Exploring Headteachers, Teachers and Learners' Perceptions of Instructional Effectiveness of Distance Trained Teachers

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Abstract. This study examined the perceptions of headteachers, teachers, and learners regarding instructional effectiveness of University of Cape Coast distance trained teachers. The convergent parallel mixed-method design was employed to conduct the study. Research participants comprising 25 headteachers, 667 distance trained teachers, and 138 learners were selected through purposive sampling, stratified random sampling, and simple random sampling techniques respectively. Mean and standard deviations, independent sample t-test, and thematic analysis were employed to analyse the data. The study revealed that headteachers, teachers and learners perceived distance trained teachers as instructionally effective because they demonstrated professional knowledge, professional practice and professional values and attitudes in their instructions. Results also indicated that there was statistically significant difference between male and female teachers with regard to perceived instructional effectiveness. It is recommended that stakeholders such as parents and prospective applicants should consider UCC distance education programme as an alternative to the conventional education.

Keywords: distance education; headteachers; instructional effectiveness; pre-service teacher

1. Introduction

Instructionally effective teachers play important roles in the lives of learners across the globe. It is against this background that Mtetesha (2017) asserted that an effective education system in any society hinges on the caliber of its teaching staff. This indicates that teachers who are effective in their instruction form part

of the critical human resource as highlighted by Davis, Yarkwah, Beccles, and Ayebi-Arthur (2019) that quality and effective teachers are important in the preparation of quality human force. What constitutes effective instruction and from whose perspectives instructional effectiveness is measured has been the subject of concern for academics, researchers and school administrators. We enumerated in this study three domains of instructional effectiveness from the perspectives of headteachers, distance trained teachers and learners. Evaluating effective teaching based on the views of headteachers, teachers and learners has always been a contested area since researchers have not concluded on the validity within the education enterprise (Almutairi & Shraid, 2021). Notwithstanding, their perspectives on effective teaching could provide insights into the classroom practices.

Training instructionally effective teachers falls within the domain of higher education institutions. However, there came a time in Ghana's history where public universities and teacher training institutions were unable to meet the teacher training needs as expected. This was due partly to unavailability of space to accommodate ever-increasing youths who wanted to acquire higher education (Kumi-Yeboah, Blankson, & Young, 2014). This with other possible factors culminated in the birth of distance education in the country where a number of both public and private tertiary education institutions engaged in the training of teachers. Distance education is an educational experience during which instructors and students are separated in time and space; and consequently, it employs various technological gadgets so as to connect students with their teachers (Tzivinikou, Charitaki, & Kagkara, 2021). We conceptualised distance education as a teaching and learning phenomenon where study materials (modules) are used in combination with technology to bridge the geographical vacuum between the learner and the instructor.

The College of Distance Education (CoDE), a college dedicated to the training of teachers at the University of Cape Coast has since its establishment in 1997, trained thousands of teachers. The College trains different groups/cohorts of teachers principally for the basic education system. We have pre-service teachers who had not been professionally trained prior to enrolling on the programme while the other enrolled on the programme to upgrade from diploma degree to bachelor degree. The current study focused on the former cohort as the first group to be given professional training. The focus on this cohort was to help make a case for or otherwise of the contribution of distance programme to perceived instructional effectiveness of teachers. Having trained many of this cohorts since the inception of the distance programme, little is known about their perceived instructional effectiveness. This study therefore sought to examine headteachers, teachers and pupils' perspectives through the mixed methods approach. The study was guided by the following research question and hypotheses:

1. How do headteachers, teachers and learners perceive instructional effectiveness of teachers trained through distance education?

H_1: There is no statistically significant difference in teachers' perception about instructional effectiveness based on gender.

H_2: There is a statistically significant difference in teachers' perceptions about instructional effectiveness based on gender

2. Literature Review

The raging debate about whether distance trained products can match those who enrolled on traditional face-to-face programmes seems to be far from over. All things being equal, distance trained and traditionally trained teachers who pursued the same programme should exhibit similar instructional competences in their teaching. Per the teaching standards developed by the National Teaching Council (NTC) in Ghana, teachers irrespective of the training mode are expected to demonstrate three minimum characteristics namely, professional knowledge, professional practice and professional values and attitudes. Professional knowledge is a collection of knowledge pre-service teachers acquired through initial professional and continuous training as well as engaging in active participation in professional collaboration (Wang, Lai, & Lo, 2014). Effective teachers must possess vast knowledge about learners and how they should be taught. Professional knowledge also covers knowledge of the official school curriculum and the learning outcomes that are to be stated in the lesson notes. Additionally, effective instruction covers demonstration of adequate subject matter, knowing how to transmit the knowledge to the learner and knowing how best to transmit the knowledge so that the learner in particular can learn better (Nopriyeni, Prasetyo, & Djukri, 2019). Understanding the way learners grow and learn in varied settings and how it should be applied in teaching to enhance learners' academic work is crucial to a good teacher (National Council for Tertiary Education [NCTE], 2010).

