructors' use of highly immediate behaviors such as offering frequent compliments and disclosing information openly and willingly; offering quick responses to students' questions and; support from the faculty to help the online learning endeavor to succeed. All these factors evidently continue to show the crucial role of the instructor in the learning process and the need to facilitate the instructors' ability to offer useful support to the learning process which is possible through training which is often not necessary in the conventional face-to-face classes. Finally, Barnett, Shoho and Cypres (2012) note that instructional leadership relies heavily on training of the instructor. Therefore, and any change in roles, as is the case in the shift towards online learning, there is need for retraining to maintain effectiveness of the learning process.

### Conceptual framework

The conceptualization of the variables in the study has been done in Figure 1. The independent variables are the five factors of the big five theory of personality which include extraversion, agreeableness, conscientiousness, neuroticism, and openness. Their extent to which these traits vary in an instructor will be measured to determine their influence on their preference of either online or face-to-face modes of teaching which form the dependent variable. However, since an analysis of past research has shown that gender and age have a significant influence on personality, these two factors then become this study's intervening variables.

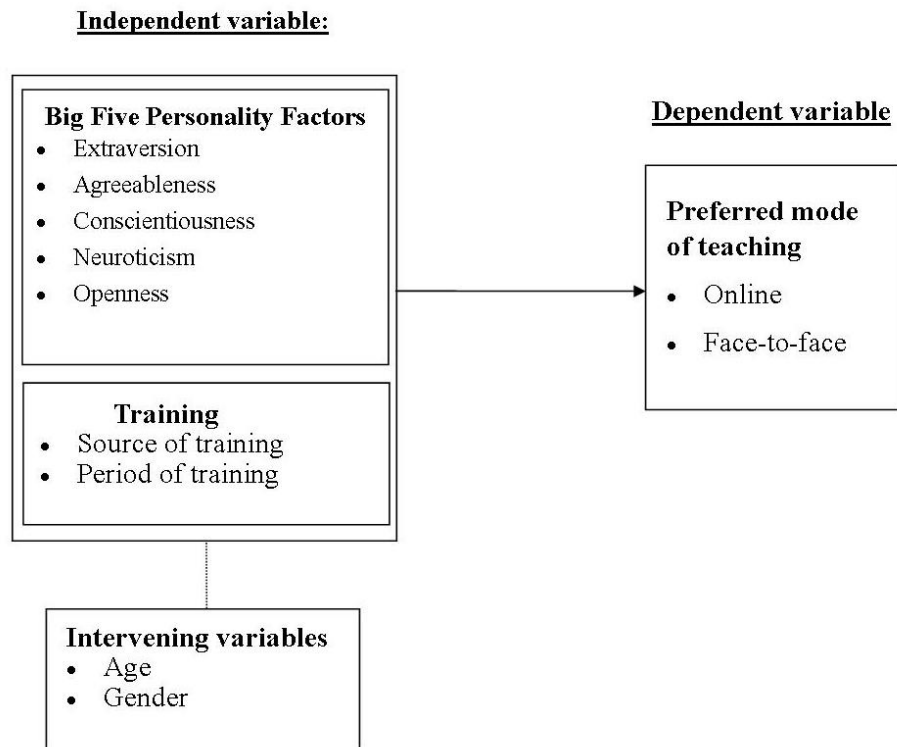


Figure 4: *Conceptual framework showing the relationship between the big five personality factors and an instructor's preferred mode of teaching.*

### Chapter summary

Chapter two reviewed literature concerning various concepts such as open and distance learning, instructional leadership, personality and teaching preferences. There was also the evaluation of the relevant past studies which have explained these concepts and their relationships both from a global and local perspective. This analysis included the challenges and benefits that ODL presents and which specific issues are addressed in this study. The chapter

also showed the theoretical framework which included the Big Five Theory of Personality and the Role Theory of Leadership. Finally, there was the illustration of the study's conceptual framework.

## CHAPTER THREE

### RESEARCH METHODOLOGY

#### Introduction

This chapter explains the methodology employed in the study including details concerning the research design, population, sample selected, sampling method, types of data, data collection methods, instrument pre-testing, data analysis plan, and ethical considerations.

#### Research design

This study employed a survey research design since it involved collecting data from a certain number of people about their behaviors and whose responses were generalized to the target population. The study also collected and analyzed quantitative data from its respondents through the use of questionnaires which had both open-ended and closed questions. Further, it was also a mixed-mode research because the researcher used questionnaires and document analysis as instruments of data collection. The justification for the exclusion of the use of interviews is that the questions that would be asked in the interviews were included as the open-ended questions in the questionnaire administered.

Concerning the issue of the research paradigm, Jones, Torres and Armino (2014) state that research has its foundation in specific philosophical paradigms which determine how a worldview influences people's view on research and have underlying philosophical assumptions which guide action as well as how we think. Of the three paradigms in research, namely positivism, constructivism, and emancipatory, this study employed the positivist paradigm

which researchers mostly use in studies like this one which concern the fields of psychology and education (Mason, 2009). Jones, Torres and Armino (2014) further say that positivism is “the optimistic notion that science leads to progress” (p. 15). Pascale (2011) adds that positivism and objectivism enjoy a mutually reinforcing relationship such that positivism steers “a search for laws of social life that could stand as equivalent to the natural laws of the physical sciences” (p.13). This matter was very important in ensuring that the information derived from this study represented reality as it is since objectivity facilitates the presentation of facts which are true or false regardless of what people’s thoughts or feelings (Jones, Torres & Armino, 2014).

#### Study Population

Instructors who teach both online and face-to-face classes in the University of Nairobi (UoN) formed the target population for this study. The courses offered through distance learning in UoN (University of Nairobi, 2018) include:

Table 2: Table showing number of courses offered through ODL in UoN

<b>PROGRAMMES</b>	<b>No. of courses</b>
Certificate	-
Diploma	-
Degree	21
Post-graduate certificate	-
Post-graduate diploma	-
Post-graduate degree	12
<b>Total</b>	<b>33</b>

#### Sample to be selected

This process facilitated the identification of respondents who were representative of the target population. Generalization from this sample was therefore possible for the population of this study.

The study involved respondents who facilitated both online and face-to-face classes in UoN. Upon consultation with the UoN's ODeL department, the researcher found that only 33 respondents were the total available population and a census was taken since the population was small.

### Sampling method

The sampling method used to identify the institutions to be used in the study was purposive sampling which Daniel (2012) defines as “a nonprobability sampling procedure in which elements are selected from the target population on the basis of their fit with the purposes of the study and specific inclusion and exclusion criteria” (p. 87). This study only aimed at University of Nairobi which is accredited and facilitates both online and face-to-face modes of teaching. A census was taken owing to the small size of the population.

According to a study by Nyerere (2016), other institutions such as Jomo Kenyatta University of Science and Technology (JKUAT), Kenyatta University, Africa Nazarene University and Mount Kenya University also offer online courses. The University of Nairobi was deemed the most appropriate institution in which to carry out the study for various reasons. Apart from its longest standing history in ODeL dating back to 1966, its systems and structures are much better established as proven in its higher standing than other Kenyan universities. This establishment is in areas such as “access to facilities and computers with eLearning materials... availability of ICT infrastructure... adequate skills to use eLearning platforms... [and] level of interaction between lecturers and students in ODL platforms” (Nyerere, 2016, p.11).

### Types of data

This study contains both primary and secondary data. While primary data was collected by the researcher through questionnaires, secondary data was collected from existing information from past studies and other sources which have relevant information to the research topic

through document analysis (Kuiper, 2009). Quantitative data was also used in the likert scale measuring personality to attribute numerical values to qualitative data.

#### Data collection methods

This study used printed questionnaires for data collection of quantitative data which was administered to the respondents. The researcher also intended to use interviews and questionnaires but the respondents were unavailable for this activity. The questionnaires had open-ended as well as closed questions. In particular, the closed questions had a likert scale (as shown in Table 1) which is an interval measurement scale used when trying to investigate “the degree to which [respondents] agree or disagree with a statement” (Sullivan & Artino, p. 541). Notably, the researcher chose to employ questionnaires since the information collected was not complex, thus reading and answering the questions appropriately by the respondents would suffice. Also, the researcher was able to reach more respondents in this way since this method allowed the collection of data from respondents who were both in the UoN Nairobi and Kikuyu campuses. Thirdly, the lack of face-to-face interaction in the course of the data collection reduced possible bias that would have arisen through personal contact. Finally, given the personal nature of some of the questions, respondents may have been more comfortable filling in the questionnaires on their own rather than being asked the questions in person.

The tool used to measure personality using the likert scale was the Costa and McCrae questionnaire which measures the five traits using questions which ask about day-to-day behavior. This study employed this tool because it “has demonstrated strong convergent and

discriminate validity, as well as reliability coefficients from .86 to .95” (Information Resources Management Association, 2015, p. 133).

Table 3: *Table showing an example of a likert scale*

	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly agree</b>
<b>1. I am a morning person</b>					
<b>2. I prefer to swimming to jogging</b>					

The second method was document review which is a method of data collection involving analysis of existing information concerning a particular topic. This study analyzed documents such as books, peer-reviewed articles and journals which contained information about instructional leadership, the Big Five Theory of Personality as well as links between the two concepts. There was also the analysis of online institutional records concerning courses offered and the modes of teaching for these courses. On arrival at the school, the ODeL department furnished the researcher with information concerning the distribution of faculty members according to the modes of teaching that they facilitate. Such documents were of importance in research since they could be accessed easily and cheaply, they provide information that may be unavailable verbally, and their enduring nature allows the study of the sequence of events, and

comparing and contrasting such information from different time periods (Daymon& Holloway, 2011).

