A STUDY OF ICT FACILITY READINESS AND TEACHERS' USE OF ICT FACILITIES IN THE ESCOLA TÉCNICA PROFISSIONAL BECORA DILI AND THE TÉCNICA PROFISSIONAL DOM BOSCO FATUMACA BAUCAU, DILI TIMOR-LESTE

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Abstract: This study examines the availability and usability of Information and communication technology among the two technical high school teachers in the Escola Técnica Profissional Becora, Dili and the Escola Técnica Profissional Dom Bosco Fatumaca Baucau, Dili, Timor-Leste. The Research Design employed is the quantitative, descriptive and comparative survey design. Four research questions were formulated for the study. The population for the study consisted of 90 technical high school teachers. Questionnaire was used as the instrument for gathering data for the study. Data collected were analyzed using means standard deviation and independent samples t-test (two-tailed). Results of the study showed that ICT facilities are not available in most of the schools covered. It was also observed most teachers used as the sample for the study, are not competent in the use of ICT. Recommendations were then made to the administrators, principals the two schools, and teachers, schools in Timor-Leste, MOE Timor-Leste and future researchers.

Keywords: ICT facility readiness and teachers' use of ICT facilities.

Introduction

Information and Communication Technology (ICT) includes computers, the Internet, and electronic delivery systems such as radios, televisions, and projectors among others, and is widely used in today's education field. Kent and Facer (2004) indicated that school is an
important environment in which students participate in a wide range of computer activities, while the home serves as a complementary site for regular engagement in a narrower set of computer activities. Increasingly, ICT is being applied successfully in instruction, learning, and assessment.

ICT is considered a powerful tool for educational change and reform. A number of previous studies have shown that an appropriate use of ICT can raise

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educational quality and connect learning to real-life situations (Lowther, et al. 2008; Weert and Tatnall 2005). As Weert and Tatnall (2005) have pointed out, learning is an ongoing lifelong activity where learners change their expectations by seeking knowledge, which departs from traditional approaches. As time goes by, they will have to expect and be willing to seek out new sources of knowledge. Skills in using ICT will be an indispensable prerequisite for these learners.

ICT tends to expand access to education. Through ICT, learning can occur anytime and anywhere. Online course materials, for example, can be accessible 24 hours a day, seven days a week. Teleconferencing classrooms allow both learner and teacher to interact simultaneously with ease and convenience.

Based on ICT, learning and teaching no longer depend exclusively on printed materials. Multiple resources are abundant on the Internet, and knowledge can be acquired through video clips, audio sounds, and visual presentation and so on. Current research has indicated that ICT assists in transforming a teaching environment into a learner-centered one (Castro Sánchez and Alemán 2011). Since learners are actively involved in the learning processes in ICT classrooms, they are authorized by the teacher to make decisions, plans, and so forth (Lu, Hou and Huang 2010). ICT therefore provides both learners and instructors with more educational affordances and possibilities. More specific benefits of using ICT in education are described below.

Information and Communication Technology (ICT) may be viewed in different ways. Rodrigues and Wilson (2000) defined ICT as a set of activities which facilitate by electronic means the processing, transmission and display of information. Ogunsola (2005) regarded ICT as "an electronic based system of information transmission, reception, processing and retrieval, which has drastically changed the way we think, the way we live and the environment in which we live". It can be used to access global knowledge and communication with other people. Students who use ICTs gain deeper understanding of complex topics and concepts and are more likely to recall information and use it to solve problems outside the classroom (Apple Computer, 2002). Ogunsola and Aboyade (2005) viewed ICT as a cluster of associated technologies defined by their functional usage in information access and communication of which one embodiment is the internet.

Objectives

The general purpose of this research is to examine the ICT facility readiness and teachers use of ICT facilities in the Escola Técnica Professional Becora Dili and the Escola Técnica Professional Dom Bosco Fatumaca Baucau, Dili Timor-Leste.

1. To determine ICT facility readiness in the Escola Técnica Professional Becora and the Escola Técnica Professional Dom Bosco Fatumaca.
2. To determine teachers' use of ICT facilities in the Escola Técnica Profissional Becora, Dili and the Escola Técnica Profissional Dom Bosco Fatumaca, Baucau.
3. To compare ICT facility readiness between the two schools.
4. To compare teachers' use of ICT facilities between the two schools teachers.