Moreover, an effective teacher demonstrates professional practice which comprises managing the learning space, teaching and learning and evaluation. Managing the learning space is one of the surest ways to improve academic outcomes of learners. Hence, an effective teacher ensures a safe and enabling learning context that facilitates teaching and learning (Dhanapala, 2021). For Danielson (2013), it is appropriate that teachers establish and monitor daily routines for the smooth running of classroom activities including use of time. She adds that, for learners to immensely benefit from what is taught, the classroom environment must be orderly; a business-like atmosphere should exist and dictatorial tendencies should be avoided. It is imperative therefore that an effective teacher engages in a number of activities that promote learners' academic outcomes. For instance, an instructionally effective teacher adopts a variety of teaching approaches that give learners encouragement and motivation to participate thereby developing in them critical thinking. Assessment is very critical in teaching and learning for it is one of the best approaches to determine how learners have progressed. Assessment affords teachers the opportunity to establish if learning has actually taken place (Msimanga, 2017).

Professional values and attitudes characterize how a teacher engages in activities to project the image of the teaching profession within the school and beyond. This may include behaviours such as establishing a cordial relationship with learners, colleague staff, and parents. An effective and well-trained teacher should be seen

as someone who recognizes that the school is a professional learning community (PLC) where knowledge is shared for the improvement of teaching and learning. Being instructionally effective is not limited to classroom teaching but goes beyond to include, for instance, serving as a role model for learners. Under professional values and attitudes, an effective and qualified teacher should keenly take part in school-wide activities such as Parent- Teacher Association/ School Management Committee (PTA/SMC) events, sporting and cultural activities. Effective teachers should also keep leaners records to serve as reference points in monitoring learners' progress.

Perceived instructional effectiveness, in general, and in distance education in particular continues to receive the attention of scholars and researchers. Åhslund and Boström's (2018) study describes how primary school teachers perceive differences in behaviour and learning of boys and girls, and showed that they had positive view of their teaching. A case study was conducted by Jangu (2015) in the Upper West region of Ghana to evaluate the perception of headteachers on the instructional performance of distance trained teachers. Results of the study showed that headteachers were satisfied with the instructional performance of distance trained teachers. It can further be explained that teachers who obtained their certificates through DE were perceived as effective in delivering the curriculum in the classroom. The finding was in line with Samkange (2016) whose study showed that headteachers perceived that there was no major difference between traditional face-to-face teaching approach of training teachers and the open and distance learning (ODL) means of training teachers. This means that teachers who were produced through DE were perceived to be as good as graduates from the conventional mode.

Moreover, Fernandez-Garcia, Maulana, Inda-Caro, Helms-Lorenz and Garcia-Perez (2019) conducted a study concerning students' evaluation of their teachers. The purpose of the study was to examine students' perception of teaching behaviour and teacher characteristics that explain teacher effectiveness. The study revealed that students perceived teachers' learning climate, efficient classroom management and instructional clarity (less complex task) as good while activating teaching, differentiation and teaching learning strategies (more complex task) as sufficient.

Another variable of interest to researchers and educationists is whether gender has influence on perceived instructional effectiveness of teachers. A gender and perceived instructional effectiveness study was conducted by El-Emadi, Said and Friesen (2019). The study examined the motivation factors and attitudes toward and interest in science among Qatari students. It was shown that there were differences in the teaching styles of male and female teachers. The finding that there is difference in perceived instructional effectiveness based on gender finds expression in the study by Ahmed, Ambreen and Hussain (2018). Their study revealed that female teachers exhibited more classroom management skills on four out of six dimensions of classroom management than the male teachers. However, the finding was inconsistent with the work of Singh and Attri (2020),

who found out that there was no significant difference in the perceived instructional effectiveness of male and female teachers.