#### Instrument pre-testing

The researcher sent the printed questionnaires to six instructors who carry out online and face-to-face teaching in Africa Nazarene University (ANU). The choice of ANU was because it had similar characteristics to the target population, UoN. That is, the institution offered face-to-face and online courses, and had an institution within Nairobi County. The respondents were asked about the ease with which they answered the questions and whether or not they think the questionnaire adequately covered the topic of research. This process helped to improve content validity (Huang, 2012). The findings were analyzed and corrections made accordingly to make the questionnaire better thereby making the study more effective in making accurate conclusions. Notably, the sample used for this pilot study was not part of the study since they were outside the scope of the research.

#### Data analysis plan

The data collected in this study was quantitative. First, the questionnaire collected nominal data using a dichotomous nominal scale. Nominal data simply labels variables in the study (Stephens, 2006). In this regard, the questionnaire began by asking the respondents' gender and age since they are the intervening variables in the study. The questionnaire also included the number of years of practice in teaching online or face to face since the literature showed this might have an impact on the instructor's preference for online or face-to-face modes of teaching. Finally, there was a table showing four categories representing the type and level of training

received to allow them to facilitate ODL classes similar to what Nyerere (2016) used in an earlier study.

Secondly, the likert scale measured ordinal data and was the primary instrument used for the collection of data from respondents to study their personality. The responses given were analyzed in accordance with the outlined in McCrae and Costa's (1995) six facets of personality traits (Appendix III). An ordinal scale is one whose data has an order such as the one shown in Table 1, but the interval from one value to the next is difficult to determine (Stephens, 2006). Sullivan and Artino (2013) argue that the downside of the likert scale is in its inability to give accurate responses since the intervals of the values are unclear may distort the accuracy of the data collected. However, studies by Dr. Geoff Norman have proven that researchers can still use parametric tests such as t-tests and analysis of variance (ANOVA) to analyze likert scale data since these "tests are sufficiently robust to yield largely unbiased answers that are acceptably close to "the truth" (Sullivan & Artino, p. 542).

In all, the information which the researcher collected and analyzed concerned:

- i. Age of respondent
- ii. Gender of respondent
- iii. Number of years as a lecturer
- iv. Respondent's level of training received for ODL facilitation
- v. Personality of respondent
- vi. Respondent's preference for face-to-face, online, or blended modes of teaching

vii. Link between respondents' personality and preference

Once the data had been analyzed, it was then compared to information analyzed through document analysis to find points of agreement as well as discrepancies.

#### Ethical considerations

The researcher began by getting a permit from NACOSTI (Appendix III) to conduct the study as well as seek consent from the University of Nairobi. Such permission is important not just because it is a requirement for conducting research, but it also expresses respect for one's choice regarding their involvement in the exercise (Shahnazarian, Hagemann, Aburto & Rose, 2017). The institution's office of the Deputy Vice-Chancellor (Research, Production and Extension) was contacted to request for permission to carry out the study among their staff. After permission was granted, the researcher consulted with the ODeL department to inquire concerning the number of staff they have that fit the stated criteria. All respondents involved in the study were informed about the study and what it aimed to achieve after which they chose whether or not to take part in the research process. As such, coercion was not involved in getting data from the respondents. The respondents were asked to fill in a consent form, clearly indicating their willingness to participate in the study. There was also freedom of anonymity of the respondents and their views since the questionnaires administered showed that stating one's name or any information that would reveal their identity is optional. Furthermore, the researcher maintained the privacy of the data collected from the specific respondents.

### Chapter summary

This chapter evaluated the intended process of data collection. The study involved collection of data from lecturers who facilitate both distance and face-to-face learning in the University of Nairobi. Since the population was small, a census was taken, and printed questionnaires were administered to the respondents. The data collected was analyzed using a questionnaire to uncover information concerning instructor's teaching preferences, their personality and level of training as well as the extent to which there is a relationship between their personality and preference for face-to-face or distance modes of teaching. The chapter also included ethical consideration for the study.

## CHAPTER FOUR

### RESULTS AND DISCUSSIONS

#### Introduction

This chapter shows the results of the study carried out as well as its findings concerning the relationship between instructional leaders' personality their preference for online and face-to-face modes of teaching. Findings also show the level of training received by these lecturers to equip them to facilitate their work and how it relates to their preferred modes of teaching.

#### Response rate

The response rate is shown in the table below

Table 4: Table showing response rate of the study

Category	Frequency	Percentage
Respondents	19	58%
Non-respondents	14	42%
Total	33	

The table above shows that 19 out of the 30 lecturers to whom questionnaires were given filled in and submitted their questionnaires. Therefore, there was a 58% response rate which is above Mugenda and Mugenda's (2003) 50% threshold for an adequate sample, thereby rendering

the results sufficient for analysis. Notably, out of the 19 responses, only 17 (52%) were usable which is also above the threshold.

#### Age of respondents

The following table shows a distribution by age of the respondents

Table 5: *Table showing age distribution of respondents*

Age (in years)	Frequency	Percentage
< 30	1	6%
30-39	3	18%
0040-49	5	29%
50-59	5	29%
60-69	1	6%
Unstated	2	12%
Total	17	100%

The table shows that majority of the lecturers (10 respondents) were between the ages of 40 and 59 years of age and they accounted for 58% of the respondents. Apart from 2 respondents (12%) who did not state their age, the remaining 30% was shared by 4 respondents (24%) being less than 40 years old and one respondent (6%) who was over 59 years old. The respondents

were between the ages of 29 and 67 and the median age of the respondents who stated their age was 47.

#### Gender of respondents

The following table shows a distribution by gender of the respondents

Table 6: *Table showing gender distribution of the respondents*

Gender	Frequency	Percentage
Male	14	82%
Female	3	18%
Total	17	100%

The table shows that 82% of the respondents were male while only 18% were female. This finding was in line with K'Odipo's (2013) observation that in institutions of higher learning, there has been an inadequate representation of women in areas such as research, high administrative positions and in teaching. It would therefore be expected that the women in this study who teach online and face-to-face classes would be under-represented.

#### Personality of respondents

The following results were the product of analysis of questionnaires that the respondents filled, whose questions were categorized into five sections according to the theoretical

framework of the five Big Five personality traits. Notably, the simple and practical nature of the questions which investigated day-to-day behavior did not need the respondents to understand the underlying theory of the study.

The following table shows the distribution of respondents' personalities:

Table 7: Table showing personality distribution of respondents

	High		Average		Low	
	Freq.	Percent.	Freq.	Percent.	Freq.	Percent.
Extraversion	0	0%	8	47%	9	53%
Neuroticism	0	0%	4	26%	13	74%
Openness	7	41%	10	59%	0	0%
Agreeableness	7	41%	10	59%	0	0%
Conscientiousness	12	71%	5	29%	0	0%

The table shows that the majority of the respondents scored lowly in extraversion (53%), lowly in neuroticism (74%), averagely in openness (59%), averagely in agreeableness (59%), and highly in conscientiousness (71%). Also, no respondent scored highly in extraversion and neuroticism, or score lowly in openness, agreeableness and conscientiousness. .

This finding alludes to the fact that there was close similarity between the respondents' personality since there was consistency in scores across the table. Evidence of this consistency is

particularly evident in the lack of high scores in extraversion and neuroticism and lack of low scores in openness, agreeableness and conscientiousness.

### *Personality and age*

Given that the median age is 47 as shown in the previous section, the following graphs show the personality distribution of the respondents on the basis of their age. The first graph shows the personality distribution for respondents below the age of 47 while the second shows the distribution of respondents above 47 years old

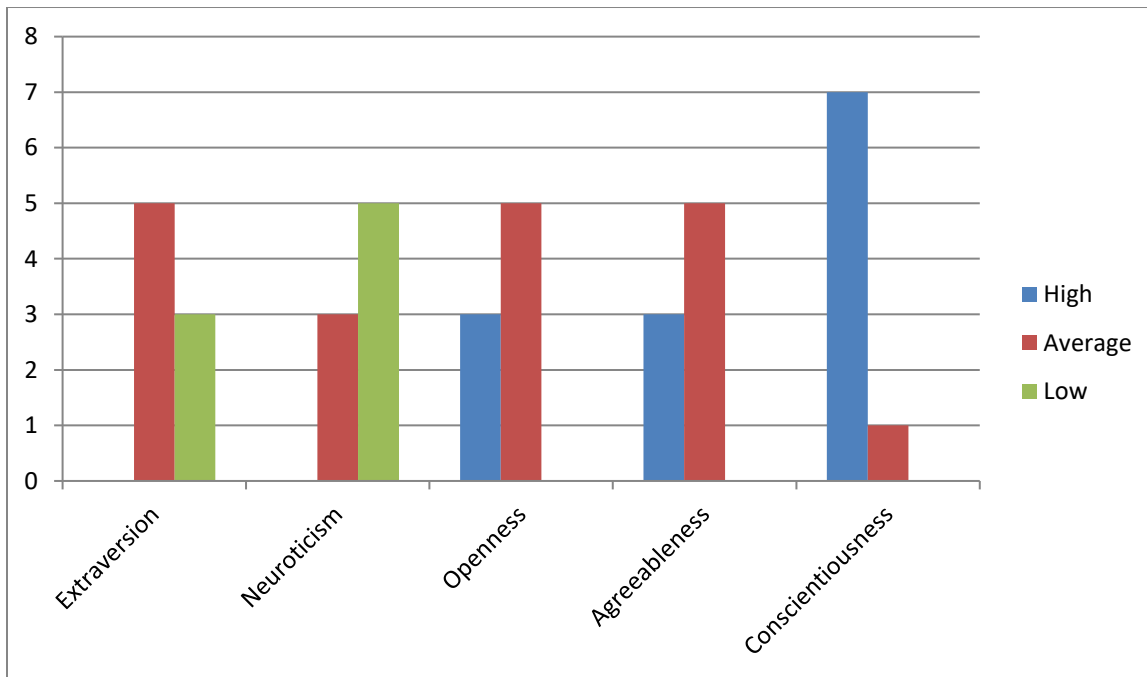


Figure 5: Figure showing personality trait distribution of respondents below 47 years old

