

# Empirical Analysis of the Effectiveness of Teacher Distance Education (TDE) in Ghana: The Perception of Student Teachers, Tutors and Coordinators of the University of Education, Winneba (UEW)

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## Abstract

Education has proven to be an effective means of developing the human resource base of most nations and could advance the development of nations. In order to upgrade and train more professionals and non-professionals in the sphere of education, the concept of teacher distance education has gained more attention globally. Therefore, more and new knowledge is required to advance the course of teacher distance education in developing countries through empirical research; it becomes critically important to understand the perceived quality and, therefore, effectiveness of teachers distance education from stakeholders' perspective in the Ghanaian teacher distance education context. Overall, student teachers, tutors and coordinators rated the University of Education Teacher Distance Education successful. It was recommended among other things that the programme design, content quality, instruction design, instructional delivery, student support and student assessment quality must be given further attention.

**Keywords:** effectiveness, perception, teacher distance education, university of education

## 1.0 Introduction

Education has proven to be an effective means of developing the human resource base of most nations, and could advance the development of nations (Arko-Boham, 2001). George and Singh (2000) maintained that nations with bountiful resources without high literacy rates are not developed while those with little natural resource but higher literacy rate are developed and enjoy a high standard of living. Education is a catalyst for eradicating socially undesirable behavior, which does not only make the life of people unbearable but also increases government expenditure that could have otherwise been used to enhance national development (Baum & Payea, 2005a). Thus, education is the engine of national growth through the development of human capital and that it provides the requisite knowledge, skills and attitude that are needed to refine the human resource to be more productive in their respective endeavour.

Teachers are indispensable in developing the human capital towards nation building. This is because they are the key facilitators in transmitting the knowledge, skills, attitudes and interest to the younger generation in formal education. Good teachers matter in the proper and quality education of the citizenry of every nation. Burns (2011) postulated that "high-quality teachers are the single most important factor in a child's education". Burns added that nations must invest in distance education programmes related to teacher education as a core mission of developing good teachers who in turn provide good teaching. It is therefore a matter of serious consideration to train more teachers and even reshape the capacities of the exiting teachers in Ghana, who are very instrumental in the realization of the national developmental agenda.

However, the colleges of education in Ghana are not adequately resourced to produce the needed number of teachers in the country; hence the teacher deficit gap still remains a problem. The teacher deficit gap has deepened phenomenally over the years owing to global agenda of education for all by 2015 (UNESCO, 2001) coupled with Ghana Free Compulsory Universal Basic Education (FCUBE) policy which has been operational since 2005, has resulted to an astronomical increase in pupils' enrolment. This is why the need for quality teachers has become pressing than never before. To address this problem, it might not be appropriate to allow the exiting few teachers to leave the classroom to seek for higher professional development but to embark on distance education which will serve the purposes of retaining the teachers and also to expand their frontiers of knowledge in the realms of the teaching profession. Mensah and Owusu-Mensah (2002) urge that all teacher training institution to avoid the traditional teacher training of accommodating teachers to off-campus training mode to bridge the teacher deficit gap. Thus, the traditional way of training teachers by housing them in campuses – taken them away from the classrooms where they are supposed to teach has the predisposition to preclude the quest to fill the teacher vacancies in the short, medium and long-term. It is therefore, needful to encourage teachers to embark on teacher education through other modes of education outside the confines of the physical classroom facility, notably called Distance Education (DE).

Distance education is the organizational framework and process of providing instruction at a distance. Distance education takes place when a teacher and student(s) are physically separated, and technology is used to bridge the instruction gap (Willis, 1992, p. 104). This type of communication can occur through a variety of

technical media including print, computer, fax, telephone, audiocassette, videocassette, broadcast television, and narrowcast interactive television. Similarly, Perraton (2002) defines it as an organized educational activity that uses a variety of media and/or teaching materials, in which “constraints on study are minimized in terms either of access, or of time and place, pace, method of study, or any combination of these.”

Teacher distance education has seen increased growth over the past two decades (UNESCO, 2001) in many parts of the world. Generally, the expected goal of distance education is to be able to deliver quality education in the more convenience to the learners (Mensah and Owusu-Mensah, 2003), and to fit study in with their work, family or lifestyle commitments (Jakobsdóttir 2008b). Over the past decade the issue of the quality of DE in general, and quality of TDE in particular has received a growing interest among scholars, practitioners and educators. TDE is expected to deliver a considerably high teacher education quality in almost all aspects of educational quality such as teaching quality, teacher-learner relationship, instructional development quality, education policy management, project supervision, student practice teaching quality, examination quality, instructional media quality, student support systems quality, among others (Burns, 2011). In many developing countries like Ghana TDE serves an important opportunity for teachers to upgrade themselves while still on the job. The growing importance of TDE has led to the adoption of TDE in by teacher education universities such as Cape Coast University (UCC), the University of Education, Winneba (UEW), and Jackson Education Complex.

One of the ways of improving upon practice is to evaluate how different stakeholders view a programme and how it is benefiting them. Such feedback is expected to provide basis for developing leadership and management strategies towards improving practice.

### **1.1 Purpose and Objective of the Study**

Based on the above background, the main purpose of this study is to assess and analyze stakeholders’ perception of the effectiveness of TDE offered by the UEW in Ghana.

## **2.0 Review of Literature**

### **2.1 Quality Dimensions for Evaluating TDE**

In TDE, one of crucial questions has been that, what leads to a successful teaching and learning in distance environment? These quality dimensions are important if practitioners and scholars in TDE want to be able to measure and evaluate the effectiveness of TDE programmes for quality improvement in higher education. Irrespective of the type of evaluation approach, formative or summative, the quality dimensions against which the evaluation will be done is critically important. A review of existing literature on quality of teacher distance education and quality education in higher education reveals a number of quality dimensions of evaluating TDE in areas relating to the input, process and output of the programme.

#### **2.2.1 Programme design and organization**

This dimension relates the input aspect of the TDE programme. It involves such things as admission process and information, fresh student orientation, communicating changes in time table and course tutors in advance, among others. These are elements that help get the fresh students started smoothly on the TDE programme and continue effectively.

#### **Quality of teachers/instructors**

One important aspect of quality of distance education in general is the teacher or instructor quality. According to Darling-Hammond (2008) and Organization for Economic Co-operation and Development (OECD), 2008, good teachers possess at least five major characteristics that distinguish them from bad teachers. First good teachers have strong knowledge of their subject matter (content knowledge). Student achievement is significantly related to whether teachers are fully prepared in the field in which they teach. Research demonstrates that the amount of college maths and science coursework teachers have taken in their content areas is positively related to student achievement gains (Darling-Hammond & Bransford, 2005; OECD, 2008).

Second, good teachers adopt a structured, planned approach to instruction (structured instructional approach). Good teachers adopt either a traditional, more direct, structured approach or a constructivist approach. Research (OECD, 2008) depending on students learning characteristics with the aim of assisting the learner to having hands-on learning and activities that emphasize higher-order thinking.

Third, good teachers have adequate knowledge about how students learn. They teach with a good understanding of child development and learning are more likely to be effective in the classroom; good teachers who understand how learning occurs are better able to select and develop a curriculum that supports, rather than undermines, the learning process (Darling-Hammond & Bransford, 2005).