The current study was underpinned by social constructivism theory developed by Vygotsky (1968). The theory is premised on the assumption that humans experience, communicate and understand reality through two sources – language and culture. According to Vygotsky, culture and language play a pivotal role in cognitive development and how humans conceptualise the world around them. It indicates that learning concepts and principles are transferred through communication, interpreted and understood by experience and interactions within a particular social setting. Within this context, it takes a group of individuals to have language and culture to construct cognitive structures. Knowledge, therefore, is not only socially constructed but co-constructed (Akpan, Igwe, Mpamah & Okoro, 2020). The connection, therefore, is that while the constructivist sees knowledge as what students construct among themselves based on the experiences they gather from their environment, the social constructivist sees knowledge as what students do in collaboration with other students, teachers and peers (Akpan, et al. 2020). An effective teacher adopts collaborative approach where learners are encouraged to learn in groups through sharing ideas and knowledge. This easily deepens learners' understanding of the knowledge they are constructing in the classroom.

In addition, the study applied the theory of self-efficacy, a psychological construct which is rooted in the framework of social cognitive theory propounded by Albert Bandura in 1977. It is conceptualised as people's conviction about their capability to produce acceptable and desired results within an organisation. Self-efficacy beliefs provide direction as to how people feel, reason, and encourage themselves to take certain action (Bandura, 1994). A person who has positive orientation towards self-efficacy is believed to succeed because the chances are that there will be perseverance towards an activity until it is completed. However, a person with low perception of self-efficacy foresees failure and is less likely to make conscious efforts or persist in challenging the status quo (Harahsheh, 2017). Self-efficacy can be equated to "I can do this" attitude. Researchers such as Clement and Rencewigg (2020) investigated into the characteristics of effective teachers and discovered that good teachers are optimistic for academic excellence and behaviour for their learners to give off their best. The theory of self-efficacy is premised on the assumption that expectation of personal capability and ability to make progress is depended on whether a person will be ready to take a particular cause of action. It is also presumed that an individual's ability to demonstrate a specific action lies basically on the persons' psychological status, including the drive, readiness to exhibit the behaviour, endurance in the face of setbacks, dedication, success in foreseeable future, and the positive mind.

By way of filling the research gap, all the studies reviewed were different from the current study in terms of multiple respondents in a single study as in the case of the present study. Headteachers, teachers and learners occupy different positions within the teaching and learning context to the extent that when their views converge, such views are deemed to be valid. Moreso, we also employed a

mixed-methods design to seek different perspectives to the topic under study since it is one of the complex human experiences. A single approach may not yield the kind of results that may be encompassing.

3. Methods
3.1 Research design
The researchers adopted a convergent parallel mixed-method design to carry out the study. The mixed-method was employed on the grounds that social phenomena such as teaching and learning processes can best be understood by adopting both qualitative and quantitative data collection and analysis methods in the same research (Creswell & Creswell, 2018). The researchers believe that this approach would enable them to understand the complex nature of human aspects (Plano Clark, Foote & Walton, 2018; Minadzi, Gyimah & Ankoma-Sey, 2019) like teaching and learning. In this milieu, the study was carried out by employing different data collection instruments to seek how headteachers, teachers and learners perceived instructional effectiveness of distance trained teachers from the University of Cape Coast. We merged the data sets (point of interface or integration) during the interpretation stage where the results from the qualitative and quantitative data were compared for confirmation, corroboration and complementation or disconfirmation.

3.2 Participants, sample and sampling techniques
Respondents comprised teachers who graduated from the College of Distance Education and had up to six years of teaching experience in public basic schools at the time of the study. The year was limited to six since the impact of good or poor training stays a bit longer and can be examined for at least few years after the pre-service teachers have completed the programme (Wendel, 2000). Headteachers and learners in whose schools' distance trained teachers teach were included in the study. The inclusion of the headteachers and learners was to triangulate distance trained teachers' views with respect to their perceived instructional effectiveness. Research respondents were selected from three out of sixteen randomly selected regions in Ghana. A region each was selected from the three administrative zones of the College of Distance Education (CoDE) namely, Ashanti region from the Middle Zone, Volta Region from the Southern Zone, and Northern Region from the Northern Zone. Record from Students' Records and Management Unit (SRMU, 2020) showed that a total of 15,671 comprising 8997 males and 6674 females graduated within the period. In all, 399 males (representing 59.8%) while 268 females (representing 40.2%) were selected through the stratified random sampling technique. Their average age ranges from 21 to 41. The majority (56.5%) of the teachers indicated they had 5-6 years teaching experience while 24.8% had less than 3 teaching experience respectively. Finally, 18. 7% stated they had 3-4 years teaching experience. Twenty-five (18 males and 7 females) headteachers with average age ranging from 31 to 57 were selected through the purposive sampling technique. Headteachers were chosen because they had deep knowledge and experience in classroom practices and could provide rich information (Cresswell and Plano Clark, 2011) about the perceived instructional effectiveness of distance trained teachers. Their inclusion in the study, therefore, was important since they play roles such as