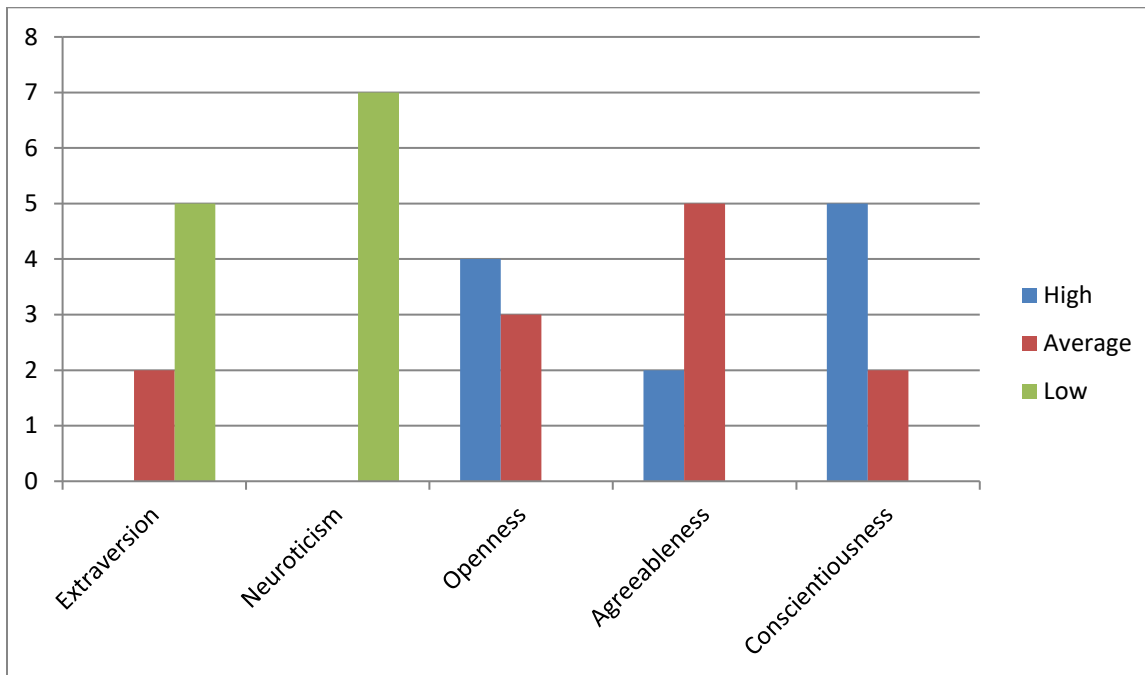


Figure 6: Figure showing personality trait distribution of respondents above 47 years old

The graphs show that respondents above the median age scored significantly higher in extraversion, neuroticism, and conscientiousness. However, the score seemed tied for both age groups in the openness and agreeableness personality traits. Foss and Clark (2016) explain that younger adults tend to score higher in neuroticism and extraversion. The authors note that over time, openness and extraversion decrease while conscientiousness and agreeableness increase. Pastorina and Doyle-Portillo (2013) add that people indeed tend to become more emotionally stable as they age resulting in a decrease in the neuroticism score.

This study agrees with these authors' assertions since the results shows that respondents' extraversion, neuroticism and openness scores were compatible with the authors' analysis but there was a difference in finding in the agreeableness and conscientiousness scores since the former was more or less tied between the two age groups while the conscientiousness score seemed higher in the younger age group than the younger one.

### *Personality and gender*

The graphs below show the personality distribution of respondents on the basis of their gender. The first graph shows the male distribution while the second graph shows the female distribution.

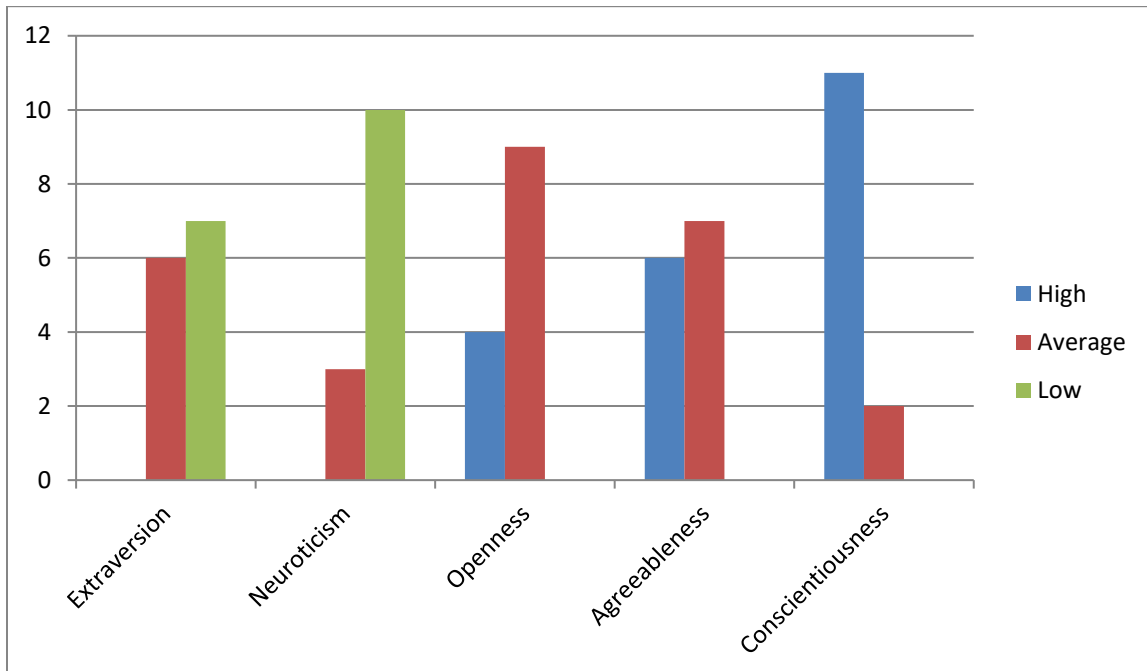


Figure 7: Figure showing personality trait distribution of male respondents

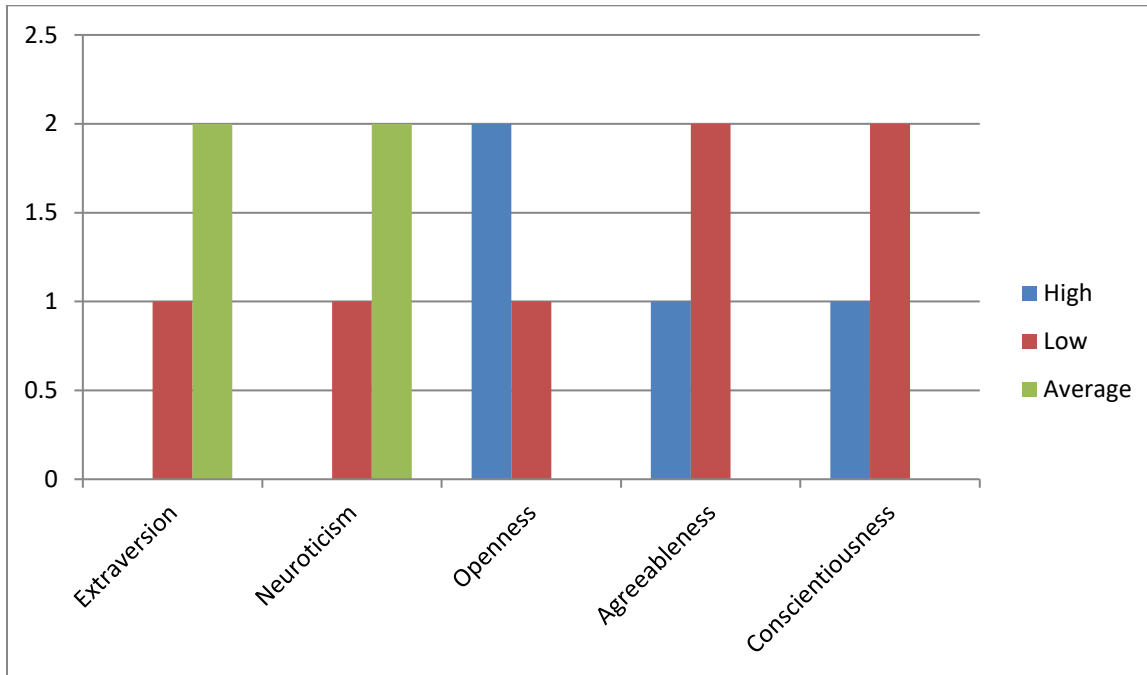


Figure 8: Figure showing personality trait distribution of female respondents

In this study, there is significant disparity in the number of respondents which makes it very difficult to compare personality distribution by gender. The women in particular were very few (3 respondents) which made it difficult to make a proper comparison. Therefore, although Jarecka-Zyluk & Holz (2014) assert that women score higher in extraversion, agreeableness, and neuroticism compared to the men, it would be difficult to accept or reject this claim given the distribution of this study's respondents.