Fourth, good teachers have high self-efficacy by which they are able to motivate learners towards striving for higher achievement and excellence. Again, a study conducted by Organisation of Economic Co-operation and Development (2008) found a positive relationship between teachers’ beliefs about their efficacy and student achievements in core academic outcomes. Efficacy is a broad term that deals with attitudes, beliefs, and perceptions. Teachers with strong self-efficacy believe that they can be successful. Teachers with strong self-efficacy also have

strong beliefs in their students' efficacy—a belief that students can be successful. Teachers who have strong efficacy are better able to motivate students, because they set high standards and believe that they can teach their students what they need to know to attain these standards.

Fifth, teachers with high efficacy also demonstrate caring and respectful behaviours toward students and provide a safe learning environment. This concept of efficacy underlies the importance of motivation in teachers' work (OECD, 2008).

Finally, good teachers have adequate knowledge of how to teach (pedagogical content knowledge). They have good teaching experience and practice, and know not just their content, but specific strategies for teaching this particular content. Thus, they prepare in advance for effective delivery of content. According to Shulman, 1986, good teachers with sound pedagogy:

- a. Know how to select topics, useful forms of presentation, analogies, illustrations, examples, explanations, and demonstrations.
- b. Understand what makes learning of specific topics easy or hard for students (including knowledge about the conceptions and misconceptions students bring to the subject).
- c. Acquire deep knowledge about content and structure of the subject matter.
- d. Know the appropriate teaching materials, technology, and media and have strategic knowledge in the application of teaching strategies.
- e. Teach specific topics or skills by making clear the context in the broader fundamental structure of a field of knowledge.

Since teachers or instructors provide instructional delivery to students, it becomes apparent to associate good teachers with good teaching skills or effective instructional delivery.

### **2.2.2 Quality of instructional delivery**

Since distance education entails different modes of instructional delivery, it becomes critically important for teachers to adopt and adhere to institutionally approved modes of instructional delivery in the teacher distance education. Not all instruction is equal. Distance education raises instructional issues that depend on a number of factors: whether the course is taught synchronously (in real time) or asynchronously, what technology is used—for example, teaching via videoconferencing is very different from online instruction—and what the educational outcomes of the distance learning program or course are.

Nevertheless, it is critical in all modes of distance education to model effective instructional techniques. Student-teachers, therefore, must be taught using the same instructional methods with which they are expected to teach students and, as much as possible, participate in a variety of appropriate instructional models. These include direct instructional models (transmission of concepts, skills, and procedures), cognitive models (inductive reasoning, teaching via analogy) and social models (learner-centered instruction) (Maor & Zoriski, 2003; Gaible & Burns, 2007; Dede et al., 2005a).

In the context of teacher distance education in countries like Ghana, much of the instructional delivery mode take place in the form of face-to-face tutorials and interactions that are planned to take place at designated centers. The quality of these faces-to-face tutorials and interactions are crucial to the development of student learning outcomes.

### **2.2.3 Quality of instructional design**

One of the major dimensions of distance teacher education that have been emphasized in the education literature is quality of instructional design. Instructional design is a broad term that encompasses the selection, organization, sequencing, and assessment of content and the tools and experiences required to help learners attain a certain set of goals (Burns, 2011). Instructional design is particularly critical in a distance learning situation, because the student's learning experience is almost entirely mediated through some form of technology.

Poorly designed technology-based courses can confound learning, frustrate learners and instructors, and result in high attrition rates (SAIDE, 2007; Center for Children and Technology, 2008). Quality of instructional design refers to the appropriateness of material for teaching and learning in teacher distance education in terms of content, print quality, binding, and design, among others. Instructional design for teacher education include course text books, online tutorials, audios and audio-visual media, use of computer and other ICT tools, among others. The research regarding effective instructional design for distance education suggests that it should have seven major characteristics:

- a. Grounding in an understanding of the learning process. An effectively designed distance learning environment must take into account multiple factors: the characteristics of targeted learners, the nature of the content, the role of the community in shaping learning, and integration of ongoing feedback and assessment. It should provide connections between the learner's prior knowledge and course content (McGhee, 2003) and should offer ample opportunities for practice and expert feedback to guide the development of knowledge in action.
- b. Grounding in an understanding of the needs of adult learners. Research (Knowles, 1984) demonstrates that adult learners share common characteristics and beliefs that must be integrated into

- any learning experience.
- c. Links between theory and practice (Perraton, 1993). Some forms of distance education are better than others for teacher learning. For example, print- and audio-based instruction may help teachers understand the characteristics of differentiated instruction, but may be far less effective in helping teachers understand how to actually teach the same content in a differentiated manner. In contrast, televisually based distance modes are effective tools for helping teachers understand processes, procedures, and practices, such as how to implement a problem-based science activity. Distance education has been criticized for its relative failure to integrate theory with practice compared with face-to-face instruction (Robinson & Latchem, 1997).
  - d. Accommodation of its audience's range of learning styles. These learning styles are cognitive models or "frames of mind" shape the way learners perceive and process information and suggest that an individual's ability to learn is influenced by the manner in which information is organized and presented. The challenge for distance learning programs is to incorporate as many of these "frames of mind" or "intelligences" into its design as possible to address teachers' learning strengths and compensate for their weaknesses.
  - e. Flexible design. One of the most common misconceptions in teacher distance education is that face-to-face curricula can be transferred wholesale to a distance education format. Although this has unfortunately often been the approach, distance education courses must instead be designed flexibly (Williams, 1999; Hope, 2006) and specifically for the medium through which they will be delivered—be it radio, television, immersive environments, multimedia, or online courses.
  - f. Flexible delivery. In addition to being flexibly designed, distance courses should be flexibly delivered. Luschei, Dimiyati and Padmo (2008) define "flexible delivery" as a client-centered approach in which the providers commit to tailor courses to meet learners' individual needs. A poorly designed course may require excessive amounts of teaching and person power in terms of presentation to compensate for it, it may have a high failure rate, or it may result in the lowering of exit performance standards—or all of these. Flexibly delivered courses offer the following:
    - i. Realistic options and choices in terms of time, place, and technology;
    - ii. Multiple modes of delivery—in the workplace, in block modes, modules, interactive formats, and other nonstandard modes of delivery;
    - iii. Alternative options—including on-campus, in-class, independent lectures, seminars, tutorials, and practical sessions;
    - iv. Accommodation of learners' diverse learning needs and styles;
    - v. Use of technology and resources to provide options to any students to access and use materials in their own place (e.g., Web-based teaching materials and exercises or assessments that are not in time- and location-specific).
    - vi. Accessibility. Finally, distance learning courses should be accessible to all learners. One way to do this is to make sure courses are "universally" designed.

#### **2.2.4 Quality of content**

Content has to do with the very courses that make up the teacher distance education programme and certification. The content delivery should enable student teacher gain an in-depth knowledge of the subject matter which would in turn enhances their self-efficacy in teaching with confidence their respective courses in the classroom. Teachers on distance education programme are considered matured and adult learners and are therefore able to assess the adequacy and relevance of the course content they undergo.

#### **2.2.5 Quality of student assessment**

Distance-based assessment systems are faced with the challenge of preparing teachers to teach in a 21<sup>st</sup> century educational and economic environment that emphasizes what Bloom termed "higher-order thinking skills." For teachers to help students develop such skills, teachers themselves must develop these critical thinking faculties. And for teachers to develop these skills, distance education systems must instruct and assess teacher-learners in higher-order ways. They must assess teachers' abilities to apply new information, analyze divergent information, synthesize discrete topics into one unified idea, and evaluate the merits and demerits of a particular teaching strategy or curriculum guide.