planning, supervision of staff and vetting of lesson notes. These activities equip them to be able to provide valid information concerning effective teaching. For the headteacher to be included in the study, his or her teacher who went through the UCC distance programme willingly agreed to be observed in the classroom (we were unable to carry out classroom observation due to COVID-19 pandemic leading to the closure of schools). Hence, headteachers were excluded on the basis that their teachers were unwilling to be observed in the classroom. Moreover, headteachers who also pursued distance programme from the same institution were excluded from the study. Learners (67 males and 71 females) whose average age ranged from 11 to 14 years were also included in the study because they occupy a critical position in the teaching and learning process and are at the receiving end of quality or poor teaching. They could tell whether the teacher is good or otherwise (McCoy, Smyth, Watson, & Darmody, 2014) in terms of classroom practices. Six learners each were selected through random sampling from the schools where headteachers and distance trained teachers were selected. In total, 23 FGDs were conducted across the three regions.

3.3 Data collection instruments

Three instruments namely, interview guide, questionnaire and focus group discussion (FGD) guide were used to collect data. Questionnaire was used to data from distance trained teachers. Part A of the questionnaire had seven items which dealt with the bio data of respondents while Part B covered the perceived instructional effectiveness of distance trained teachers. Part B of the questionnaire was adapted from National Teachers' Standards (NTS, 2017) for teaching, a framework designed by the National Teaching Council in Ghana to assess teachers' instructional practices. The framework has three domains namely, professional knowledge, professional practice, and professional values and attitudes. Coincidentally, the framework aligns well with the widely used Danielson (2013) framework, a framework used to assess teachers' professional practices. Danielson's framework has four domains which are planning and preparation, the classroom environment, instruction and professional responsibilities. The framework was used because it is rooted in the social constructivist theory of learning developed by Vygotsky (1978) which is premised on interaction, discussion and sharing of ideas among students (Akpan, Igwe, Mpamah & Okoro, 2020). Additionally, the NTS framework was used because it was the only locally developed standard document to assess teachers' performance in Ghanaian basic schools. Finally, Part C of the questionnaire was adapted from Nsamba's (2016) instrument which yielded reliability coefficient of 0.89. The questionnaire was designed to find out students' perception about the service quality provided by the University of South Africa (UNISA). This part of the questionnaire has four subheadings which included student support service, face-to-face teaching session, teaching practice, and assessment/evaluation procedures. Interview and FGD guide were used to collect data from headteachers and learners respectively. The interview guide and FGD were designed to cover the three domains of teachers' classroom practices namely professional knowledge, professional practice and professional values and attitudes.

3.4 Validity and reliability

Prior to pretesting the data collection instruments on the field, they were validated through seeking the assessment of two experts at the College of Education Studies who had vast experience in the area of teacher education. This was done to seek their inputs regarding the challenges with the items. Their inputs helped to fine tune the instruments for optimal results. The questionnaire was pre-tested in the Central region of Ghana before final administration for the study. Fifty (50) distance trained teachers were selected for the pre-test. This sample was good for pre-test because Ornstein (2022) suggested a sample between 20 to 50. The Cronbach Alpha for professional knowledge, professional practice and professional attitudes and value was .974, .973 and .973 respectively. After the pre-test, words or phrases which were not clear to the respondents were modified or deleted. The interview and FGD were pre-tested on two headteachers and six learners respectively to enable fine tune the instruments before the final administration. The initial four questions in the interview guide and FGD were reduced to three questions because they appeared to lack clarity.

3.5 Data collection and data analysis

Prior to the data collection, clearance was obtained from the Institutional Review Board at the University of Cape Coast. Apart from the IRB clearance, an introduction letter was obtained from the three regional directorates of Ghana Education Service that permitted us to have access to the selected schools. The researchers self-administered the questionnaire in the three regions. Data collection assistants were recruited and given brief training about questionnaire administration. For example, explaining to respondents the purpose of the study, when to administer it and how to handle the questionnaire after filling them to ensure no respondent was identified. Researchers themselves conducted the interview and FGD in the respective schools of the respondents. The interview was conducted in the headteachers' offices while the FGDs were conducted in the classrooms during the time learners were on break. The classroom enabled the learners to feel relaxed since they were used to the environment and that it also provided a conducive atmosphere devoid of disruptions. Data collection lasted for 3 months.