### Preferred mode of teaching

The following table shows the respondents' preferred mode of teaching

Table 8: *Table showing respondents' preferred mode of teaching*

Mode of teaching	Frequency	Percentage
Face-to-face	0	0%
Online	0	0%
Blended	16	94%
No preference	1	6%
Total	17	100%

The table shows that no respondents expressed a preference for face-to-face or online teaching. However, 16 out of the 17 respondents (94%) preferred the blended mode of teaching while only one respondent (6%) had no preference. It would be important to note that the 16 respondents who prefer blended learning range from 29 to 67 years of age. This result shows that unlike studies that have posited that instructors with characteristics such as conscientiousness (Michael & Michael, 2014), extraversion (Oreg & Goldenberg, 2015) and openness (Thompson, 2013) being reasons for which educators preferring online rather than face-to-face modes of teaching, the overwhelming majority of the respondents' preference for the blended mode shows that there may be other factors at play which may not be directly linked to instructors' personality.

### Preferred mode of teaching and respondents' personality

The following tables show a comparison between the respondents' personality and their preferred mode of teaching. The first table shows the distribution of 16 respondents' personalities with a preference for the blended mode of teaching while the second one is for the one respondent who had no preferred mode of teaching.

Table 9: Table showing distribution of respondents' with a blended mode of teaching preference by personality traits

	High		Average		Low	
	Freq.	Percent.	Freq.	Percent.	Freq.	Percent.
Extraversion	0	0%	8	50%	8	50%
Neuroticism	0	0%	4	25%	12	75%
Openness	7	44%	9	56%	0	0%
Agreeableness	6	36%	10	64%	0	0%
Conscientiousness	11	69%	5	31%	0	0%

This table shows that the personality of a majority of the respondents who preferred blended mode of teaching was average (50%) or low (50%) in extraversion, low in neuroticism (75%), average in openness (56%), average in agreeableness (64%), and high in conscientiousness (69%). Further, none of the respondents neither scored highly in extraversion and neuroticism, nor scored lowly in openness, agreeableness and conscientiousness.

Table 10: Table showing distribution of respondents' with no preferred mode of teaching by personality traits

	High		Average		Low	
	Freq.	Percent.	Freq.	Percent.	Freq.	Percent.
Extraversion	0	0%	0	0%	1	100%
Neuroticism	0	0%	0	0%	1	100%
Openness	0	0%	1	100%	0	0%
Agreeableness	1	100%	0	0%	0	0%
Conscientiousness	1	100%	0	0%	0	0%

This table shows that the one respondent who had no preference for any of the three modes of teaching scored lowly in extraversion and neuroticism, averagely in openness and highly in agreeableness and conscientiousness.

From the analysis, given that 16 out of the 17 respondents preferred the blended mode of teaching, only one who had no preference and none chose online or face-to-face modes, it is evident that an instructors' preference for a specific mode of teaching is not dependent on their personality. Further, the diverse distribution of the personality traits among the respondents shows that lecturers with significantly different sets of personality traits may opt for similar modes of teaching based on various factors, none of which is their personality. Also, this study

shows that rather than purely online or purely face-to-face modes of teaching, respondents preferred to facilitate partly online and partly face-to-face classes.

#### Period of facilitating face-to-face and online classes

The following table shows the number of years during which the respondents have facilitated face-to-face and online classes

Table 11: *Table showing respondents' period of facilitating face-to-face and online classes*

	0-5 years	6-10 years	11-15 years	16-20 years	>20 years	Total
Face-to-face	3	6	4	2	2	17
Online	8	3	5	0	1	17

The table shows that for face-to-face classes, the majority (8 respondents) have facilitated this mode of teaching for less than five years while for online classes, the majority (6 respondents) have taught for between 6 to 10 years. Notably, more respondents have taught for 10 years and below in both online and face-to-face categories (9 and 11 respondents respectively) than those who have taught for 11 years and above (8 and 6 respondents respectively). The results show that the period of facilitation of online and face-to-face classes may not have a link to one's preferred mode of teaching since 94% of the respondents who expressed a preference

for blended learning had a varying period within which they facilitated online and face-to-face classes ranging from 1 year to 40 years.

#### Training received from institution

The following table shows the level of training that the respondents have received from their institution to help them to facilitate their online classes

Table 12: *Table showing the level of training respondents have received from their institution*

Level of training	Frequency	Percentage
0%	0	0%
1-10%	1	5%
10-20%	2	12%
20-50%	2	12%
50-100%	12	71%
Total	17	100%

The table shows that the majority of the respondents have received 50-100% of the training that is required for them to facilitate their online classes. No respondent claimed that they had 0% training while 5%, 12% and 12% of the respondents stated that they had received 1-10%, 10-20%, and 20-50% training respectively. Comparatively, in a study by Makokha and Mutisya (2016), the researchers found that the level of training was at 0%, 8%, 8%, 44% and 40%

in the five respective categories with the highest score being for the 20-50% level of training. This impressive difference in statistics between Makokha and Mutisya's (2016) study and this one may be the reason behind the overwhelming preference for blended learning which may allude to the comfort with which UoN instructors can facilitate both online and face-to-face classes since the institution has equipped its lecturers to effectively facilitate a diverse range of modes of teaching.

Song and Kidd (2010) state that the differences in teaching online and face-to-face classes is in the ways through which the instructors can drive the curriculum as well as the skills and tools which would be the most suitable for teaching. This difference brings up the need for training so that there is little or no strain when employing different modes of teaching. Therefore, training may be a significant factor that has brought up the comfort in technological use evidenced by the respondents' choice of the blended mode over all others.

#### Training received to facilitate online classes

The following table shows the different means of training that the respondents have received to facilitate their online teaching

Table 13: *Table showing the means of training respondents received to facilitate online teaching*

Means of training	Frequency	Percentage
Formal (by institution)	14	58%
Trained by colleague	5	21%
Trained yourself	5	21%
Not trained at all	0	0%
Total	24	100%

In this table, it would be important to note that 5 respondents identified more than one means of training, thus the frequency stated is not a representation of the number of respondents of the study but rather the total of different means of training specified by the respondents.

58% of the respondents attributed their training to formal training, which the institution facilitates. 21% attributed it to colleagues while self-training took up 21% each. No respondent claimed to have received no training at all. In a study by Makokha and Mutisya (2016), the research showed that 17% had undergone formal training, 8% received training from colleagues, 20% trained themselves and a shocking 55% of ODL instructors had no training at all on how to facilitate e-learning. As explained in the previous section, the high level of training provided by UoN to its lecturers, compared to the study by Makokha and Mutisya (2016) which paints the sad state of national training levels, may be a significant contributor to the respondents' comfort with a blended approach to teaching.

## CHAPTER FIVE

### SUMMARY OF FINDINGS, RECOMMENDATIONS, AREAS FOR FURTHER RESEARCH AND CONCLUSION

#### Introduction

This chapter begins with a summary of findings of this study on the relationship between instructional leaders' personality and their preference for online and face-to-face modes of teaching. It then outlines the study's implications and recommendations. There is then an analysis of the areas of future research, especially with reference to improving the level of training for faculty members to facilitate various modes of teaching, and finally, the conclusion of the study.

#### Summary of findings

##### *What is the influence of personality on instructional leaders' preferred modes of teaching?*

Personality seems to have little or no influence on the instructional leader's preference for specific modes of teaching. This conclusion is so because the respondents of this study had a diverse combination of personality traits yet none of them chose purely online or purely face-to-face modes of teaching. Instead, a majority of them (94%) chose blended learning as their preferred mode to teaching while only 6% stated a lack of preference. The following shows a breakdown of the results of the study according to this study's theoretical framework of the Big Five personality traits:

### *Extraversion*

This study showed that preference for either face-to-face or online modes of teaching was not reliant on one's level of extraversion since the 94% of the respondents showed preference for the blended approach, 50% scored average and 50% scored low in extraversion. None of them had a high extraversion score. Further, the remaining 6% of the respondents in the study stated that they had no preferred mode of study and they had a low extraversion score. Therefore, although Blau and Barak (2012) stated that extraverted instructors may prefer face-to-face communication and Gamble and Gamble (2013) argued that instant feedback was necessary for instructors to prefer online teaching, this study shows that other factors may be in play to warrant the lack of preference or preference for blended teaching regardless of their extraversion score.

### *Agreeableness*

The results of this study showed that 64% of the respondents had an average agreeableness score while the remaining 36% had a high agreeableness score. None of the respondents were lowly agreeable. Comparatively, there was a 94% score for those who had a preference for blended approach and only 6% who had no preference for modes of teaching. This result shows that there may be consensus on the importance of blended teaching modes as opposed to just face-to-face or online approaches. Therefore, it may show that these instructors are either attempting to find social approval or to be liked as is common for people who score highly in agreeableness (Kenrick, Neuberg&Cialdini, 2010; Leary & Tangney, 2012), or there may be other factors, such as high levels of training, which may explain the consensus in preference for blended modes of teaching.

### *Conscientiousness*

Contrary to the argument by Davis and Arend (2013) that highly conscientious instructors had a hard time keeping up with emerging trends in the teaching scene, and Fink and Capparell (2013) who say that they prefer to be stable rather than adapt, this study showed that despite the respondents being averagely (64%) to highly (36%) conscientious, an overwhelming majority of them (94%) preferred blended teaching modes while the rest (6%) had no preference. Therefore, although their natural inclination may be to stick to the familiar, other factors may have caused their preference for that which was unnatural thereby showing that even those who are highly conscientious may be taught to adapt to and even prefer what is unnatural to them.