Distance-based programs must assess both the product of learning and the thinking process of learners—what teachers have learned and how they learn. Quality of student-teacher assessment may also include such things as the effectiveness of summative and formative assessment (quizzes and end-of-semester examinations, etc.) in terms of their timeliness, publication of results, and perceived fairness of grading, among others.

#### **2.2.6 Quality of student support for distance learners**

Successful distance education programs provide ongoing support for learners. Distance learning can be a "very lonely" experience (Brown & Early, cited by Prescott & Robinson, 1993). This isolation exacerbates all of the many issues that can occur when learners are separated from their instructor and other learners by distance.



Difficulties in understanding content, computer problems, uncertainty about how to employ a strategy, and disappointment when a new pedagogical approach fails are all magnified when teachers confront these issues alone. The issue of support in distance courses is linked to teacher completion, satisfaction, and performance. High rates of attrition in distance-based teacher training courses are in large measure due to feelings of isolation and “anonymity” (Potashnik & Capper, 1998; Hope, 2006). High rates of teacher dissatisfaction with distance-based courses occur when teachers lack “support, contact and confidence” (Prescott & Robinson, 1993: 306).

In contrast, where distance education programs enjoy high rates of completion, these programs have been characterized by ongoing support. This situation generally holds true for all types of professional development programs for teachers— whether face-to-face, distance, or hybrid—and is particularly true for all types of distance education programs. Support is not simply one type of assistance, but rather a multi-layered array of different types of “infrastructure” that help teachers successfully carry out their professional responsibilities. For student-teachers, support often includes the following:

- a. *Administrative support.* This can mean instructional leadership, compliance monitoring by principals, official recognition, serving as an interlocutor between school and district or school and community, expressions of support for implementation of new innovations, effective communication between management and student-teachers, administrative decisions that provide teachers with time and resources to carry out new instructional practices, and effective organization of the entire distance programme,
- b. *Instructional support.* Typically, this means the distance learning instructor, coach, mentor, or in-class support person who models, guides, co-implements, or helps the teacher with content, instruction, assessment, classroom management, and the conceptual and logistical issues arising from change.
- c. *School-based community.* A community of colleagues also undergoing the same professional development is a significant source of support. This valuing of another teacher’s perspective is a key component of constructivist learning theory. This may include leadership, counselling, and periodic supervision of students’ teaching in the classroom, among others.
- d. *Technical support.* This includes help on how to use a particular application, troubleshooting help, and the availability of someone on site to fix computers when they break down (as they inevitably will).
- e. *Community and/or family support.* Formal and informal recognition and approval by parents of teachers’ efforts can manifest itself in terms of resources or materials for the classroom.
- f. *Teaching and Learning Materials.* Teachers need this most basic level of support to gain access to authentic resources or to purchase or create curriculum-specific teaching and learning materials. This may include library facilities, among others.
- g. *Time.* Release time for teachers to meet in-class support people is critical, as is dedicated time during the school day or week to engage in the extensive planning that is a requirement for learner-centered instruction. “Time” is also invoked by teachers who feel unsure of how to embark on change.

### **Impact of Quality TDE**

The quality of teacher distance education is considered effective where it is able to deliver to students the necessary pedagogies, attitudes and knowledge that will improve upon the student teachers’ teaching abilities as well as their social skills or interactive skills in their career development (Raths & McAninch, 2003). In view of this, it is expected that quality of TDE would result in the following:

1. Improvement in teaching philosophy. This involves presence or absence of changes, no changes. Changes related to why one teaches or why one teaches a particular way.
2. Improvement in teaching practice. This involves presence of changes related to application to real world, how and what one teaches assessment activities, technology Integration, among others.
3. Personal growth/development. This involves other changes over the program, appreciation of diversity, technology self-efficacy, sense of profession, research self-efficacy, collaboration, among others.
4. Program satisfaction. This involves factors related to program facilitating factors, obstacles, satisfaction or dissatisfaction, faculty, students, reasons for enrolment, positive effect, negative effect, among others.

### **3.0 Methodology**

The population of the study will comprise three stakeholder groups –student-teachers, tutors and co-ordinators in the 23 centres for the TDE of the UEW. However, for time constraint and cost the study will focus on the eleven centres in northern centre. Moreover, for purposes of effective evaluation, the final year students of both diploma and post-diploma were used as the population for the study since they are more likely to evaluate the effectiveness of the programme in that in the final year it is generally believed they would had enough insight and experience to evaluate the programme’s effectiveness. According table 1, the population for final year students for both

diploma and post-diploma students is four thousand two hundred and six one (4261) while the population for tutors is four hundred and forty three. The population for co-ordinators consist of all the 23 centre co-ordinators.

**Table 1: Sample frame and size for students and tutors in the northern sector**

Centre	Students		Total	% of The Proportion Frame	Proportionate Sample Size	Tutors	%	Proportionate Sample Size
	Post Dip2	Dip.3						
Atebubu	108	-	108	2.5	9	16	3.6	8
Bechem	583	30	613	14.4	53	59	13.3	28
Kumasi(UEW)	1073	65	1138	26.7	98	89	20.1	42
Kumasi Girls	732	-	723	17.2	63	61	13.8	29
Mampong	129	-	129	3.0	11	16	3.6	8
Navrongo	281	10	291	6.8	25	56	12.6	27
Obuasi	206	6	212	5.0	18	21	4.7	10
Tamale	422	30	452	10.6	39	60	13.5	29
Tachiman	247	14	261	6.1	2	28	6.3	13
Wa	281	11	292	6.9	25	29	6.5	13
Enchi	31	2	33	0.8	3	8	1.8	04
Total	4093	168	4261	100	366	443	100	210

### 3.1 Sample and Sampling Techniques

Using Yamin's the sample size formula the sample sizes for the three categories of respondents were selected. According to the populations the sample sizes were three hundred and sixty six (366), two hundred and ten (210) twenty two (22) respectively for student-teachers, tutors and co-ordinators respectively.

The stratified simple sampling technique was used to select the sample from each stratum. When sub-populations vary considerably, it is advantageous to sample each subpopulation (stratum) independently. Stratification is the process of grouping members of the population into relatively homogeneous subgroups before sampling. The strata are made to be mutually exclusive: every element in the population is assigned to only one stratum. The strata should also be collectively exhaustive: no population element is excluded. The systematic sampling was applied within each stratum. This often improves the representativeness of the sample by reducing sampling error. Systematic sampling is a statistical method involving the selection of elements from an ordered sampling frame. In this approach, progression through the list is treated circularly, with a return to the top once the end of the list is passed. The sampling starts by selecting an element from the list at random and then every  $k^{\text{th}}$  element in the frame is selected, where  $k$ , the sampling interval this is calculated as:

$$K=N/n$$

where  $n$  is the sample size, and  $N$  is the population size.

Using this procedure each element in the population has a known and equal probability of selection.

### 3.2 Research Instrument

The main research instrument that will be used is questionnaire (see Appendix A and B). The questionnaire is appropriate because the study is a survey that seeks to analyse the opinion of some stakeholder groups about the effectiveness of the TDE run by UEW. Moreover, most of the prospective respondents are literates who can conveniently respond to the items in the questionnaire. One of the two sets of questionnaire are responded to by student-teachers and the other by tutors and coordinators of TDE of UEW. The items in the questionnaire would be based the literature reviewed for a strong theoretical support (Burns, 2012; Sampong, 2009). It will consist of Likert- scale type questions, coded 1 to 5. It will be distributed personally by the researcher and with the help some trained assistants to the respondents. The questionnaire covered twelve aspects of evaluation of TDE of UEW with 45 indicators as depicted in Appendix A, B and C.