Research question one sought to find out how headteachers, teachers and learners perceived instructional effectiveness of CoDE trained teachers. Descriptive statistics such as mean and standard deviation were used to analyse the data from respondents. Specifically, data from distance trained teachers were analyzed using mean, standard deviation, and independent sample t-test. Qualitative data from headteachers and learners was analysed using thematic approach. The qualitative data were reduced to manageable units through coding into themes or categories based on emerging patterns or similarity among the codes. The reduction exercise was helpful to us because we were able to edit the data, summarize it, and make it presentable. For example, after the coding exercise, major themes namely professional knowledge, professional practice, professional values and attitudes emerged from minor themes. Some of the minor themes were knowledge of the learners, knowledge of the curriculum, managing the learning environment, teaching and learning, assessment and school as a learning community.

4. Results

In all, six hundred and sixty-seven (667) distance trained teachers comprising 399 males and 268 females completed the questionnaire. Moreover, twenty-five (25) headteachers whose school distance trained teachers teach were purposively selected for interviews. Finally, 6 learners each were also randomly sampled to engage in FGD in schools where the headteachers were selected.

Standard deviations which range from 0.70 to 0.85 were moderate and closer to each other indicating the non-dispersion in a widely-spread distribution. The moderateness of the standard deviations of the distribution implies that the perspectives of the respondents were coming from a moderately homogeneous group. This indicates, to large extent, that the group had similar characteristics or understanding with regard to the issues being investigated. In other words, teachers' views on perceived instructional effectiveness were an approximation to a normal distribution.

Responses to the close-ended items, used in collecting data on perceived instructional effectiveness, were measured on a four-point unilinear scale. This ranged from one to four where one indicated the strongest disagreement to the items while four indicated the strongest agreement to the items. Based on the four-point numerical scale used, the study interpreted the results using recommendation of Sarstedt and Mooi (2019) which states that in a unilinear scale items, the responses to the items can be interpreted, using mathematical approximation. Therefore, the study adopted mathematical approximation techniques to interpret the mean scores. These were Strongly Agree (3.5 – 4.0), Agree (2.5 – 3.4), Disagree (1.5–2.4), and Strongly Disagree (1.0–1.4). The quantitative results on teachers' perceptions of instructional effectiveness of distance trained teachers are presented in Table 1.

Table 1: Summary of CoDE trained teachers' perception of perceived instructional effectiveness

Items	Mean	SD
Professional knowledge	3.29	0.76
Professional practice	3.21	0.74
Professional values and attitudes	3.19	0.73
Mean of all means (perceived instructional effectiveness)	3.23	0.74

Source: Field survey (2020)   (N = 667)

Results from Table 1 showed that respondents perceived professional knowledge of teachers in positive terms (Mean = 3.29, SD = 0.76). The results suggest that distance trained teachers possessed knowledge of the curriculum framework and subject matter, and understood learners' individual needs. The results from the Table further showed that respondents (CoDE trained teachers) perceived professional practice within the context of managing the learning environment, teaching and learning as well as assessment positively (Mean = 3.21, SD = 0.74). In all, the results seem to indicate that through the UCC distance programme, teachers demonstrated professionalism in terms of managing learning in the classroom effectively. The results revealed that teachers perceived themselves as effective in handling teaching and learning activities during lessons. In addition,

the results indicated that the programme equipped distance trained teachers with professional values and attitudes. They were able to appreciate the need to participate regularly in workshops/in-service training, develop love for the teaching profession to serve as role model to their learners and the need to delegate work to both male and female learners in their respective classes. Meanwhile, the overall mean (Mean =3.23, SD = 0.74) signifies that largely CoDE trained teachers perceived themselves to demostrate professional knowledge, professional practice, and professional values and attidues in the discharge of classroom activites.

Analysis of interview data showed that 23 out of 25 headteachers appear to confirm teachers' perceptions. Interview number 18 reflects the confirmation from headteachers.

> *Her output of work, in fact I would say is perfect. You go to meet her teaching then you realise that she has the technical knowhow of the subject that she is teaching. Sometimes you meet somebody teaching a particular topic then when you observe the person, you realise that the person doesn't have the technical knowhow or subject knowledge* [Interview 18, 11/3/2020].

