TRIDENT UNIVERSITY INTERNATIONAL

Friday, April 25, 2014

The Impacts of Quality Teaching and How it Increases Student Learning at the Public Universities in South Sudan

BY

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DEL700: Comprehensive Revised Exam

This Comprehensive written Exam is presented as a partial requirement and fulfillment of my Ph.D. in Higher Educational Leadership at Trident University International in Cypress, California

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Abstract

This comprehensive revised exam is being submitted upon request by Dr. Kim, faculty as well as the course supervisor. I am required to clarify some important statistical concepts in fulfillment of my dissertation study. In this exam, there are two sections: Section One – will discuss a quantitative research article that supports my dissertation; and Section Two – will discuss a visual framework of my dissertation, provide a sample description, provide a couple of hypothesis statements, introduce study variables and measurements of each variable, provide the reliability and validity of instruments that will be used in the dissertation.

Section One:

This section one discusses my selected quantitative research peer-reviewed journal article to support my dissertation study. I will discuss and explain these areas including the purpose of the study, the hypothesis in the study, discuss research methodology (including variables and samples) and finally, discuss whether the findings of the study support the hypothesis and purpose of the design and procedures of the study.

Article Titled: Classroom Action Research: A Case Study Assessing Students' Perceptions and Learning Outcomes of Classroom Teaching Versus On-line Teaching

The purpose of this study is to evaluate students' perceptions of their on-line and off-line classroom environment. The author Schmidt (2011) discussed that combining on-line learning with the traditional classroom would diversify teaching and learning alike, address a multitude of learning styles, and increase technological literacy of both faculty and students. The students' suggestions for this study helped identify a statistically significant difference on the two learning instructions.

H0: There is no statistically significant difference between students' perception of on-line and off-line learning environments. I believe the idea of efficiently assessing students' perception of their instructional environment is an integral role in student learning outcomes.

This study used both quantitative and qualitative methods to assess the outcomes of a classroom action research project. In order to evaluate students' perceptions of their on-line and off-line classroom environment, the researcher included the eight categories as content, interaction, participation, critical thinking, assignments, faculty preparation and expertise, communication skills and technical skills.

This study took all 35 students who were enrolled in TEC 151 Introduction to Industrial Computer Systems in fall semester 2001. The students were randomly assigned to one of two cohorts, either Cohort A or Cohort B to prevent students from choosing a preferred method of instruction for a particular content matter.

The researcher used three strategies for data collection including test scores, teacher evaluations, final course grades, and other progressive classroom assessment techniques. Three instruments to gather data were employed including: First – A questionnaire designed by Ryan, Hodson Carlton, and Ali (1998) was used to evaluate students' perceptions of their on-line and off-line classroom environment; Second – A 20-item multiple choice test was administered to assess learning outcomes; and three – The exercise tests were problem-solving activities designed to address higher level thinking skills. The responses to the items were measured by a Likert-type scale ranging from strongly agrees to strongly disagree. All participants were physically present to fill out the questionnaire on the last day of each three-week block. They were allowed to use their notes as well as access any information on-line and the appropriate software package during the three-week block.

The ANOVA was used to identify statistically significant differences on the eight Likert-type items and on learning outcomes as measured by the tests and exercises. The finding of this study supports the hypothesis and purpose of the study. It reveals that there are no statistically significant differences in learning outcomes identified in this case study. It indicates that students participating in this project learned as well on-line as they did in the traditional classroom setting. The application of this study was to gain knowledge and understanding on how teaching and learning both online and off-line helped integrate and impact student learning outcomes.

Section Two: My Dissertation Ideas

Section two discusses a visual framework of my dissertation, provides a sample description, provides a couple of hypothesis statements, introduce study variables and measurements of each variable, and provide the reliability and validity of instruments that will be used in the dissertation.

Dissertation Conceptual Framework

The purpose of this study is to discuss the impact of quality teaching and how it increases student learning at the public universities in South Sudan higher education. This study will be conducted with 5 of the 9 public universities that are operationally providing higher learning and practices toward increasing student learning outcomes. The goal is to highlight effective quality teaching initiatives and to encourage practices that may help higher education institutions to improve the quality of their students learning outcome. This project will analyze the goal and scope of quality teaching to ensure the provision of increasing students learning.