### 3.3 Tests for Reliability of Instrument

One of the most commonly used indicators of internal consistency is Cronbach's alpha coefficient. For most social science research, according to Hair et al. (2010) and Straub et al. (2004), the Cronbach alpha coefficient of a scale should be 0.7 or above. In the current study, the Cronbach alpha coefficient was 0.91 for the student-teachers' instrument, 0.78 for the tutors' instrument and 0.86 for the co-ordinators instrument. These indicate that the research instruments have high reliability. The reliability statistics for each item for the three groups are presented in Appendix D, E and F.

### 3.4 Data Analysis tools

The data gathered were screened, coded, entered and analysed using SPSS Version 16.0 for windows. The main statistical technique used for the analysis of the data was One-sample t-Test

## 4.0 Analysis and Discussion

### 4.1 Evaluation of the effectiveness Teacher Distance Education (TDE) of UEW

The analyses of perceived effectiveness of TDE delivered by UEW are presented in Tables 2, 3 and 4 for student-

teachers, tutors and coordinators respectively. First of all, a look at the descriptive analyses in the table show that a few of the mean ratings for the dimensions were above four, and most of them were between 1.47 and 3.96. This implies that most of the means indicate a rating of *neutral, disagree and strongly disagree* could be described as unsatisfactory evaluation.

In order to objectively and statistically conclude whether mean ratings indicate significantly satisfactory evaluation or not (i.e. whether the TDE programme of UEW satisfactorily or favourably evaluated by student-teachers), a one sample t-test was applied. The one-sample t-test was used using SPSS version 16.0 to determine whether the mean ratings for each item of TDE evaluation by UEW were significant or not. To do this, a significant level of 0.05 was pre-determined, and a hypothetical mean of four was chosen as it could be used as an indicator of rating for favourable or satisfaction for each item of TDE evaluation using questionnaire. A rating of one, two or three indicates no agreement or insignificant improvement.

A negative mean difference implies that the mean rating of an item is less than the hypothetical mean of four, while a positive mean difference implies that the mean rating of an item is greater than the hypothetical mean of four. The significance values (p-values) for each item show whether the negative or positive mean differences are significant or not. A negative mean difference that is significant indicates that the mean rating for that item is significantly less than the hypothetical mean, which implies the evaluation of the item is less satisfactorily evaluated. Conversely, a negative mean difference that is not significant indicates that the mean rating is equal to the hypothetical mean, which implies that the evaluation of the item is at least satisfactorily favourable. A positive mean difference that is significant indicates that the mean rating for the item is significantly greater than the hypothetical mean, implying that there is substantial satisfaction in TDE for the item a can considered a favourable. A positive but non-significant mean difference indicates that there is at least some significant level of satisfaction in the evaluation for the item.

Table 1 Student-teachers' evaluation of TDE

		One-Sample Statistics									
						Test Value = 4		95% CI of the Difference			
		Mean	Stdv.	T	df	Sig. (2-tailed)	Mean Difference	Lower	Upper	Remarks	
<b>Quality of programme design</b>											
QPD1	Orientation seminar	3.61	1.23	-6.56	422	0.00	-0.39	-0.51	-0.27	USAT	
QPD2	The admission information	3.42	1.21	-9.95	422	0.00	-0.58	-0.70	-0.47	USAT	
QPD3	Admission forms/Online registration designed	3.72	1.11	-5.13	422	0.00	-0.28	-0.39	-0.17	USAT	
QPD4	Structure of courses taught	2.81	1.55	-15.80	422	0.00	-1.19	-1.34	-1.04	USAT	
QPD5	Timeliness of course materials	3.38	1.15	-11.15	422	0.00	-0.62	-0.73	-0.51	USAT	
<b>Teacher quality</b>											
TQ1	Perceived tutors' qualification	3.82	2.18	-1.70	422	0.09	-0.18	-0.39	0.03	SAT	
TQ2	Tutors' teaching skills	4.04	0.91	0.80	422	0.42	0.04	-0.05	0.12	SAT	
TQ3	Tutors' experience in subject	4.00	0.99	-0.05	422	0.96	0.00	-0.10	0.09	SAT	
<b>Quality of instructional design</b>											
QID1	Course manuals contained course objectives	2.84	1.42	-16.80	422	0.00	-1.16	-1.30	-1.03	SAT	
QID2	Manuals were easy to read and understand	3.01	1.49	-13.75	422	0.00	-0.99	-1.13	-0.85	USAT	
QID3	Manuals' graphics in were self-explanatory	2.60	1.38	-20.75	422	0.00	-1.40	-1.53	-1.26	USAT	
QID4	Access to ICT resources for course work	1.47	1.05	-49.76	422	0.00	-2.53	-2.63	-2.43	USAT	
QID5	Manuals encourage collaborative work	2.76	1.25	-20.36	422	0.00	-1.24	-1.36	-1.12	USAT	
<b>Quality of instructional delivery</b>											
QIDL1	Communicating with tutor.	3.19	1.37	-12.21	422	0.00	-0.81	-0.94	-0.68	USAT	
QIDL2	Tutors as facilitators of student learning	2.87	1.35	-17.33	422	0.00	-1.13	-1.26	-1.01	USAT	
QIDL3	Comments on assignments as a dialogue ....	2.48	1.33	-23.46	422	0.00	-1.52	-1.65	-1.39	USAT	
QIDL4	Teaching methods motivated me to study.	3.46	1.25	-8.86	422	0.00	-0.54	-0.66	-0.42	USAT	
<b>Quality of student support</b>											
SSQ1	Usefulness of counselling	2.03	1.37	-29.70	422	0.00	-1.97	-2.10	-1.84	USAT	
SSQ2	Co-ordinators' communication of important information	2.65	1.39	-19.98	422	0.00	-1.35	-1.48	-1.21	USAT	
SSQ3	Coordinator's help to resolve student complaints/problems	2.87	1.23	-18.88	422	0.00	-1.13	-1.24	-1.01	USAT	
SSQ5	Supervisor regular visit	3.19	1.33	-12.58	422	0.00	-0.81	-0.94	-0.69	USAT	
SSQ6	Supervisor as a source of information	2.93	1.37	-16.09	422	0.00	-1.07	-1.20	-0.94	USAT	
SSQ7	Impact of supervisor's visit	3.05	1.12	-17.36	422	0.00	-0.95	-1.05	-0.84	USAT	
<b>Quality of content of TDE</b>											
CONT1	Adequacy of courses offered	3.88	0.95	-2.62	422	0.01	-0.12	-0.21	-0.03	USAT	
CONT2	Supervised teaching practice	3.10	1.33	-13.89	422	0.00	-0.90	-1.03	-0.77	USAT	
CONT3	Relevance of courses	4.23	0.89	5.33	422	0.00	0.23	0.14	0.31	SAT	
<b>Quality of student assessment</b>											
QSA1	Graded assignments given in time.	2.45	1.22	-26.05	422	0.00	-1.55	-1.67	-1.43	USAT	
QSA2	Exams were organised effectively	3.41	1.36	-8.89	422	0.00	-0.59	-0.72	-0.46	USAT	
QSA3	Course assignments often required research writing.	2.69	1.31	-20.56	422	0.00	-1.31	-1.44	-1.19	USAT	
QSA4	Test questions involved critical thinking...	3.08	1.32	-14.28	422	0.00	-0.92	-1.04	-0.79	USAT	
<b>Satisfaction with TDE</b>											
SAT1	Recommend UEW TDE to others...	3.95	1.05	-1.02	422	0.31	-0.05	-0.15	0.05	SAT	
SAT2	I wish for other TDE degrees at UEW	4.07	1.12	1.34	422	0.18	0.07	-0.03	0.18	SAT	
SAT3	Overall satisfied with the TDE by UEW.	3.80	1.07	-3.77	422	0.00	-0.20	-0.30	-0.09	USAT	
SAT4	Happy with the TDE at UEW	3.91	0.93	-1.98	422	0.05	-0.09	-0.18	0.00	USAT	
<b>Perceived impact of TDE</b>											
IMTP1	Understanding teaching and learning well...	4.35	0.75	9.78	422	0.00	0.35	0.28	0.43	MSAT	
IMTP2	Gained educationally useful experiences...	4.29	0.71	8.37	422	0.00	0.29	0.22	0.36	MSAT	
IMPD1	My professional development is enhanced	4.29	0.80	7.49	422	0.00	0.29	0.21	0.37	MSAT	
IMPD2	Educational experience is rewarding	4.10	0.81	2.47	422	0.01	0.10	0.02	0.17	MSAT	