Literature Review

Theories Definition of ICT

Milken's "Exchange on Education Technology" (1999) defined ICT as computer-based tools used by people to work with the information and communication processing needs of an organization. It encompasses computer hardware and software, the network and several other devices (video, audio, photography camera, etc.) that convert information (text), images, sound, and motion and so on into common digital form. ICT has a wider spectrum of applications with enormous relevance to teaching and learning activities.

Based on the ICT definition, teachers' use of ICT in the schools will involve the presentation and distribution of instructional content through the web environment (e-teaching) or systems offering an integrated range of tools (stand-alone computer instruction, CD ROM amongst others) to support learning and communication. Yusuf (2005) mentioned that Instructional service delivery has to do with teaching and learning activities that take place in the classrooms. Therefore, quality of instructional service delivery entails the extent of effectiveness to which lecturers carry their classroom teaching/learning process.

Information communication technologies (ICTs) are information handling tools that are used to produce, store, and process, distribute and exchange information. These different tools are now able to work together, and combine to form networked world- which reaches into every corner of the globe (UNDP Evaluation Office, 2001). It is an increasingly powerful tool for participating in global markets, promoting political accountability; improving the delivery of basic services; and enhancing local development opportunities (UNDP, 2006).

Ogunsola (2005) regarded ICT as "an electronic based system of information transmission, reception, processing and retrieval, which has drastically changed the way we think, the way we live and the environment in which we live". It can be used to access global knowledge and communication with other people.

Students who use ICTs gain deeper understanding of complex topics and concepts and are more likely to recall information and use it to solve problems outside the classroom (Apple Computer, 2002).

In addition, through ICT, students extend and deepen their knowledge, investigation, and inquiry according to their needs and interest when access to information is available on multiple levels (CEO Forum on Education and Technology, 2001:8).

Information and Communication Technology (ICT) may be viewed in different ways. Rodriguez and Wilson (2000) defined ICT as a set of activities which facilitate by electronic means the processing, transmission and display of information. ESCAP (2000) in its own definition defined ICT as techniques people use to share, distribute, and gather information and to communicate through computers and computer networks. Marcelle (2000) described ICT as a complex varied set of goods, applications and services used for producing, distributing,

processing, transforming information (including) telecoms, TV and radio broadcasting, hardware and software, computer services and electronic media.

Ogunsola and Aboyade (2005) viewed ICT as a cluster of associated technologies defined by their functional usage in information access and communication of which one embodiment is the internet. Information and Communication Technology are computer based tools used by people to work with information and communication processing needs of an organization. It purview covers computer hardware, software, the network and other digital devices like video, audio, camera and so on which convert information (text, sound, motion etc) into digital form (Moursund and Bielefeldt, 1999).

Information and Communication Technology as tools within the school environment include use for school administration and management, teaching and learning of ICT related skills for enhancing the presentation of classroom work, teaching/learning repetitive tasks, teaching/learning intellectual, thinking and problem solving skills, stimulating creativity and imagination, for research by teachers and students and as communication tool by teachers and students (Collis and Moonen, 2001, Derbyshire, 2003; Moursund and Bielefeldt, 1999).

Theories Teachers' Use of ICT Facilities

Abdul-Salaam Aminat Obakhume's (2012) developed a Teachers' Use of ICT Assessment based on UNESCO (2004) and ICT Teachers Survey to examine the ICT facilities situation and teachers' use of ICT in Nigeria and African countries.

This study examined Nigeria secondary school teachers' uses of ICTs and its implications for further development of ICTs use in Nigerian secondary schools. The study through census drawn on 700 teachers from twenty five purposefully selected private secondary schools in Ibadan, Oyo state, Nigeria. This comprised 430 males and 270 females. Their age ranged from 25 – 45 years with a mean age of 35 years.

The instrument for the study was developed by the researcher based on established procedures in literature. The instrument contained of three sections. Section A focused on the demographic information of the teachers. Section B focused on the availability of ICT facilities in the schools while section C contained questions on the usability of these facilities by secondary school teachers.