### *Neuroticism*

94% of the respondents in this study stated that they preferred blended modes of teaching rather than purely online or purely face-to-face while the remaining 6% of the respondents had no preference. This result points to the ease with which all the respondents could facilitate teaching using a diverse range of teaching modes. Given that respondents had an average (76%) to low (24%) neuroticism score, it is possible that there is a link between low neuroticism scores and ability to facilitate teaching using various modes. However, the link may also be explained by other factors such as high levels of staff training which improves confidence in teaching using varied modes.

### *Openness*

According to the results of this study, a majority of the respondents (94%) preferred blended modes of teaching rather than purely online or purely face-to-face, while the remaining

6% stated they had no preference. Further, they scored averagely (59%) to highly (41%) in the openness trait. Given that Chammoro-Premuzic & Furnham (2007) argue that people who score highly in agreeableness tend to delve into new ways of accomplishing tasks, it may explain why they prefer blended modes of teaching rather than the traditional face-to-face mode. Notably, other factors such as staff training may also explain the consensus regarding the preference for blended modes.

*Influence of age and gender on an instructor's preference for online and face-to-face modes of teaching*

This study showed that age of the majority of the respondents was between the ages of 40 and 59 years of age and accounted for 58% of the respondents. Apart from 12% who did not state their age, the remaining 30% was shared by 24% being less than 40 years old and 6% over 59 years of age. Also, 82% of the respondents were male while only 18% were female. Despite the diversity in the demographic of the respondents, there was still consensus across age and gender categories regarding their preference for blended teaching modes and while the remaining 6% had no preference. These results show that other factors may explain such preferences apart from that of age and gender.

To what extent do instructional leaders prefer online or face-to-face modes of teaching?

The study found that despite the diversity in the combination of personality traits, varying age groups (between 29 and 64 years old), different genders (both male and female) and significantly varying periods of time facilitating both online and face-to-face classes (between 1

and 40 years), none of the respondents expressed a preference for online or face-to-face modes of teaching. Instead, of the 17 respondents, the majority (16 respondents) chose the blended mode while only one respondent had no preferred mode of teaching.

What kind of training have instructors received to tackle both online teaching?

All the respondents stated that they had received training from the institution to facilitate online classes. However, 71% said that they had received 50-100% training, 21% indicated that they had received 20-50% training, and the remaining 8% claimed 10-20% training. Further, the respondents attributed 58% of the training they had received to the institution, 21% to their colleagues, and 21% to themselves.

### Implications

The findings of the study highlight that although personality may not significantly influence teaching preferences, training in emerging modes of teaching does. Therefore, the implications of this study for future research is in the area of training and relate to three parties: the national education governing councils, institutions of higher learning, and instructional leaders, these are, lecturers. To the national education governing councils there should be investigation into the most effective means of training which have been implemented and are succeeding in various universities within and outside the country. The improvement and replication of such training would improve the effectiveness of the changing higher

education system. To the universities and other institutions of higher learning, there should be proactivity when it comes to seeking the best practices and implementing them in training their lecturers to facilitate a diverse range of modes of teaching. Finally, to the lecturers, there would be need for openness to learning new and better ways of facilitating various modes teaching, particularly those whose personalities may cause a resistance to such learning, for example those who score lowly in the openness trait.

### Recommendations

Given the findings of this study, the following are the recommendations:

- i. National bodies regulating higher education teaching practices such as Commission for University Education (CUE) should research, analyze and set in place appropriate policies the most effective ways of training university lecturers to facilitate emerging modes of teaching. This research could be done within Kenyan institutions or institutions outside Kenya which have sound and effective training methods and policies.
- ii. Evidently, by national standards, UoN is performing well in training its lecturers as seen by the comparison between this study and that of Makokha and Mutisya (2016). Other institutions of higher learning should conduct activities such as benchmarking in UoN as well as other well-performing schools which will allow the sharing of information regarding best practices when it comes to training lecturers to facilitate a diverse range of modes of teaching.

- iii. Universities and other higher learning institutions should also encourage internal training where lecturers who have knowledge on how to facilitate various modes of teaching can train their colleagues on the same. Learning from peers may be the most inexpensive and effective mode of learning for the lecturers.
- iv. Universities should encourage the use of the blended mode of teaching in higher education before venturing into fully online learning since the findings have shown that lecturers have a strong preference for it.

#### Areas of further research

Future research should investigate the specific kind of training conducted in universities such as UoN which have shown impressive levels of staff training which is evidenced in their lecturers' comfort with the blended approach which is a combination of different modes of teaching. Similar studies should be done conducted in other institutions of higher learning to investigate whether the situation in UoN is similar to theirs. The similarities and differences will uncover other factors which may influence instructional leaders' preference for specific modes of teaching.

#### Conclusion

The findings of this study have shown that there is little or no influence of an instructional leader's personality on their preference for online and face-to-face modes of teaching. These findings stand true despite the significant difference in the age, gender, and periods of time of facilitating both online and face-to-face classes. However, the

overwhelming preference for blended mode of teaching coupled with relatively high level of training to facilitate teaching online classes may have a correlation. Investigation into this relationship may uncover means of improving teaching practices in education.

## REFERENCES

- Abdelsalam, A. A. (2013). *The Personal Characteristics of University Lecturers in Libyan Universities* (Doctoral dissertation). Retrieved May 25, 2018 from [http://irep.ntu.ac.uk/id/eprint/343/1/217161\\_ABDULQADER%2520ABDELSALAM%252C%25202013.pdf](http://irep.ntu.ac.uk/id/eprint/343/1/217161_ABDULQADER%2520ABDELSALAM%252C%25202013.pdf)
- Adkins, S. (2013) *The Africa Market for Self-paced eLearning Products and Services: 2011-2016 Forecast and Analysis*. Monroe WA: Ambient Insight
- Arif, M. I., Rashid, A., Tahira, S. S., & Akhter, M. (2012). Personality and Teaching: An Investigation into Prospective Teachers' Personality, *International Journal of Humanities and Social Science*, 2(17), 161-171
- Bano, N., Ansari, M., & Ganai, M. Y. (2017). *A Study of Personality Characteristics and Values of Secondary School Teachers in Relation to Their Classroom Performance and Students' Likings*. Hamburg: Anchor Academic Publishing
- Barakat, M. & Weiss, D. N. (2017). Through the Eyes of Student and Faculty: A Conceptual Framework for the Development of Online Courses. In Information Resources Management Association. (Ed.) *Online Course Management: Concepts, Methodologies, Tools, and Applications*. Hershey: Information Science Reference
- Barasa, R. S. (2017). Effectiveness of Digital Technology in Teaching of Literature in Kenyan Universities: A Case of Pwani University. In Meda, L. & Makura, A. H. (Eds.) *Technology Driven Curriculum for 21st Century Higher Education Students in Africa*. Bamenda, Cameroon: Langaa RPCIG
- Barnes, R. (2018). *Uncovering Online Commenting Culture: Trolls, Fanboys and Lurkers*. Cham: Palgrave Macmillan
- Beckmann, N. & Wood, R. E. (2017). Dynamic Personality Science. Integrating between-Person Stability and within-Person Change. In Beckmann, N. & Wood, R. E. (2017). *Dynamic Personality Science .Integrating between-Person Stability and within-Person Change*. USA: Frontiers
- Berliner, D. C. & Calfee, R. C. (2013). *Handbook of Educational Psychology*. New York: Routledge
- Biddle, B., & Thomas, E. (1966). *Role theory: Concepts and research*. New York, NY: John Wiley & Sons.

- Biles, J. B., & Flint, L. J. (2013). *The Creative Imperative: School Librarians and Teachers Cultivating Curiosity Together*. California: ABC-CLIO, LLC.
- Blau, I. & Barak, A. (2012). How Do Personality, Synchronous Media, and Discussion Topic Affect Participation? *Educational Technology & Society*, 15(2), 12-24
- Boit, J. M. & Kipkoech, L. C. (2012). Liberalization of Higher Education in Kenya: Challenges and Prospects. *International Journal of Academic Research in Progressive Education and Development*, 1(2), 33-41
- Bolliger, D. U., & Erichsen, E. A. (2013). Student satisfaction with blended and online courses based on personality type. *Canadian Journal of Learning and Technology*, 39(1), 1-23
- Busato, V. V., Prins, F. J., Elshout, J. J., & Hamaker, C. (2000). Intellectual ability, learning style, personality, achievement motivation and academic success of psychology students in higher education, *Personality and Individual Differences*, 29 (5), 1057-1068
- Campbell, J., Kyriakides, L., Muijs, D., & Robinson, W. (2005). *Assessing Teacher Effectiveness: Different Models*. New York: Routledge
- Chamorro-Premizic, T. & Ahmetoglu, G. (2012). *Personality 101*. New York: Springer Publishing Company, LLC
- Chamorro-Premuzic, T. & Furnham, A. (2014). *Personality and Intellectual Competence*. New York: Lawrence Erlbaum Associates, Inc., Publishers
- Chamorro-Premuzic, T. (2015). *Personality and Individual Differences*. Chichester: John Wiley & Sons, Inc.
- Chamorro-Premuzic, T., & Furnham, A. (2007). Personality and music: Can traits explain how people use music in everyday life? *British Journal of Psychology*, 98, 175–185
- Chamorro-Premuzic, T., von Stumm, S., & Furnham, A. (2011). *The Wiley-Blackwell handbook of individual differences*. Malden: Wiley
- Charles, L.B. (2016). *Human Diversity: Its Nature, Extent, Causes and Effects on People*. Singapore: World Scientific Publishing Co. Pte. Ltd.
- Cheung, S. K. S., Kwok, L., Ma, W. W. K., Lee, L. K., & Yang, H. (2017). *Blended Learning. New Challenges and Innovative Practices: 10<sup>th</sup> International Conference on Blended Learning, ICBL 201, Hong Kong, China, June 27-29, 2017, Proceedings*
- Christiansen, N. & Tett, R. (2013). *Handbook of Personality at Work*. New York: Routledge