Note: N=423, SAT – Satisfactory USAT – Unsatisfactory, MSAT – More satisfactory

Table 4: Tutors' evaluation of TDE

One-Sample Statistics	Mean	Stdv	T	Df	Test Value = 4 Sig. (2-tailed)	Mean Difference	95% CI Difference		Remarks
							Lower	Upper	
<b>Quality of programme design</b>									
The admission brochure are made available to students	4.219	0.693	3.238	209	0.002	0.219	0.085	0.353	Satisfactory
The admission form/online registration was designed to be easy	2.676	1.181	-11.489	209	0.000	-1.324	-1.552	-1.095	Unsatisfactory
After admission, students are provided orientation seminar	4.067	0.912	0.749	209	0.456	0.067	-0.110	0.243	Satisfactory
I believe the study centres are adequately equipped with furniture for learning to take place there	2.095	1.043	-18.721	209	0.000	-1.905	-2.107	-1.703	Unsatisfactory
The study centre I am familiar with has the necessary communication equipment	1.981	0.940	-22.002	209	0.000	-2.019	-2.201	-1.837	Unsatisfactory
Learners are given course materials in time at the beginning of the semester.	3.419	1.108	-5.375	209	0.000	-0.581	-0.795	-0.367	Unsatisfactory
There is an integrated framework at a policy and practice level	2.190	0.878	-21.116	209	0.000	-1.810	-1.979	-1.640	Unsatisfactory
<b>Teacher quality</b>									
In my estimation, the course tutors had the good teaching qualification	4.076	0.768	1.016	209	0.312	0.076	-0.072	0.225	Satisfactory
Course tutors were competent in their subject area	4.095	0.779	1.253	209	0.213	0.095	-0.055	0.246	Satisfactory
Course tutors have good teaching skills	4.057	0.853	0.687	209	0.494	0.057	-0.108	0.222	Satisfactory
<b>Quality of Content of TDE</b>									
The content of the courses and practice of tutors encourage collaborative learning	2.038	1.091	-18.422	209	0.000	-1.962	-2.173	-1.751	Unsatisfactory
The TDE programme is well structured in terms of courses taught	1.952	1.060	-19.802	209	0.000	-2.048	-2.253	-1.843	Unsatisfactory
The courses offered on the TDE programme at UEW are relevant to the professional growth of teachers	4.333	0.916	3.727	209	0.000	0.333	0.156	0.511	More Satisfactory
Supervisors often visit student-teacher's classroom	3.457	1.301	-4.275	209	0.000	-0.543	-0.795	-0.291	Unsatisfactory
There is a mechanism in place to ensure that supervisors visit student-teachers' Classroom	2.324	1.070	-16.058	209	0.000	-1.676	-1.883	-1.469	Unsatisfactory
<b>Quality of instructional design</b>									
The course materials are accessibly presented	3.714	1.054	-2.779	209	0.006	-0.286	-0.490	-0.082	Unsatisfactory
The course materials present information in a coherent way that engages the learners	2.295	1.247	-14.003	209	0.000	-1.705	-1.946	-1.463	Unsatisfactory
There is an identified process of development and evaluation of course materials	2.086	1.136	-17.266	209	0.000	-1.914	-2.134	-1.694	Unsatisfactory
The course materials encourage learners to exercise their inquiry abilities through constructivist approaches	2.000	1.118	-18.330	209	0.000	-2.000	-2.216	-1.784	Unsatisfactory
The course materials encourage reflection and connection between theory and practice	2.048	1.013	-19.745	209	0.000	-1.952	-2.148	-1.756	Unsatisfactory
The course materials take into consideration different learning styles of students	1.838	1.075	-20.602	209	0.000	-2.162	-2.370	-1.954	Unsatisfactory
<b>Quality of student assessment</b>									
Exams were organised effectively	2.019	1.074	-18.900	209	0.000	-1.981	-2.189	-1.773	Unsatisfactory
Test questions often consisted of only a test of memorization abilities.	1.695	0.932	-25.352	209	0.000	-2.305	-2.485	-2.124	Unsatisfactory
Course assignments often required research writing.	1.533	0.760	-33.240	209	0.000	-2.467	-2.614	-2.320	Unsatisfactory
Test questions often consisted of a test of critical thinking skills	2.324	0.882	-19.463	209	0.000	-1.676	-1.847	-1.505	Unsatisfactory
The submission time for students' assignment is reasonable	2.152	0.938	-20.177	209	0.000	-1.848	-2.029	-1.666	Unsatisfactory
Learning and assessment methods are appropriate to the purpose and outcomes of the program	2.124	1.035	-18.577	209	0.000	-1.876	-2.076	-1.676	Unsatisfactory
<b>Quality of student support</b>									
Learner support is an integral part of the design of the program	2.333	1.230	-13.885	209	0.000	-1.667	-1.905	-1.429	Unsatisfactory
There is time block earmarked for one-on-one interaction with tutor for those who need it.	3.962	0.970	-0.402	209	0.688	-0.038	-0.226	0.150	Unsatisfactory



I feel adequately prepared to offer student support by means of counselling	3.733	0.933	-2.929	209	0.004	-0.267	-0.447	-0.086	Unsatisfactory
Course tutors/supervisors/study centre coordinators often do counselling to students	1.743	0.910	-25.426	209	0.000	-2.257	-2.433	-2.081	Unsatisfactory
Efficient administrative systems support the activities of the program	1.981	1.038	-19.940	209	0.000	-2.019	-2.220	-1.818	Unsatisfactory
Tutors encourage student-teachers to regard tutors' comments on marked scripts as a dialogue and not a directive	3.333	1.472	-4.641	209	0.000	-0.667	-0.952	-0.382	Unsatisfactory
Information about scope, requirements and benefits of the program is disseminated in such a way that every potential learner receives it.	2.038	1.100	-18.275	209	0.000	-1.962	-2.175	-1.749	Unsatisfactory
<b>Quality of instructional delivery</b>									
The tutorials are student-centred instead of teacher-centred	2.352	1.109	-15.22	209	0.000	-1.648	-1.862	-1.433	Unsatisfactory
Course tutors use different modes of instruction, (e.g. lectures, discussion, role-playing, overhead projectors, etc.) during face to face seminars.	3.476	1.249	-4.298	209	0.000	-0.524	-0.765	-0.282	Unsatisfactory
The program integrates encouragement of peer support structures	2.314	1.077	-16.03	209	0.000	-1.686	-1.894	-1.477	Unsatisfactory
Course tutors act as facilitators of self-directed learning instead of didactic transmitters of information	3.276	1.229	-6.037	209	0.000	-0.724	-0.962	-0.486	Unsatisfactory
<b>Perceived Impact of TDE</b>									
In my estimation, the Distance Teacher Education program of UEW has had a positive impact on teacher education in the country	3.962	1.018	-0.383	209	0.702	-0.038	-0.235	0.159	Unsatisfactory
I would recommend UEW distance education course to my friends etc.	3.952	1.050	-0.465	209	0.643	-0.048	-0.251	0.156	Unsatisfactory