A modified instrument tagged Teachers ICT use survey adapted from ICT survey indicator for teachers and staff by UNESCO (2004) and ICT Teachers Survey by New Zealand Ministry of Education MINEDU (1999) were used for the collection of data. The results showed that teachers generally have access to ICTs in their various schools except E-mail and Internet because their schools are not connected. Technical support are lacking in the schools and teachers lack of expertise in using ICT was indicated as being the prominent factors hindering teachers readiness and confidence of using ICTs during lesson.

Abdul-Salaam Aminat Obakhume's (2012) study found the following results: (1) Teachers generally have access to ICTs in their various schools except E-mail and Internet because their schools are not connected. Technical support are lacking in the schools and teachers lack of expertise in using ICT was indicated as being the prominent factors hindering teachers readiness and confidence of using ICTs during

lesson. (2) Teachers perceived ICT as being easier and very useful in teaching and learning. For continuous uses of ICTs by teachers, it was recommended among others that teacher training and professional development oriented policies should support ICT-related teaching models that encourage both students and teachers to play an active role in teaching/learning activities. And that emphasis must be placed on the pedagogy behind the use of ICTs for teaching/learning. (3) ICT facilities were not readily available in the schools covered by his study. It also showed that most of the schools were not connected to the internet. Schools with computers did not have the relevant educational software required by their students. In addition, the computer available in these schools could not meet the need of the large population of students in these schools. Some schools with internet connectivity had been cut off because they have not been able to pay their access fee. (4) Most teachers in secondary did not use ICT teaching students, for administrative purpose and for their personal purpose. It observed that most of these teachers lack the knowledge, competence to use ICT to facilitate teaching-learning process.

Conceptual Framework

This study mainly aimed to determine and to compare the ICT facility readiness and teachers' use of ICT facilities in the Escola Técnica Profissional Becora Dili and the Escola Técnica Profissional Dom Bosco Fatumaca Baucau. Figure 1 below showed the conceptual framework of this study.

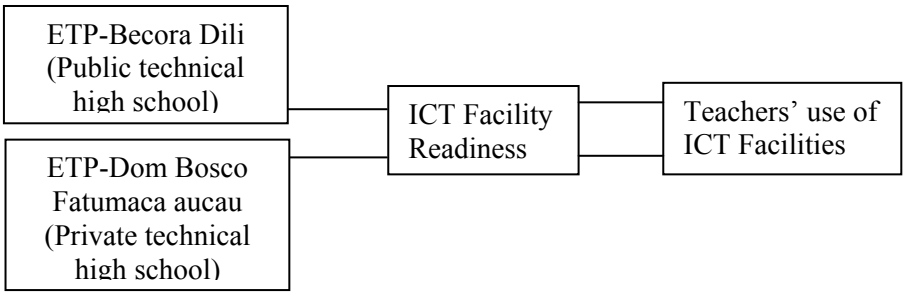

Figure 1: Conceptual Framework of The Study

Method/Procedure

This research was a quantitative research using questionnaires consisting of two parts. The first part of the research questionnaire was designed to determine ICT facility readiness, and the second part questionnaire was designed to determine teachers' use of ICT facilities. The statistical methods used in these studies were: quantitative, descriptive and comparative.

This study was conducted in Dili Timor-Leste, to investigate the ICT facility readiness and teachers' use of ICT facilities in two technical high schools at the Escola Técnica Profissional Becora Dili and the Escola Técnica Profissional Dom Bosco Fatumaca Baucau, in Dili Timor-Leste.

The participants were all the teachers from both schools. The total number of participants from the Escola Técnica Profissional Becora was 45 teachers and from the Escola Técnica Profissional Dom Bosco Fatumaca 45 teachers.

To determine the ICT facility readiness and teachers' use of ICT in the two schools the researcher developed a research instrument based on Abdul-Salaam Aminat Obakhume's (2012) "Teachers' Use of ICT Assessment". The major part of the questionnaire is the same as Abdul-Salaam Aminat Obakhume's (2012) "A Teachers' Use of ICT Assessment". However, this research added the first part to identify the demographics of teachers from the Escola Tecnica Profissional Becora Dili and the Escola Tecnica Profissional Dom Bosco Fatumaca Baucau, Timor-Leste. So finally, the research questionnaire is composed of three parts. The part-one questionnaires were used to identify the demographics of teachers (questions 1-4) at both schools in the Escola Técnica Profissional Becora, Dili and the Escola Técnica Profissional Dom Bosco Fatumaca Baucau,Timor Leste, with questions for notifying teachers' gender, age, and background of education and year of computer experience.