- Costa, P. T., Jr., & McCrae, R. R. (1992). *Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI) professional manual*. Odessa: Psychological Assessment Resources
- Daft, R. L. (2015). *The Leadership Experience*. Stamford: Cengage Learning
- Daniel, J. (2012). *Sampling Essentials: Practical Guidelines for Making Sampling Choices*. Thousand Oaks: Sage Publications, Inc.
- Davis, J. R. & Arend, B. D. (2013). *Facilitating Seven Ways of Learning: A Resource for More Purposeful, Effective, and Enjoyable College Teaching*. Virginia: Stylus Publishing, LLC
- Daymon, C. & Holloway, I. (2011). *Qualitative Research Methods in Public Relations and Marketing Communications*. 2nd ed. Oxford: Routledge
- Engler, B. (2013). *Personality Theories*. Belmont: Wadsworth
- Ennis, C. D. (2017). *Routledge Handbook of Physical Education Pedagogies*. Oxon: Routledge
- Filmer, D. & Fox, L. (2014). *Youth Employment in Sub-Saharan Africa*. Washington, DC: World Bank Group
- Fink, S. B. & Capparell S. (2013). *The Birkman Method: Your Personality at Work*. San Francisco: John Wiley & Sons, Inc.
- Fisher, D. L., and Kent, H. B. (1998). Associations Between Teacher Personality and Classroom Environment, *Journal of Classroom Interaction*, 33(1), 5 – 13.
- Fives, H., & Gregorie, G. M. (2014). *International handbook of research on teachers' beliefs*. New York: Routledge
- Foos, P. W. & Clark, M. C. (2016). *Human Aging*. New York: Routledge
- Forman, D, Jones, M. & Thistlethwaite, J. (2015). *Leadership and Collaboration: Further Developments for Interprofessional Education*. Hampshire: Palgrave Macmillan
- Frost, D. & Durrant, J. A. (2003). Teacher leadership: rationale, strategy and impact. *School Leadership & Management*, 23 (2). pp. 173-186
- Gamble, T. K. & Gamble, M. W. (2013). *Interpersonal Communication: Building Connections Together*. Thousand Oaks: Sage Publications Inc.

- Gijbels, D., Donche, V., Richardson, J. T. E., & Vermunt, J. D.(2014). *Learning Patterns in Higher Education: Dimensions and Research Perspectives*. Oxon: Routledge
- Göncz, L. (2016). Teacher personality: a review of psychological research and guidelines for a more comprehensive theory in educational psychology, *Open Review of Educational Research*, 4(1), 75-95
- Greener, S. (2015). The Impact of Web 2.0 and Web 3.0 on Academic Roles in Higher Education.In Issa, T. and Isaias, P., (Eds.) *Artificial Intelligence Technologies and the Evolution of Web 3.0*. Australia: IGI Global.
- Hallinger, P & Wang, W. C. (2015). *Assessing Instructional Leadership with the Principal Instructional Management Rating Scale*. Dordrecht: Springer
- Hallinger, P., & Murphy, J. (1986). The Social Context of Effective Schools. *American Journal of Education*, 91 (3), 328-355
- Hamza, K., and Nash, W. R. (1996). *Creating and Fostering a Learning Environment That Promotes Creative Thinking and Problem Solving Skills*. Research Report. ERIC Document ED 406435.
- Hamza, M. K. & Griffith, K. G. (2006). Fostering problem-solving and creative thinking in the classroom: cultivating a creative mind. *National forum of applied educational research journal-electronic*, 19(3), 1-32
- Harmisch, S. (2011). Role theory: Operationalization of key concepts. In Harmisch, S., Frank, C. & Maull, H. W. (Eds.) *Role Theory in International Relations*. New York, NY: Routledge
- Hedge, J. W., & Borman, W. C. (2012).*The Oxford handbook of work and aging*. New York: Oxford University Press, Inc
- Hew, K. F. & Cheung, W. S. (2012).*Student Participation in Online Discussions: Challenges, Solutions, and Future Research*. Springer: New York
- Hew, K. F. & Cheung, W. S. (2014). *Using Blended Learning: Evidence-Based Practices*. New York, NY: Springer
- Holland, J. L. (1997). *Making Vocational choice: A theory of personality and Work environment*. Odessa FL: Psychological Assessment Resource

- Holman, D., Wall, T.D., Clegg, C., Sparrow, P. and Howard, A. (2005). *The Essentials of the New Workplace: A Guide to the Human Impact of Modern Working Practices*, Chichester: Wiley
- Huang, E. (2012). Online experiences and virtual goods purchase intention, *Internet Research*, 22(3), 252-274
- Humbert, M. (2007). Adoption of Blended Learning: An Exploratory Analysis. In McCuddy, M. K., Bosch, H., Martz, W. B., Matveev, A. V., and Morse, K. O. (Eds.) *The Challenges of Educating People to Lead in a Challenging World*. Dordrecht, the Netherlands: Springer
- Inegbedion, J. O. (2017). Academic Workload Planning for Open and Distance Learning (ODL) Universities: The Experience of National Open University of Nigeria (NOUN). *Open Praxis*, 9(3), 313-333
- Jarecka-Zyluk, M. & Holz, O. (2014). *Gender and Education from Different Angles*. Berlin: Lit Verlag
- Jones A. C. (2012). *Becoming a Strong Instructional Leader: Saying No to Business as Usual*. New York, NY: Teachers College Press
- K'Odipo, W. O. (2013). Gender Disparities in Decision Making Levels in Universities in Kenya. *Gender Disparities in Universities*, 2(2), 39-53
- Kadushin, A. & Harkness, D. (2014). *Supervision in Social Work*. New York: Columbia University Press
- Kaplan, L., & Owings, W. (2010). *American Education: Building a Common Foundation*. Belmont: Wadsworth
- Kaplan, L., & Owings, W. (2013). *Culture Re-Boot: Reinvigorating School Culture to Improve Student Outcomes*. Thousand Oaks, CA: Sage Publications Inc
- Kasse, J. P., & Balunywa, W. (2013, February). *An assessment of e-learning utilization by a section of Ugandan universities: Challenges, success factors and way forward*. Paper presented at the International conference on ICT for Africa 2013, Harare, Zimbabwe.
- Katzenmeyer, M. & Moller, G. (2001). *Awakening the Sleeping Giant: Helping Teachers Develop as Leaders*. Thousand Oaks, CA: Corwin Press
- Keengwe, J., Schneller, G. & Kungu, K. (2014). *Cross-Cultural Online Learning in Higher Education and Corporate Training*. Hershey: Information Science Reference

- Kelley, J. R. (2011). *Teachers' and Teacher Leaders' Perceptions of the Formal Role of teacher leadership*. (Doctoral dissertation). Retrieved May 25, 2018 from [http://scholarworks.gsu.edu/cgi/viewcontent.cgi?article=1070&context=eps\\_diss](http://scholarworks.gsu.edu/cgi/viewcontent.cgi?article=1070&context=eps_diss)
- Kemboi, R. J. K., Kindiki, N. & Misigo, B. (2016). Relationship between Personality Types and Career Choices of Undergraduate Students: A Case of Moi University, Kenya. *Journal of Education and Practice*, 7(3), 102-112
- Kenrick, D. T., Neuberg, S. L. & Cialdini, R. B. (2010). *Social Psychology: Goals in Interaction*. New York: Allyn & Bacon
- Kenyatta University (2018). *Programs*. Retrieved May 25, 2018 from <http://www.ku.ac.ke/dsvol/academics/programs>
- Kerubo, I. P. (2016). *African Indigenous Education as Practiced by the Maasai of Kenya* (Unpublished master's thesis). University of Nairobi, Nairobi, Kenya
- Kigotho, W. (2013). *Demand drives growth of open learning in East Africa*. Retrieved May 15, 2018 from <http://www.avu.org/avuwweb/en/demand-drives-growth-open-learning-east-africa-university-world-news/>
- Kirwan, J. R. & Roumell, E. (2015). Developing Repertoire of Practice: Online Instructor Dispositions and Personalities. In Holtz, J. K., Springer, S. B. & McGill, C. J. B. (Eds.) *Building Sustainable Futures for Adult Learners*. Charlotte: Information Age Publishing, Inc.
- Kirwan, J., & Roumell, E. A. (2015). Building a Conceptual Framework for Online Educator Dispositions, *Journal of Educators Online*, 12 (1), 30-61
- Klassen, R. M., & Tze, V. M. C. (2014). Teachers' self-efficacy, personality, and teaching effectiveness: A meta-analysis, *Educational Research Review*, 12, 59-76
- Klocko, B. A. & Wells, C. M. (2013). When Teachers Find their Voice. In Hewitt, K. K., Childers-McKee, C., Hodge, E. & Schuhler, R. (Eds.) *Postcards from the Schoolhouse: Practitioner Scholars Examine Contemporary Issues in Instructional Leadership*. USA: NCPEA Publications
- Kneipp, L. B., Kelly, K. E., Biscoe, J. D., & Richard, B. (2010). The impact of instructor's personality characteristics on quality of instruction. *College Student Journal*, 44(4), 901-905