Table 5: Co-ordinators' evaluation of TDE

Code		One-Sample Statistics					95% CI of the Difference			Remarks
		mean	Stdv	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper	
<b>Quality of programme design</b>										
QPD1	The admission brochure	4.23	1.23	0.87	21	0.40	0.23	-0.32	0.77	SAT
QPD2	The admission form/online registration	3.77	1.27	-0.84	21	0.41	-0.77	-0.79	0.34	SAT
QPD3	Orientation seminar	4.64	1.05	2.85	21	0.01	0.64	0.17	1.10	MSAT
QPD4	Study centres are adequately equipped	3.05	1.40	3.21	21	0.00	-0.95	-1.57	-0.34	USAT
QPD5	The study centre has ICT equipment	3.50	1.06	2.22	21	0.04	-0.50	-0.97	-0.03	USAT
QPD6	Course materials given in time	3.59	1.10	1.75	21	0.10	-0.41	-0.90	0.08	SAT
QPD7	There is an integrated framework at a policy and practice level	3.82	0.96	0.89	21	0.38	-0.18	-0.61	0.24	SAT
<b>Teacher quality</b>										
TQ1	Tutors are qualified.	3.95	0.84	0.25	21	0.80	-0.05	-0.42	0.33	SAT
TQ2	Course tutors were competent	4.23	0.75	1.42	21	0.17	0.23	-0.11	0.56	SAT
QT3	Course tutors have good teaching skills	4.00	0.62	0.00	21	1.00	0.00	-0.27	0.27	SAT
<b>Quality of Content of TDE</b>										
CONT1	The content helps collaborative learning	3.77	0.87	1.23	21	0.23	-0.23	-0.61	0.16	SAT
CONT2	The TDE programme is well structured	4.09	0.92	0.46	21	0.65	0.09	-0.32	0.50	SAT
CONT3	The courses offered are relevant	4.41	0.91	2.11	21	0.05	0.41	0.01	0.81	SAT
QSUP1	Supervisors often visit student-teachers	3.09	1.23	3.46	21	0.00	-0.91	-1.45	-0.36	USAT
QSUP2	There is a mechanism in place to ensure that supervisors visit student-teachers?	3.09	1.23	3.46	21	0.00	-0.91	-1.45	-0.36	USAT
<b>Quality of instructional design</b>										
QID1	The course materials are accessibly presented	4.09	0.75	0.57	21	0.58	0.09	-0.24	0.42	SAT
QID2	The course materials present information in a coherent way that engages the learners	4.00	0.87	0.00	21	1.00	0.00	-0.39	0.39	SAT
QID3	There is an identified process of development and evaluation of course materials	3.82	1.05	0.81	21	0.43	-0.18	-0.65	0.28	SAT

QID4	The course materials encourage learners to exercise their inquiry abilities through constructivist approaches	4.05	0.95	0.22	21	0.82	0.05	-0.38	0.47	SAT
QID5	The course materials encourage reflection and connection between theory and practice	4.18	0.96	0.89	21	0.38	0.18	-0.24	0.61	SAT
QID6	The course materials take into consideration different learning styles of students	3.91	1.15	0.37	21	0.71	-0.09	-0.60	0.42	SAT
<b>Quality of student assessment</b>										
QSA1	Exams were organised effectively	4.45	0.96	2.22	21	0.04	0.45	0.03	0.88	More SAT
QSA2	Test questions often consisted of only a test of memorization abilities.	2.45	1.34	5.43	21	0.00	-1.55	-2.14	-0.95	USAT
QSA3	Course assignments often required research writing.	3.18	1.14	3.37	21	0.00	-0.82	-1.32	-0.31	USAT
QSA4	Test questions often consisted of a test of critical thinking skills	3.59	0.91	2.11	21	0.05	-0.41	-0.81	-0.01	USAT
QSA5	The submission time for students? assignment is reasonable	3.68	1.13	1.32	21	0.20	-0.32	-0.82	0.18	SAT
QSA6	Learning and assessment methods are appropriate to the purpose and outcomes of the program	4.05	1.13	0.19	21	0.85	0.05	-0.46	0.55	SAT
<b>Quality of student support</b>										
QSS1	Learner support is an integral part of the design of the program	3.82	1.18	0.72	21	0.48	-0.18	-0.71	0.34	SAT
QSS2	There is time block earmarked for one-on-one interaction with tutor for those who need it.	3.50	1.22	1.91	21	0.07	-0.50	-1.04	0.04	SAT
QSS3	I feel adequately prepared to offer student support by means of counselling	4.00	1.07	0.00	21	1.00	0.00	-0.47	0.47	SAT
QSS4	Course tutors/supervisors/study centre coordinators often do counselling to students	4.09	1.06	0.40	21	0.69	0.09	-0.38	0.56	SAT
QSS5	Efficient administrative systems support the activities of the program	3.86	1.08	0.59	21	0.56	-0.14	-0.62	0.34	SAT
QSS6	Tutors encourage student-teachers to regard tutors? comments on marked scripts as a dialogue and not a directive	4.05	0.72	0.30	21	0.77	0.05	-0.27	0.37	SAT
QSS7	Information about scope, requirements and benefits of the program is disseminated in such a way that every potential learner receives it.	3.91	1.02	0.42	21	0.68	-0.09	-0.54	0.36	SAT
<b>Quality of instructional delivery</b>										
QIDEL 1	The tutorials are student-centered instead of teacher-centered	4.05	1.00	0.21	21	0.83	0.05	-0.40	0.49	SAT
QIDEL 2	Course tutors use different modes of instruction, (e.g. lectures, discussion, role-playing, overhead projectors, etc.) during face to face seminars.	3.95	0.84	0.25	21	0.80	-0.05	-0.42	0.33	SAT
QIDEL 3	The program integrates encouragement of peer support structures	3.77	1.11	0.96	21	0.35	-0.23	-0.72	0.26	SAT
QIDEL 4	Course tutors act as facilitators of self-directed learning instead of didactic transmitters of information	3.86	1.17	0.55	21	0.59	-0.14	-0.65	0.38	SAT
<b>Perceived Impact of TDE</b>										
PIMP1	In my estimation, the Distance Teacher Education program of UEW has had a positive impact on teacher education in the country	4.55	0.91	2.81	21	0.01	0.55	0.14	0.95	M SAT
PIMP2	I would recommend UEW distance education course to my friends, relatives, etc. who are in the teaching profession.	4.59	0.91	3.05	21	0.01	0.59	0.19	0.99	M SAT

#### 4.2.1 Student-teachers evaluation of TDE by UEW

The results of students' evaluation are presented in Table 2. With quality of programme design dimension it reveals that all the five items were ranked unsatisfactory, which were orientation seminar; admission information; admission forms/online registration; structure of course taught; and timeliness of course materials. Contrarily, with teacher quality dimension, it indicates that all the three items which were: tutors competence; tutors teaching skills; and tutors experience in the subject were rated satisfactory. With quality of instructional design dimension which have four items: manuals were easy to read and understand; course manuals contained course objectives; manuals' graphics were self-explanatory; and access to ICT resources for course work, were all satisfactorily rated. Students-teachers' evaluation on quality of TDE content indicates that out of the shows that only one of the items was rated satisfactory while the others items were rated unsatisfactory. Similarly, the quality of instructional delivery dimension indicates that all items were ranked unsatisfactory. The items were: comfortable communicating with tutors on courses; tutors as facilitators of learning; comment on assignment as dialogue; and motivated method of teaching.