Analysis of learners' data showed that 21 out of 23 FGD corroborated teachers' views concerning professional knowledge as for instance:

> *Before he starts teaching, he reviews with us the previous lesson and talks briefly about what he will teach. He reviews the previous lesson because he thinks that we might forget what we learnt previously. This will tell him whether we are learning what he is teaching* [Participant 5, 5/2/2020].

Again, teachers' perceptions on professional practice with specific reference to managing the learning environment were confirmed by all the 25 headteachers. For example, interview 1 indicated:

> *During lessons his classroom environment can be described as friendly. He teaches Mathematics and Ghanaian Language. Someone came and we gave Mathematics to him and now he teaches Ghanaian Language. And you know children want to identify with subjects they can easily relate with. Even when he was teaching Mathematics the same situation existed. So, it tells you that he is friendly. His approach to the subject is good* [Interview 1, 4/2/2020].

Twenty-one (21) out of 23 FGDs from learners were consistent with the perceptions of teachers concerning managing the classroom environment by CoDE trained teachers. For instance, FGD 5 affirmed teachers' views:

> *He is friendly so if he gives us exercise and you did not get all, he will find out the problem. If you are learning and it is not giving results, he will advise you what you should do to improve* [Participant 5, 5/2/2020].

More so, results from Table 1 showed that respondents (CoDE trained teachers) agreed that CoDE programme had helped them in boosting their professional values and attitudes (Mean = 3.19, SD = 0.73). This appears to suggest that through the CoDE programme, they were able to develop their professional attitudes and values towards the teaching profession. 18 out of 25 headteachers corroborated with what teachers said. Interview 7 reflects the general observation from headteachers:

> *If she is not interested in upgrading herself, she would not have enrolled on the UCC programme. For instance, I was there and she came to find out something on the net. For me, she is trying to find something to improve on herself* [Interview 7, 7/2/2020].

Consistent with teachers' perceptions, 19 out of 23 FGD indicated that learners perceived CoDE trained teachers as demonstrating professional values and attitudes. For example, FGD 1 reflected this:

> *Our teacher is very enthusiastic about teaching and that enable us to enjoy his lessons. He does not want to waste his time or period in doing things that are not necessary* [Participant 4, 4/2/2020].

Though there seemed to be positive ratings for CoDE trained teachers with respect to professional values and attitudes, there was negative reaction from one of the headteachers. It was revealed that the teacher did not show interest in school wide activities such as PTA and SMC meetings:

> *I don't think he is active in the participation of PTA/SMCs. I don't because sometimes you organise and you want all teachers to be present and he would not come with no permission. I hope you are a teacher. You know the way teachers are. Someone may not even come to school, no call, no anything. How long would one keep on asking you? One can hardly see him around.*

The head teacher's comments showed that this particular teacher did not live up to expectation as a professional teacher. A professional teacher is expected to involve in all school wide activities and seek permission if one is to absent him or herself from these activities.

H^1_0: There is no statistically significant difference in teachers' perception about teacher effectiveness based on gender.

$H_{2:}$ There is a statistically significant difference in teachers' perceptions about instructional effectiveness based on gender.

Table 2 presents summary of teachers' perceptions about instructional effectiveness based on their gender.

Table 2: Summary of independent sample t-test on CoDE teachers' perception of instructional effectiveness by gender

Variables	Gender	N	Mean	SD	t-value	p-value	η^2
Professional knowledge	Male	399	3.345	.736			
	Female	268	3.203	.793	2.365*	.018	.008
Professional practice (managing the learning environment)	Male	399	3.238	.719			
	Female	268	3.125	.736	1.964*	.047	.006
Professional practice (teaching and learning)	Male	399	3.250	.698			
	Female	268	3.141	.735	1.948	.052	
Professional practice (assessment)	Male	399	3.293	.716			
	Female	268	3.155	.759	2.389*	.017	.009
Professional values and attitudes	Male	399	3.215	.712			
	Female	268	3.142	.763	1.265	.206	
Perceived instructional effectiveness	Male	399	3.268	.685			
	Female	268	3.153	.720	2.085*	.037	.007

Source: Field survey (2020)   *p<0.05   df = 665   (N = 667)
Where η^2 = Eta Square, SD = standard deviation