- Kozlowski, S. W. J. & Salas, E. (2010). *Learning, Training, and Development in Organizations*. New York: Routledge
- Kuiper, S. (2009). *Contemporary Business Report Writing*. Mason: South-Western Cengage Learning
- Leary, M. R. & Hoyle, R. H. (2009). *Handbook of Individual Differences in Social Behavior*. New York: The Guilford Press
- Leary, M. R. & Tangney, J. P. (2012). *Handbook of Self and Identity*. New York: The Guilford Press
- Lim, D. H., & Morris, M. L. (2009). Learner and Instructional Factors Influencing Learning Outcomes within a Blended Learning Environment. *Educational Technology & Society*, 12 (4), 282–293.
- Lorentz, J. L., & Coker, H. (1977). *Myers-Briggs Types as Predictors of Observed Teacher Behaviour*. Paper Presented at Second National Conference on the Use of the MBTI, Michigan State University, East Lansing. ERIC Document
- Makokha, G. L. & Mutisya, D. N. (2016). Status of E-learning in Public Universities in Kenya. *International Review of Research in Open and Distributed Learning*, 17 (3), 341-359
- Matthews, G., Deary, I. J. & Whiteman, M. C. (2003). *Personality Traits*. Cambridge: Cambridge University Press
- McKenzie, R. B. (2011). *The political economy of the educational process*. Netherlands: Springer
- Michael, M G. & Michael, K. (2014). *Uberveillance and the Social Implications of Microchip Implants: Emerging Technologies*. Hershey: Information Science Reference
- Mondak, J. J. (2010). *Personality and the Foundations of Political Behavior*. New York: Cambridge University Press
- Moneta, G. B. (2014). *Positive Psychology: A Critical Introduction*. Hampshire: Palgrave Macmillan
- Moore, M. G. & Kearsley, G. (2012). *Distance Education: A Systems View of Online Learning*. Belmont, CA: Wadsworth

- Moore, M. G. & Kearsley, G. (2012). *Distance Education: A Systems View of Online Learning*. Belmont, CA: Wadsworth
- Moreira, F. & Ferreira, M. J. (2017). Teaching and Learning Requirements Engineering Based on Mobile Devices and Cloud: A Case Study. In Information Resources Management Association. (Ed.) *Online Course Management: Concepts, Methodologies, Tools, and Applications*. Hershey: Information Science Reference
- Mount Kenya University (2018). *January 2018 Intake ODeL Programmes*. Retrieved May 25, 2018 from <http://www.mku.ac.ke/index.php/mku-latest-news/1200-january-2018-intake-odel>
- Mpofu, V., Samukange, T., Kusure, L. M. (2012). Challenges of virtual and open distance science teacher education in Zimbabwe. *International Review of Research in Open and Distance Learning*, 13(1), 207–219
- Mudasir, H. & Ganai, M. Y. (2017). *Personality Characteristics, Attitude and Emotional Intelligence among Secondary Level Teachers*. Hamburg: Anchor Academic Publishing
- Mugenda, O., & Mugenda, A. (2003). *Research Methods: Qualitative and Quantitative Approaches*. Nairobi Kenya: Acts press.
- Mulinge, M. M., Arasa, J. N., & Wawire, V. (2017). *The Status of Student Involvement in University Governance in Kenya: The Case of Public and Private Universities*. Dakar, Senegal: CODESRIA
- Mumford, M. D. (2012). *Handbook of Organizational Creativity*. London: Academic Press
- Murray, D. E. & Christison, M. (2017). Going online: Affordances and limitations for teachers and teacher educators. In Wong, L. L. C. & Hyland, K. (Eds.) *Faces of English Education: Students, Teachers and Pedagogy*. New York, NY: Routledge
- Mwiria, K., Ng'ethe, N., Ngome, C., Ouma-Odero, D., Wawire, V., Wesonga, D. (2007). *Public and private universities in Kenya*. Oxford, UK: James Curry Limited
- Ndume, V., Tilya, F. N., & Twaakyondo H. (2008). Challenges of adaptive e-learning at higher learning institutions: A case study in Tanzania. *International Journal of Computing and ICT Research*, 2(1), 47–59.
- Nelson, D. L., Quick, J. C., Armstrong, A. & Condie, J. (2012). *ORGB*. Toronto: Nelson Education Ltd.

- Northcote, M. T. (2010). Lighting up and transforming online courses: Letting the teacher's personality shine. *Education Papers and Journal Articles*, Paper 33.
- Nyerere, J. (2016). *Open and Distance Learning in Kenya: A Baseline Survey Report Commissioned by the Commonwealth of Learning*. Nairobi: Commonwealth of Learning
- Odhimbo, O. O. (2009). Comparative study of the e-learning platforms used in Kenyan Universities: Case study of Jomo Kenyatta University of agriculture and technology and United States international university. Unpublished MSC thesis, Strathmore University.
- Oreg, S. & Goldenberg (2015). *Resistance to Innovation: Its Sources and Manifestations*. Chicago: The University of Chicago Press
- Owuor, N. A. (2012). Higher Education in Kenya: The Rising Tension between Quality and Quantity in the Post-Massification Period. *Higher Education Studies*, 2 (4), 126-136
- Pastorino, E. & Doyle-Portillo, S. (2013). *What is Psychology? Essentials*. Belmont: Wadsworth
- Powell, R. G. & Powell, D. L. (2016). *Classroom Communication and Diversity: Enhancing Instructional Practice*. New York: Routledge
- Pusztai, G. & Engler, A. (2014). *Teacher Education Case Studies in Comparative Perspective*. Debrecen: Center for Higher Education Research and Development
- Robbins, S. P, Bergman, P., Stagg, I., & Coulter, M. (2015). *Management*, 7th edition, Sydney: Pearson Australia
- Rooji, S. W. (2001). Higher Education and FOOS for E-learning: The Role of Organizational Sub-cultures in Enterprise-Wide Adoption. In B. O. Czerkowski (Ed.), *Free and Open Source Software for E-Learning: Issues, Successes and Challenges* (pp. 55-74).
- Royse, D., Thyer, B., & Padgett, D. (2010). *Program Evaluation An Introduction*. Belmont, CA Wadsworth Cengage Learning
- Sa'don, N. F. & Iahad, N. A. (2017). Collaborative Mobile Learning : A Systematic Literature Review. In Information Resources Management Association. (Ed.) *Online Course Management: Concepts, Methodologies, Tools, and Applications*. Hershey: Information Science Reference
- Salas, E., Rico, R. & Passmore, J. (2017). *The Wiley Blackwell Handbook of the Psychology of Team Working and Collaborative Processes*. Chichester: John Wiley & Sons Inc.

- Saleh, I. S. & Khine, M. S. (2014). *Reframing Transformational Leadership: New School Culture and Effectiveness*. Rotterdam: Sense Publishers
- Sanga, P. L. (2017). Challenges and Opportunities for Quality Assurance of Cross-Border Higher Education in East Africa. In Ssempebwa, J., Neema-Aboki, P, &Muzaazi, J. C. S. (Eds.) *Innovating University Education: Issues in Contemporary African Higher Education*. Kampala, UG: Fountain Publishers
- Schreuder, A. M. G., & Coetzee, M. (2007). *Careers: An Organizational Perspective*. Lansdowne: Juta& Co. Ltd
- Shahnazarian, D., Hagemann, J., Aburto, M. & Rose, S. (2017). Informed Consent in Human Subjects Research. USA: University of Southern California
- Simonson, M., Smaldino, S. & Zvacek, S. M. (2015). *Teaching and Learning at a Distance: Foundations of Distance Education*. Charlotte, North Carolina: Information Age Publishing
- Snart, J. A. (2010). *Hybrid Learning: The Perils and Promise of Blending Online and Face-to-Face Instruction in Higher Education*. Santa Barbara: Praeger
- Song, H. & Kidd, T. (2010). *Handbook of Research on Human Performance and Instructional Technology*. Hershey: Information Science Reference
- Spillane, J. P. (2012). *Distributed Leadership*. San Francisco: John Wiley & Sons Inc.
- Srinivasan, R. (2017). *Whose Global Village?: Rethinking How Technology Shapes Our World*. New York, NY: New York University Press
- Starr-Glass, D. (2014). Blended Learning: An Opportunity for Integration or Variation? In Kyei-Blankson, L. & Ntuli, E. (Eds.) *Practical Applications and Experiences in K-20 Blended Learning Environments*. Hershey, PA: IGI Global
- Stephens, L. J. (2006). *Schaum's Outline of Beginning Statistics*. New York: McGraw-Hill
- Sullivan, G. M. & Artino, A. R. (2013) Analyzing and Interpreting Data From Likert-Type Scales. *Journal of Graduate Medical Education*, 5(4):541-542
- Tayebinik, M., & Puteh, M. (2012). Blended Learning or E-learning? *International Magazine on Advances in Computer Science and Telecommunications*, 3(1), 103-110.
- Thompson, L. (2013). *Creative Conspiracy: The New Rules of Breakthrough Collaboration*. Massachusetts: Harvard Business Review Press