For quality student support dimension students rated all the six items unsatisfactory. The items are: supervisors regular visit; impart of supervisors visit; supervisors as a source of information; coordinators support

for students problem and nervous at supervisors visit. Under quality of content of TDE it reveals that out of the three items evaluated, two were ranked unsatisfactory (i.e. adequacy of courses offered and supervised teaching practice) while the item relevance of course manual was rated as favourably evaluated. Under quality of student assessment dimension, all items being: exams were organized effectively; test questions involve critical thinking; assignment often required research; and graded assignments given on time were all rated unsatisfactory. Under satisfaction with TDE dimension, two items (i.e. wish for other TDE degrees at UEW and recommending TDE to others) were evaluated favourably and two other items (i.e. happy with the TDE and satisfied with TDE by UEW) were also unfavourably evaluated. Lastly, under the perceived impact of TDE all 4 items were evaluated more favourably evaluated.

#### **4.2.2 Tutors evaluation of TDE**

The results of tutors' evaluation of the effectiveness of TDE quality dimensions delivered UEW are presented in Table 3. According to this table, it appears that out of the seven items for quality of programme design dimension, two of the items which are orientation seminar and admissions information were rated satisfactory with means of 4.067 and 4.219 respectively while four items being the admission form/online registration design; adequate furniture; communication equipment; course material before start of semester; and integrated framework for practice were rated unsatisfactory with the means of 2.676, 2.059, 1.981, 3.419 and 2.190 respectively. With teacher quality dimension, out of the three items evaluated, being tutors' competence; tutors teaching skills and tutors' experience in subject were rated satisfactory with the means of 4.076, 4.095 and 4.057 respectively. There were also five items evaluated by tutors under the quality of content of TDE dimension, which are: collaborative learning. TDE programme is well structured; supervisors' frequent visit; and policy on supervision were rated unsatisfactory and one item (i.e. relevance of course offered) was evaluated more favourably.

For quality of instructional design dimension, all the six items evaluated ranked unsatisfactory, they are: course materials accessibility printed; the course materials engage learners; development and evaluation of course materials; encourage us of inquiry abilities; support reflection and connection between theory and practice; and course materials consider student learning style.

For quality of student assessment dimension, all six items being: exams were organized effectively; test only contain memorization abilities; assignment involves research writing; test of critical thinking skills; reasonable submission time for assignment; and appropriateness of assessment methods were unsatisfactorily evaluated. Regarding quality of student support dimension, out of the seven items evaluated, only one being specified one-one interaction with tutor was satisfactorily rated while the other six being: learner support part of programme design; student support by means of counselling; efficiency of administrative system and program information dissemination.

For quality of instruction delivery dimension, all four items were evaluated unsatisfactory. These items were: the tutorials are student-centred; use different modes instruction; the programme integrates peer support structures; and course tutors act as facilitators. Lastly, on perceived impact of TDE, all the two items being UEW's TDE has made positive impact in the country and I would recommend UEW's TDE were evaluated unfavourably.

#### **4.2.3 Coordinators evaluation on the effectiveness TDE delivered by UEW**

The results of coordinators' evaluation on the effectiveness of TDE delivered by UEW is presented in Table 4. With regards to quality of programme design, out of seven items evaluated, four were ranked satisfactory, two were ranked unsatisfactory and one was ranked more satisfactory. The satisfactorily evaluated items were: availability of administration of information; easiness of administration forms/online registration; timeliness of course material provision; and integrated framework at policy and practice. On the other hand, the unsatisfactorily evaluated items were: centre has necessary communication equipment; and equipping centre with furniture, while the more favourably evaluated item was conduct orientation seminar. However, under the quality of teacher dimension all items namely: course tutors' teaching qualification; course tutors' competence; and course tutors' teaching skills were ranked satisfactory. Also, under teacher quality dimension, all three items were evaluated unsatisfactory. Furthermore, under coordinators' evaluation for quality of content of TDE, out of five items, two and three items were ranked satisfactory and unsatisfactory respectively. With regards to quality of instructional design, all six items were evaluated satisfactory. For quality of assessment dimension, out of the six items evaluated, coordinators ranked one item more satisfactory, three items were ranked unsatisfactory and two items were also ranked. However, for both quality student support and quality instructional delivery all items were ranked satisfactory. Finally, with regards to coordinators' perceived quality of TDE, out of two items, all were rated more satisfactory.

From the results presented in Tables 1, 2 and 3, for the quality of programme design (QPD) items, the results show that both tutors and students rated them unsatisfactory while co-ordinators rated them satisfactory. This sharp contrast among the sub-groups reveals that, the co-ordinators of the TDE being in direct management position are likely to be considerate in their evaluation of the effectiveness of TDE.

Whereas the students and tutors who being the ultimate target of TDE management policies, are more likely to be able to give an objective evaluation of how the programme is effective. In this case, since students are

recipients of TDE policy implementation it is prudent to understand that their evaluation provides a major and probably a more reliable feedback for management strategy about TDE at UEW. Regarding teacher quality items, a critical examination of the results indicate that all the three respondent sub-groups rated them satisfactory. The importance of the quality of a teacher is very needful in the success of education delivered in any mode (Burns, 2011, Darling-Hammond, 2008). The teacher matters greatly since they are directly involved in the delivery of the technical or core teaching service for the TDE programme is run (Darling-Hammond, 2008).

Therefore, given that the respondents perceived teacher quality to be satisfactory it could be a strong competitive advantage for UEW in the delivery of TDE.

Next, regarding the quality of content of TDE items, both students and tutors ranked these items unsatisfactory, whilst co-ordinators satisfactory again. This also reveals a sharp contrast between the rating of co-ordinators and the other two groups. Here again, the ratings of both tutors and students needs to be given priority as their feedback could be more useful for management strategy than those of the co-ordinators. This is because the students and tutors appears be directly affected by any policy implemented by TDE management, inclusive of TDE co-ordinators.

Regarding the quality of instructional design, both students and tutors ranked these items unsatisfactory, whilst co-ordinators satisfactory again. This also reveals a sharp contrast between the rating of co-ordinators and the other two groups. Here again, the ratings of both tutors and students needs to be given priority as their feedback could be more useful for management strategy than those of the co-ordinators.

This means that there is a gap in the instructional design which must be addressed by strategic management. This situation seem to reflect the contention of Robinson (1997) that in many distance education programs instructional designs do not translate theory into practice.

According to Burns (2011) quality instructional design makes distance programme an entirely mediated by technology and ability to provide effective instructions, so poorly designed technology and materials for instruction makes distance learning programme frustrating to both learners and instructors. Therefore, these findings have implications for educational leadership of TDE delivered by UEW.