Results from Table 2 showed that there was a statistically significant gender difference in male (Mean = 3.345, SD = .736) and female (Mean = 3.203, SD = .793) teachers' perception regarding development of professional knowledge [t = 2.365, df = 665, p = .018]. Similarly, there was a statistically significant gender differences in male and female teachers' perception regarding their professional practices in the area of managing the learning environment [t = 1.964, df = 665, p = .047] and assessment [t = 2.389, df = 665, p = .017]. In addition, the results showed that there was no significant difference in perceptions between male and female regarding professional practice (teaching and learning) [t = 1.948, df = 665, p = .052]. It can be further observed that there was significant statistical difference in perception between male and female in terms of professional values and attitudes [t = 1.265, df = 665, p = .206]. Overall, the results revealed that there was statistically significant difference between male and female as far as their perceived instructional effectiveness is concerned. Based on the findings, the researchers reject the hypothesis that there is no statistically significant difference in teachers' perceptions concerning instructional effectiveness based on gender. This means that the perceptions of teachers on their instructional effectiveness differed from male to female.

5. Discussion
The study sought to examine how headteachers, teachers and learners viewed instructional effectiveness of University of Cape Coast distance trained teachers. Results from the analysis of data showed that UCC distance trained teachers were perceived by stakeholders as instructionally effective in the three domains namely, professional knowledge, professional practice, and professional values and attitudes. It was evident from the findings that CoDE trained teachers were perceived to possess professional knowledge since they demonstrated knowledge of learners, knowledge of the subject being handled and knowledge of curriculum

framework. Effective teachers use a variety of teaching methods to meet different learning needs of learners, and review learners' previous knowledge to identify the learning needs. Again, effective teaching includes asking learners further questions for clarifications during lessons, having broad subject knowledge to relate lessons to learners' real experience, and demonstrating deep understanding of topics.

The revelation that CoDE trained teachers were perceived to demonstrate professional knowledge is situated within the theory of self-efficacy. This theory states that teachers who are self-efficacious know their learners, create classroom environments that are conducive to motivate learners to learn (O'Connor et al., 2017), and are responsible for students with special learning needs (Laninga-Wijnen, Ryan, Harakeh, Shin, and Vollebergh, 2018). Furthermore, it emerged from the findings that UCC distance trained teachers were perceived to possess professional practice because they demonstrated how to manage the learning environment, adapt appropriate teaching and learning strategies as well as conduct appropriate assessment.

The findings were situated in the theory of social constructivism which views knowledge construction as a social interplay of people, interactions that involve sharing, comparing and debating among learners while the teacher plays a facilitation role. Instructionally effective teachers used the social constructivist approach where group work is effectively used on to drive the teaching and learning process. Headteachers, teachers and learners in their responses indicated that they were encouraged to do class work together to boost their understanding. Similarly, teachers' demonstration of professional values and attitudes is very crucial for effective instructions in the classroom. Teachers who are effective demonstrate love for participating in professional programmes such as workshops, in-service training, and PTA activities. They are also expected to value policies and regulations that govern the teaching profession. Moreover, teachers are supposed to join colleague staff to undertake activities that bring about changes in their work place. During these events, new ideas and knowledge are shared which ultimately could improve teachers' effectiveness. Results from the study showed that UCC distance trained teachers were involved in these activities and observe the rules and regulations governing the teaching profession.

It was also indicated from the study that UCC distance trained teachers were perceived to demonstrate characteristics that make them effective in their instructions. This was in line with what Stronge (2018) outlined as constituting qualities of effective teaching. He pointed out that effective teachers demonstrate professional knowledge, instructional planning, instructional delivery, assessment, and learning environment. The finding further agreed with the assertion by Ko and Sammons (2013) that effective teachers should possess good subject knowledge, classroom organisation, good questioning skills, and use of appropriate group work. The results that UCC distance trained teachers rated themselves positively aligned with Åhslund and Boström, (2018). Their study indicated that teachers perceived their teaching as positive. The finding corroborates the later study by Samkange (2016) who indicated that teachers

trained through open distance education in Zimbabwe were perceived to be effective in the classroom. Also, the findings were consistent with Jangu's (2015) study which found that headteachers perceived classroom performance of UCC distance trained teachers to be effective. The finding that learners described CoDE teachers as demonstrating effective teaching skills is also consistent with the earlier study by Fernandez-Garcia, Maulana, Inda-Caro, Helms-Lorenz and Garcia-Perez (2019) which revealed that learners perceived teachers' classroom environment, classroom management, and instructional clarity, differentiation, and teaching learning strategies as sufficient. However, the finding was inconsistent with that of Iqbal, Ibraheem and Hussain (n.d) who found out that the professional competencies of distance trained teachers from education programmes do not meet the set standards of quality in Pakistan.