This study attempts to ensure that a quality teaching practice is a means that gives students opportunities to gain access to quality education. It must provide and serve in the spirit of guaranteeing constituency for the rights of every citizen. It will provide insights about the status of quality teaching practices and how it increases student learning within the universities. The findings of this research will provide valuable knowledge for the classroom teaching plan, teacher/student ratio per class and leadership style strategy to increase academic learning opportunities for students at the university.

The current situation is that the five public universities providing higher education in South Sudan are under-staffed, under-funded and lack adequate infrastructure and do not have enough well-equipped secondary schools to feed the current universities. Another, the sensitive concerns that

are facing universities at the moment as not enough teachers, low incentives, large class size, lack of accommodation for the staff and lack of qualified teaching staff. Uppermost, the priority of quality education sector must therefore be, first and foremost to build their infrastructure, investing in their staff development programs, and improving their teaching and research capabilities.

This study will use mixed methods which include qualitative and quantitative research approach. Creswell and Plano Clark (2006) provided the definition of mixed methods which served as a guide for this study. As a methodology, it involves philosophical assumptions that guide the direction of the collection and analysis of data and the mixture of the qualitative and quantitative approaches in many phases in the research process. As a method, it focuses on collecting, analyzing, and mixing both quantitative and qualitative data in a single study or series of studies. Its central premise is that the use of quantitative and qualitative approaches in combination provides a better understanding of research problems than either approach alone.

Target Population and Sampling

For the purpose of this study, ten classes are chosen from five public universities because they are being fully funded by the government and currently operating under good conditions by providing higher learning for students. Other schools were excluded based on their operations status and the fact that they are not operational due to limited funding resources. The target populations in this study are students taking classes from April to August of 2014, universities' Vice Chancellors, heads of academic faculties, teachers, and parents from neighboring communities around the university and the Minister of higher education in South Sudan.

The multi-stage sampling technique will be employed to select the aforementioned group. The eight faculties from each university are identified including 1) Humanities and Social Sciences; 2) Natural Science and Technology; 3) Business and Economics; 4) Mathematics; 5) English; 6)

Law; 7) Education and Medicines. Once the departments are identified, 60 students and 8 teachers from each university will be selected using the stratified random sampling technique. The 5 parents from a neighboring community around each university will be selected using purposive sampling technique.

To be eligible for this study, students need to have completed their entire academic first year (freshman) through sophomore, at their current school. This will help insure that students being involved in the study are truly participants and acquainted with the university. The students must carry a satisfactory grade point average (GPA) of 3.0 or above to participate. The parents will be selected based on their long time experience serving on the University Parental Board. The participating teachers must be fulltime with at least one year of teaching at the university. All the heads of the department are expected to participate. A total of 300 students (60 students from each university two department faculties) will be selected using the stratified random sampling technique. All together this research study will be employed by interviewing 411 participants including 300 students, 40 heads of departments, 40 teachers, 25 parents, 5 universities' vice chancellors and the Minister of higher education.

Hypotheses

Below are the two examples out of the six hypotheses that this research will explores:

- **$H1_{null}$:** There is no statistical significant classroom environment that influences students' learning outcome at the universities.
- **$H1_{alt}$:** There is a statistical significant student-teacher relationship that influences students' learning outcome at the universities.

Variables and Measurements

This research attempts to assess the independent and dependent variables to evaluate and explain strategies to help foster quality teaching to effectively increase student learning outcome.

This study includes independent variable as factors that are assumed to influence the purpose of the research.

1. ***Leadership Skill*** Leadership skill data will be collected using Skills Inventory (SI) to measures individuals' abilities in the three areas of basic personal skills including technical, human and conceptual skills. The SI as developed by Katz (1955) is a series of 3 items use to assess strengths and weaknesses related to Skills of an Effective Administrator. Universities' vice chancellors should report their degree of agreement for each of the 18 item Likert-style by answering a series of competency statement using 5-point scale not true, seldom true, occasionally true, somewhat true and very true.
2. ***Classroom Environment*** is a set of independent variable. It should be a warm, safe, and caring environment which allows students to influence the nature of the activities they undertake, engage seriously in their study, regulate their behavior, and know of the explicit criteria and high expectations of what they are to achieve.