Regarding the quality of instructional delivery, both students and tutors ranked these items unsatisfactory, whilst co-ordinators satisfactory again. This also reveals a sharp contrast between the ratings of co-ordinators and the other two groups. Here too, the ratings of both tutors and students need to be given priority as their feedback could be more useful for management strategy than those of the co-ordinators.

Effective TDE delivery thrives on effective instruction (Burns 2011; Darling-Hammond, 2008). Yet, in the present study, instructional delivery appears to be problematic. This offers opportunity for improvement for educational leadership and management for TDE at UEW.

Regarding the quality of student support, all categories of respondents evaluated all items under this dimension unsatisfactory. Successful distance education learning programme provides support for learners to make learning easier and motivating (Prescott & Robinson, 1993). In the present study, the apparent low rating for student support suggests the students have dire need for effective student support activities such as counselling, instructional materials, administrative, information dissemination, among others (Burn, 2011).

For quality of student assessment (QSA) items, the results show that both tutors and students rated them unsatisfactory while co-ordinators rated them satisfactory. Since co-ordinators are part of management, the ratings of tutors and student would provide insight for management strategy for TDE. Successful distance education programs have overcome many of the above issues by using a range of formative and summative assessment as appropriate. They recognize that assessment is a process that is inextricably linked to teaching and learning (Heritage, 2010).

Effective assessment of distance learners ought to be use multiple and flexible types of assessments, such as quizzes, discussions, interviews, as part of learning. Such programs in Ghana could capitalize on the strengths of the distance technology employed to administer and score assessments and assess higher-order thinking skills.

Finally, for the perceived impact of TDE items, they were rated satisfactory by students and co-ordinators but unsatisfactory by tutors. In this regard, as far as students and co-ordinators are concerned TDE at UEW is making significant impact on the professional development. At least UEW's goal is to use TDE to create more opportunity for teachers to develop their professional career outside the campus-based education.

The findings generally confirm the literature that distance learning programs continues to play an increasingly important role in the achievement of universities' goals in recent years, and the trend seems likely to continue (Dewald, Crane, Booth, & Levine, 2000).

However, tutors disagreed that TDE of UEW has had positive impact on teacher education in Ghana and that they fail to recommend TDE programme to others. This implies that the impact of TDE at UEW on the nation's teacher education needs to be improved. It is well-documented in the education literature (e.g., Darling-Hammond, 2008; Kleiman, 2004; Sparks, 2002) that high-quality teaching demands high-quality professional development. And high-quality professional development demands time and resources. Countries that are recognized for having high-quality teachers and high student achievement levels typically also offer teachers extensive and rigorous

professional development opportunities. They also provide teachers with the release time and support necessary to enhance their qualifications.

## 5.0 Findings, Conclusion and Recommendations

How do stakeholders evaluate the effectiveness of UEW's TDE in its different dimensions?

### 5.1 Summary of Findings

The findings are that, generally, students and tutors rated the following dimensions of TDE at UEW as unsatisfactory:

1. Quality of programme design and organization
2. Quality of quality of content of TDE items
3. Quality of instructional design
4. Quality of instructional delivery
5. Quality of student support
6. Quality of student assessment

For the above items, co-ordinators rated all TDE dimensions satisfactory.

For the following items the findings are that, generally, students, tutors and co-ordinators rated them satisfactory:

- Regarding teacher quality items, a critical examination of the results indicate that all the three respondent sub-groups rated them satisfactory.
- Finally, for the perceived impact of TDE items, they were rated satisfactory by students and co-ordinators but unsatisfactory by tutors.
- However, tutors disagreed that TDE of UEW has had positive impact on teacher education in Ghana and that they fail to recommend TDE programme to others.

### 5.2 Conclusion

Though some items of the TDE quality dimensions were unsatisfactorily rated, overall, the stakeholder evaluated the TDE by the UEW satisfactory. This indicates that in spite of the efforts put in by the management and leadership of the TDE, there is still more to be done in order to improve the quality of TDE run by UEW in the quest to fulfil its mandate. Co-ordinators seem to favour the evaluation of all the items suggesting that they perceive the TDE quality entirely different from those of student-teachers and their tutors. Further analysis revealed that significant differences existed in the evaluation of student-teachers and tutors, on the one hand, and co-ordinators, on the other hand.

### 5.3 Recommendations and Implications

A critical examination of the findings reveals some shortfall in TDE delivered by UEW at the Northern sectors which negatively affect the effectiveness of the programme. On the basis of the findings, the following are some of the implications and recommendations for educational leadership and management:

#### Improving quality programme design

Since the study found that quality of programme design was rated low, it is recommended that the information in the admission brochure should be made very easy for students to read and understand. Again, admission forms/online registration must be designed to be easy to complete by students. Also, course materials must be given to students before the start of the semester at least a two weeks before start of semester so that students can prepare ahead.

#### Improve quality of content of TDE items

The study found that content of TDE received unsatisfactory rating generally, it is therefore recommended that education leadership and management of TDE should endeavour to ensure that adequate content of course are covered within each academic semester. Moreover, the compulsory supervised teaching components should be improved. The challenges student-teachers face in this area should be delved into so that appropriate measures will be put in place to effectively improve upon the supervision component. Also, although the courses are all relevant it is recommended that the depth of each course should be reviewed periodically to see how the content could be expanded to capture all relevant new developments in the society.

#### Improve quality of instructional design

The study found that apart the fact that students and tutors were satisfied with the inclusion of course objectives in the course manuals, the rest of the items received very low ratings. It is, therefore, recommended that the course manuals should be made easy to read to aid learners' understanding. Moreover, the graphics in the manuals should be self-explanatory and should be designed in such as as to encourage collaborative work among the learners (Burn, 2011).



### **Improve quality of instructional delivery**

Instructional delivery received very low evaluation from student-teachers and tutors. It is, therefore, recommended that tutors should endeavour to use more learner centred methods to help student understand key concepts. Moreover, tutors should present tutorial as facilitators rather than transmitters of knowledge and skills. Effective delivery of TDE is dependent on the quality of instructional delivery. It is recommended that tutors should also endeavour to adopt different and flexible delivery modes and strategies to help enhance students understanding and skills. It is also recommended that instructional delivery should include a good blend of text, multimedia, simulations, animations, lectures, presentations, tutorials, collections, resources, subject- and task-specific cognitive tools, references, assessments (quizzes/tests/exams), and readings.

### **Improve quality of student support**

Improve quality of student support is an important component of sustainable TDE (Burn, 2011). The study found that support is generally unsatisfactory. It is recommended that counselling programmes should be improved in the delivery of TDE. In this regard, it is suggested that specific office and staff should be trained to deliver student counselling services, in addition to the counselling which tutors and co-ordinators provide on ad hoc basis. Students should know where and who to approach for counselling on matters relating to both the academic and non-academic or personal life challenges. Moreover, tutors and co-orders should encourage students to share their problems and help them to resolve their academic challenges as a means of coping with the difficulties of studying in TDE.

### **Improve quality of student assessment**

Since student assessment quality received very low rating for all items, especially with student-teachers, it is recommended that management of TDE should seek to improve upon this area strongly. Specifically, it is recommended that, examinations should be organised effectively giving full attention to all necessary issues such as timeliness of time table publication, ensuring tight invigilation, starting and closing exam as scheduled, among others. Moreover, tutors should endeavour to return graded assignments to student-teachers timely in order for them track their academic progression. Further, assignments and other assessment forms should be focused more on the acquisition of critical thinking and research skills than memorisation which test only knowledge and comprehension.

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