The results of the study further gave credence to the statement read on behalf of the former Minister of Education Prof. Naana Opoku-Agyemang, that the distance education programme offered by UCC is comparable to that of the regular programmes (CoDE Digest, n. d). The then Executive Secretary to the National Council for Tertiary Education (NCTE) Prof. Mahama Duwiejua who read the minister's statement added that "distance education is not inferior to the mainstream and by the time you complete the programme you would have developed some attitudes that would equip you for the challenge ahead" (p. 8). The programme at the College is designed by experts in their area of specialization to equip pre-service teachers with the necessary teaching skills to be able to deliver the curriculum in the classroom. This means that graduates (teachers) from the College should demonstrate pedagogical skills similar to other graduates (teachers) from different teacher training institutions.

The study also examined whether gender of distance trained teachers had influence on their perceived instructional effectiveness. Drawing conclusion on whether gender has influence on perceived instructional effectiveness is difficult. This is so because gender and perceived effective teaching tend to be varried in different context. In some societies, there is the notion that women are the nurturing type and therefore suit caring for children at the elementary school level while in other societies, men are considered to be better teachers. Analysis of data showed that apart from professional professional (teaching and learning), there was signifcant difference in the perceptions of teachers with regard to instructional effectiveness within the context of gender. Overall, there was a statistically significant difference between male teachers with regard to the perception of instructional effectiveness. Specifically, male teachers perceived instructional effectiveness more positively than female teachers. This shows that gender has an effect on the way teachers perceive their instructional effectiveness. The reason for the difference in perception between male and female distance trained teachers is difficult to ascertain. Some scholars have attributed the difference to the fact that male and female teachers possess different teaching styles (Islahi & Nasreen, 2013). The positive outlook in the perceptions in favour of male teachers is strange because the long-held view is that teaching at the elementary school level is seen as female profession. This resurrects the raging debate whether teachers perceived differently the way they teach based on

gender. The finding that gender has an effect on the perception of teachers regarding instructional effectiveness supports El-Emadi, Said and Friesen (2019); Ahmed, Ambreen and Hussain (2018) whose investigations showed that there was significant difference between the male and female teachers in terms of their instructional practices. On the other hand, it contradicts Singh and Attri's (2020) investigation which found out that male and female school teachers do not differ significantly in their instructional effectiveness. So, clearly there seems to be no agreement whether instructional effectiveness can be influenced by the gender of the teacher.

6. Conclusion

This study explored perceptions of headteachers, teachers and pupils concerning instructional effectiveness of distance trained. We adopted mixed method design to undertake the study. The study revealed that headteachers, distance trained teachers and learners generally agreed that UCC distance trained teachers are instructionally effective. It showed that distance trained teachers possess professional knowledge, professional practice, and professional values and attitudes. The findings in this study therefore appeared to suggest that distance education programme had a positive influence on the classroom practices of teachers. It further indicates that the UCC distance education programme is effective and as such could be used as an alternative to traditional mode of training teachers for the education system in Ghana. Moreso, the study revealed that gender had influence on perceived instructional effectiveness of teachers in the classroom. This suggests that gender is a major variable within the context of teachers' perceptions as regards their effective instruction in the school. It is recommended that stakeholders such as parents, prospective applicants and the Ghana Education Service should consider UCC distance education programme as an alternative to the conventional education. This is due to the fact that the distance programme is able to equip service teachers with the minimum instructional competences.

The outcome of the study has significant practical implications for distance education discourse, in general, and teacher education, in particular. Distance education institutions involved in training teachers pay attention to the three domains of teachers' instructional competence. Literature indicated that if teachers possess these characteristics and demonstrate it in their instructions, learners make significant gains in their learning outcomes. Teachers need to apprise themselves of the curriculum they transmit to students, understand that learners are different, creating enabling environment, and assessing how learners progress. Moreso, teachers need to demonstrate enthusiasm and share knowledge within the school community. Distance training institutions equip teacher trainees with these essential characteristics to be able to function well in the classroom.

Limitation of the Study: A limitation of the study was our inability to carry out classroom observations to triangulate stakeholders' perceptions. Our inability was due to the closure of schools close to a year due to COVID-19 pandemic, hence, the findings were based on perceptions.

7. References

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