The part-two questionnaires (questions 1-10) aimed to determine the ICT facilities readiness in two schools and the part-three questionnaires (questions 11-24) are to gauge the teachers' use of ICT facilities in both schools.

The original questionnaire was in English, but in order to get teachers to understand it easily, it was translated into Tetum by the National Institution of Linguistics (INL), which is a nationally recognized institution for official documents translation under the National Public University of Timor-Leste.

The researcher used the questionnaire from Abdul-Salaam Aminat Obakhume's (2012) "A Teachers' Use of ICT Assessment" which has been used in the previous study. The validity test of the questionnaire used in the study by Abdul-Salaam Aminat Obakhume's (2012) has been verified by experts in the Computer Science Department and School of Education, Federal College of Education Oyo, African Society for Scientific Research, in Africa.

Then, the reliability test was carried out to determine the internal consistency of items in the questionnaires using Cronbachs' Alpha reliability test. The Cronbach alphas' coefficient in the previous study shown reached 0.84; it was regarded as reliable.

Before delivering the questionnaires, the researcher conducted a pilot study in order to test the reliability of the instruments. It was tried out with thirty (30) teachers, 20 were from the Escola Técnica Profissional Becora Dili and others 10 from the Escola Técnica Dom Bosco Fatumaca Baucau. They were not included as respondents in the study. The reliability of the pilot study, calculated by using Cronbachs' Alpha, was 0.93; therefore, the questionnaire of this study was regarded as reliable.

Means and Standard Deviation was used to determine the ICT facility readiness and teachers' use of ICT facilities in the both schools. Independent samples t-test (two-tailed) was used to compare the ICT facility readiness and compare the teachers' use of ICT facilities between the two schools.

Findings/Results

Research Objective one

Research Objective one was to determine the ICT facility readiness in the Escola Técnica Professional Becora Dili and the Escola Técnica Professional Dom Bosco Fatumaca Baucau.

In order to determine the ICT facility readiness in the two schools, the researcher developed part II of a research questionnaire which had 10 items such as: computers, educational software, internet connection, interactive boards, television sets, printers, photocopiers, multimedia facilities, projectors and library.

In general, as Table 1 shows, the total mean score of ICT facility readiness was 1.80, in the range of 1.51-2.50, according to the interpretation criteria. This means ICT facility readiness in the Escola Técnica Professional Becora Dili and the Escola Técnica Professional Dom Bosco Fatumaca Baucau, Timor-Leste were regarded as "Inadequate". Meanwhile, Table 9 also showed the rank of each item in terms of ICT facility readiness.

Based on the result among the 10 items, there was only one item of ICT facilities readiness viewed as "Adequate" in both schools, which is: There are enough computers in my school.

There were five items of ICT facility readiness viewed as "Inadequate": they were:

1. Presence of a virtual library;
2. My school has Educational Software for teaching;
3. There are photocopiers in my school;
4. Multimedia facilities are available for teaching;
5. We have enough printers;

And there were four items of ICT facility readiness viewed as "Not at All" they were:

1. We have projectors in our schools;
2. Our computers are connected to the internet;
3. We have interactive boards in our school;
4. There are television set that we use for teaching.

Table 1: ICT Facility Readiness from The Two Schools

No.	Items	N	Mean	S.D.	Interpretation
1.	There are enough computers in my school.	90	4.00	0.00	Adequate
2.	Presence of a virtual library.	90	2.47	1.15	Inadequate
3.	My school has Educational Software for teaching.	90	2.00	0.00	Inadequate
4.	There are photocopiers in my school.	90	2.00	0.00	Inadequate
5.	Multimedia facilities are available for teaching.	90	1.62	0.49	Inadequate
6.	We have enough printers.	90	1.52	0.50	Inadequate
7.	We have projectors in our schools.	90	1.38	0.49	Not at all
8.	Our computers are connected to the internet.	90	1.00	0.00	Not at all
9.	We have interactive boards in our school.	90	1.00	0.00	Not at all
10.	There are television set that we use for teaching.	90	1.00	0.00	Not at all
	Total	*90*	*1.80*	*0.14*	*Inadequate*

Research Objective Two

Research Objective Two was to determine the teachers' use of ICT facilities in the Escola Técnica Profissional Becora and the Escola Técnica Profissional Dom Bosco Fatumaca. In order to determine the ability of teachers' use of ICT facilities in two schools, the researcher developed part III of the research questionnaire which had 14 items as shown in Table 2.