- Tutt, R. & Williams, P. (2012) *How Successful Schools Work: The Impact of Innovative School Leadership*. Thousand Oaks, CA: Sage Publications, Inc.
- Tynan, B., Williams, J. & James, R. (2013). *Outlooks and Opportunities in Blended and Distance Learning*. Hershey: Information Science Reference
- University of Nairobi (2018). *Degrees Offered in ODeL Campus*. Retrieved May 25, 2018 from [http://odel.uonbi.ac.ke/uon\\_degrees\\_display](http://odel.uonbi.ac.ke/uon_degrees_display)
- Vorkapic, S. T., Vajicic, L. & Cepic, R. (2014). Pre-school Teacher Identity. In Breen, P. (Ed.) *Cases on Teacher Identity, Diversity, and Cognition in Higher Education*. Hershey: Information Science Reference
- Weisberg, Y. J., DeYoung, C. G., & Hirsh, J. B. (2011). Gender Differences in Personality across the Ten Aspects of the Big Five. *Frontiers in Psychology*, 2, 178
- Wells, C. M., Maxfield, C. R., & Klocko, B. A. (2011). Complexities inherent in the workload of principals: Implications for teacher leadership. In Alford, B. J., Perrerault, G., Zellner, L., Ballenger, J. W. (Eds.), *2011 NCPEA yearbook: Blazing trails: Preparing Leaders to improve access and equity in today's schools*. Lancaster, PA: DEStech
- Wiles, J. (2009). *Leading Curriculum Development*. Thousand Oaks, California: Corwin Press
- Wirth, K. R. & Perkins, D. (2013). *Learning to learn*. Retrieved from [www.maclester.edu/academics/geology/wirth/learning.doc](http://www.maclester.edu/academics/geology/wirth/learning.doc)
- Zawacki-Richter, O. & Anderson, T. (2014). *Online Distance Education: Towards a Research Agenda*. Edmonton: AU Press
- Zhang, D. (2014). *The situation of Chinese students in Germany: an intercultural perspective and study*. Germany: Herbert Utz Verlag
- Zhou, C. (2017). *Handbook of Research on Creative Problem-Solving Skill Development in Higher Education*. Hershey: IGI Global

## APPENDICES

### APPENDIX 1: BIG FIVE INVENTORY QUESTIONNAIRE

The questionnaire below contains a list of questions adapted from McCrae and Costa's (1995) six facets of personality traits. In part A, each set of six sections will ask questions about each of the five traits independently. Kindly answer the questions truthfully so as to get the most accurate results concerning your personality. Your answers, as stated in the consent form, will be confidential. Thank you.

#### **Bio-data**

1. Gender:

Male

Female

2. Age: \_\_\_\_\_ years old

#### **PART A**

#### **Inventory Scale**

1 – Strongly agree

2 – Agree

3 – Neither agree nor disagree

4 – Disagree

5 – Strongly disagree

## **Section I**

This section measures extraversion which is the degree to which a person is spontaneous, friendly, affectionate and social.

I see myself as one who:

	1	2	3	4	5
1. Warms up quickly to others.					
2. Prefers to be alone.					
3. Is always on the go.					
4. Can talk others into doing things.					
5. Seeks quiet.					
6. Is assertive and takes charge.					
7. Holds back from expressing my opinions.					
8. Enjoys being part of a group.					
9. Lets things proceed at their own pace.					

## **Section II**

This section measures agreeableness. It is the extent to which people are kind, accommodating of other people's differences and tend to be pleasant. High scorers are good in creating and sustaining interpersonal relations and quick conflict resolution. The opposite is true for low scorers on the agreeableness scale.

I see myself as one who:

	1	2	3	4	5
26. Suspects hidden motives in others.					
27. Trusts others.					
28. Contradicts others.					
29. Values cooperation over competition.					
30. Is easy to satisfy.					
31. Thinks highly of myself.					
32. Is concerned about others.					
33. Puts people under pressure.					

## **Section III**

This final section measures conscientiousness. Highly conscientious plan thoroughly for their tasks and have set objectives for what they intend to do as well as the outcomes of their work processes while the opposite is true for those whose score is low on conscientiousness.

I see myself as one who:

	1	2	3	4	5
34. Completes tasks successfully.					
35. Often makes last - minute plans.					
36. Excels in what I do.					
37. Often forgets to put things back in their proper place.					
38. Postpones decisions.					
39. Works hard.					
40. Pays my bills on time.					
41. Doesn't see the consequences of things.					

#### **Section IV**

This section measures neuroticism which is the degree of one's emotional stability. Highly neurotic people have low emotional stability and tend to worry a lot, are pessimistic and often have low confidence in themselves. The opposite is true for lowly neurotic people who have a high degree of emotional stability.

I see myself as one who:

	1	2	3	4	5
10. Often feels blue.					
11. Is not easily bothered by things.					
12. Becomes stressed out easily.					
13. Becomes overwhelmed by emotions.					
14. Is calm, even in tense situations.					
15. Is afraid that I will do the wrong thing.					
16. Keeps my cool.					
17. Does things I later regret.					

### **Section V**

This section measures openness. People who score highly on this scale like new experiences, can easily tolerate ambiguity, and are intellectually curious. Those who score lowly have fewer interests and prefer conventional tried-and-tested ways when carrying out tasks.

I see myself as one who:

	1	2	3	4	5
18. Does not have a good imagination.					
19. Loves to read challenging material.					

20. Is interested in many things.					
21. Tries to understand myself.					
22. Is not interested in abstract ideas.					
23. Believes in the importance of art.					
24. Prefers to stick with things that I know.					
25. Tends to vote for conservative political candidates.					

**PART B (open-ended questions)**

1. For how many years have you facilitated:

- Face-to-face classes? \_\_\_\_\_
- Distance learning classes? \_\_\_\_\_

2. Which of the three modes of teaching do you prefer?

- Face-to-face
- Online
- Blended (teaching that happens partly online and partly face-to-face)
- I have no preference

3. Which of these five categories represents the level of training you have received from your institution to facilitate online teaching?

- 0%
- 1-10%
- 10-20%
- 20-50%
- 50-100%

4. What training have you received to enable you to facilitate online classes?

- Formal training (by your institution)
- Trained by a colleague
- Trained yourself
- Not trained at all

## APPENDIX II: BIG FIVE INVENTORY (BFI)SCALE SCORING

### The BFI Scale Scoring Instructions

If you have not scored yourself on any of the assessments in Table A.1 before, the scoring system can be confusing. Especially if you have just completed the questionnaire and can't wait to discover the picture of yourself, working out the scoring system can seem to take too long. If this is true for you, go to my website, [www.waiyeichen.com](http://www.waiyeichen.com), and either transpose your results there or undertake the questionnaire online; your scores will be displayed on the screen soon after you finish.

If you wish to attempt scoring yourself, the instructions follow.

*Instruction 2:* Before working out your score for each factor, you need to reverse the score of the *reverse score questions*. For example, if your score on a reverse score question such as question 2 was 5, then reverse your result to a score of 1. Add up the scores from all the reverse score questions and normal score questions to calculate your total factor score.

Work out your scores and list them in Table A.2.

**Table A.2 Your BFI Scores**

<b>Factor I</b>	
Reverse score questions are: 2, 5, 7, and 9 Scores from reverse score questions: Scores from normal score questions 1, 3, 4, 6, and 8: Your factor I score is:	
<b>Factor II</b>	
Reverse score questions are: 11, 14, and 16 Scores from reverse score questions: Scores from normal score questions 10, 12, 13, 15, and 17: Your factor II score is:	
<b>Factor III</b>	
Reverse score questions are: 18, 22, 24, and 25 Scores from reverse score questions: Scores from normal score questions 19, 20, 21, and 23: Your factor III score is:	
<b>Factor IV</b>	
Reverse score questions are: 26, 28, 31, and 33 Scores from reverse score questions: Scores from normal score questions 27, 29, 30, and 32: Your factor IV score is:	
<b>Factor V</b>	
Reverse score questions are: 35, 37, 38, and 41 Scores from reverse score questions: Scores from normal score questions 34, 36, 39, and 40: Your factor V score is:	

*Instruction 3:* Transpose your score from each factor from the previous page to Table A.3 in the column labeled “X. Your Scores.”

*Instruction 4:* You need to calculate your own average score. Take the total scores of all 5 factors (at column X) and write it in row A. Then divide it by 5 and write the number in row B (Table A.3).

*Instruction 5:* To work out if you are high, average, or low in each factor, compare the score of each factor (column X) to your average score (row B). For example, if your factor I extraversion score was 28 and your average score was 32, then you are average in extraversion.

*Instruction 6:* Write in the column labeled “Y. Your Big Five Scale” if your score for each of the factors was H (high), A (average), or L (low).

Now, you have a sketch of your personality profile.

**Table A.3 Your BFI Scores**

	X. Your Scores	Y. Your Big Five Scale High (H), Average (A), or Low (L)
Factor I: Extraversion		
Factor II: Neuroticism		
Factor III: Openness		
Factor IV: Agreeableness		
Factor V: Conscientiousness		
<b>A. Total Scores of All 5 Factors:</b>		
<b>B. Divide Total Scores by 5:</b>		
	(This is your average score.)	

**General Disclaimer:** This questionnaire is to be undertaken in the spirit of discovering one’s own personality traits. The author does not dispense medical or psychological advice. Reliance on it is at one’s own discretion and risk.

### APPENDIX III: NACOSTI PERMIT

THIS IS TO CERTIFY THAT:  
MISS. STACY CHERONO BETT  
of PAN AFRICA CHRISTIAN UNIVERSITY,  
140-30100 ELDORET, has been permitted  
to conduct research in Nairobi County

Permit No : NACOSTUP/18/95235/23950  
Date Of Issue : 24th July, 2018  
Fee Received :Ksh 1000

on the topic: **INFLUENCE OF  
INSTRUCTIONAL LEADERS'  
PERSONALITY ON THEIR PREFERENCE OF  
ONLINE AND FACE-TO-FACE MODES OF  
TEACHING: A CASE OF UNIVERSITIES IN  
NAIROBI COUNTY, KENYA**



for the period ending:  
23rd July, 2019

.....  
Applicant's  
Signature

  
.....  
Director General  
National Commission for Science,  
Technology & Innovation

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