   The classroom environment is measured with What Is Happening in This Class (WIHIC) questionnaire, developed by Fraser, Fisher and McRobbie (1996) used to measure students' perceptions of their classroom environment. The questionnaire will be administered in a class which typically consists of 300 students, rather than to a large group. The students will be asked to provide their responses on a five-point Likert scale of almost never, seldom, sometimes, often and almost always. It consists of 7 scales and 56 items including student cohesiveness, teacher support, involvement, investigation, task orientation, cooperation and equity.

3. **Student-Teacher Relationship** is a set of independent variable. It helps influence the focus and scope of the student's learning. The relationship between a student and teacher impact the university in several domains including behavioral, social, and academic arenas.

   The Student-Teacher Relationship is measured with Student-Teacher Relationship Scale (STRS) developed by Pianta (2001). This scale consisted of 28 Likert scale questions that assessed the teacher's perception of his/her relationship with a student and includes three dimensions: closeness, conflict, and dependency. The questionnaire will rate each item using a 5-point Likert scale including: definitely does not apply, does not really apply, neutral or not sure, applies somewhat and definitely applies.

The second set is a dependent variable which is measured in an experiment.

Student Learning Outcome is a set of dependent variable. The student learning outcome directly describes what a student is expected to learn as a result of participating in academic activities or experiences at the College. They focus on knowledge gained, skills, attitudes, competencies, and habits of mind that students are expected to acquire at an institution of higher education.

The student learning outcome is measured with Student Satisfaction Inventory (SII), administered by Noel-Levitz. It consists of 7 wide varieties of issues such as: academic advising, campus climate, campus support services, instructional effectiveness, safety and security, and student centeredness designed to examine student satisfaction and priorities by improving the quality of student life and learning. The SII is a seven-point Likert-type items ranging from not satisfied at all, not very satisfied, somewhat satisfied, neutral,

somewhat satisfied, satisfied and very satisfied. Students will share how satisfied they are that their university is meeting their expectations.

Reliability and Validity Instruments

Joppe (2000) defines reliability as the extent to which results are consistent over time and an accurate representation of the total population under study and reproduce the results of a study under a similar methodology, whereas validity determines whether the research truly measures what it was intended to measure or how truthful the research results are. I believe both quantitative and qualitative use reliability and validity as the instruments to help decrease errors that might arise from measurement in the research study.

During this study, we will employ two types of validity including content and construct validity.

1. According to Cohen, Manion & Morrison (2008), content validity as a form of validity that ensures that the elements of the main issue to be covered in a research are both a fair representation of the wider issue under investigation and that the elements chosen for the research sample are addressed in depth and breadth. This type of validity requires that the researcher would consult the experts in the field of the research to rate each item in the instrument in terms of its match or relevance to the content (Rubio, BergWeger, Tebb, Lee & Rauch, 2003). This type of validity will be used in this research to help carefully evaluated samples and implement good logic for the study.
2. According to Walden (2012), construct validity refers to whether the operational definition of a variable actually reflects the theoretical meanings of a concept and based on the logical relationships among variables. It determines the significance, meaning, purpose, and use of scores from an instrument. This type of validity will be used in this study to help ensure that the construction of a particular issue agrees with other

constructions of the same underlying issue such as creativity, anxiety, motivation and so on.

This study will also use two types of reliability including:

1. According to Woolever, (2006), internal consistency the internal consistency method refers to the consistency of scores using only a single administration of an instrument. This type of reliability tests for the homogeneity of items in a measuring instrument. It will be used in this study to determine how all items on the test relate to all other items. It is measured by administering a test once on the intended group of respondents and their scores collated for analysis using the appropriate statistical tools.
2. The test-retest reliability is a measure of the consistency of an assessment test. It will be used in this study to determine the consistency of a test across time. It is measured by administering a test twice at two different points in time. This type of reliability assumes that there will be no change in the construct being measured.

In this regard, I feel this study will help investigate and examine the situation of the current higher education practices as well as to determine the prospect of implementing the impact of quality teaching and how it increases student learning at the public universities. A quality teaching framework allows the institution to monitor support, track teacher and student satisfaction, and study the impact on the learning process.

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Mr. Ajang,

Your qualifying exam committee has received your re-written paper and evaluated it. It is improved a lot. Now we are glad to let you know you have passed the qualifying exam. Hope you will have a great success on your dissertation study.

Best regards,

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