As Table 2 showed, the total mean score for teachers' use of ICT facilities in the two schools was 3.20, in the range of 2.51-3.50. According to the interpretation criteria, this means teachers' ability to use ICT facilities in the two schools was regarded as *"Moderate"***.** Meanwhile, Table 2 also showed the rank of each item in terms of teachers' use of ICT facilities readiness.

Among 14 items, there were three items of teachers' use of ICT facilities in both schools viewed as "Effective". They were:

1. I can boot the computer;
2. I use Microsoft Word to type questions and other documents;
3. I can use the computer to keep records;

There were nine items of teachers' use of ICT facilities in both schools viewed as "Moderate". They were:

1. I browse the Internet to get materials for teaching;
2. I can use Downloader to download any document;
3. I can use the computer to teach my students;
4. I can use a search engine such as Google;
5. I can use a scanner to copy images;
6. I can operate a printer that is connected to the computer;
7. I can use YouTube;
8. I can use e-mail for communication with my students and friends.
9. I can set up a multimedia projector.

And there were two items of teachers' use of ICT facilities in both schools viewed as "Ineffective". They were:

1. I use Power Point in Presenting my Lesson;
2. I use Microsoft Excel to teach basic mathematics.

(See Table 2 on the next page)

Research Objective Three

Research Objective Three was to compare ICT facility readiness between the two schools. According to this objective, the researcher set up a "Research Hypothesis 1", which is "There is a significant difference of ICT facility readiness between the Escola Técnica Profissional Becora and the Escola Técnica Profissional Dom Bosco Fatumaca, Timor-Leste.

In order to test the Research Hypothesis 1 about ICT facility readiness of the two schools the summed scores of ten facilities were calculated and compared by the independent samples t-test.

As Table 3 showed, since the probability significance was 0.037, which was smaller than 0.05, the research hypothesis was accepted and thus meant" There is a significant difference of ICT facility readiness between the Escola Técnica

Profissional Becora Dili and the Escola Técnica Profissional Dom Bosco Fatumaca, Timor-Leste". The result shown that the ICT facility readiness in the Escola Técnica Profissional Becora Dili, was more adequate than the Escola Técnica Profissional Dom Bosco Fatumaca Baucau.

Table 2: Teachers' Use of ICT Facilities from Two Schools

No.	Items	N	Mean	S.D.	Interpretation
1.	I can boot the computer.	90	4.32	1.06	effective
2.	I use Microsoft Word to type questions and other documents.	90	4.12	1.11	effective
3.	I can use the computer to keep records.	90	3.94	1.22	effective
4.	I browse the Internet to get materials for teaching.	90	3.49	1.38	moderate
5.	I can use Downloader to download any document.	90	3.42	1.44	moderate
6.	I can use the computer to teach my students.	90	3.24	1.61	moderate
7.	I can use a search engine such as Google.	90	3.23	1.46	moderate
8.	I can use a scanner to copy images.	90	3.07	1.44	moderate
9.	I can operate a printer that is connected to the computer.	90	2.98	1.54	moderate
10.	I can use YouTube	90	2.97	1.47	moderate
11.	I can use e-mail for communication with my students and friends.	90	2.91	1.62	moderate
12.	I can set up a multimedia projector.	90	2.59	1.25	moderate
13.	I use Power Point in Presenting my Lesson	90	2.37	1.39	ineffective
14.	I use Microsoft Excel to teach basic mathematics.	90	2.20	1.33	ineffective
	Total	*90*	*3.20*	*1.05*	*Moderate*

Table 3: Comparison ICT Facility Readiness between The Two Schools

No.	School	Mean	S.D.	t-test for Equality of Means		
				t	df	Sig. (2-tailed)
1.	Escola Técnica Professional Becora Dili	1.83	0.15			
2.	Escola Técnica Professional Dom Bosco Fatumaca Baucau	1.77	0.11	2.120	88	0.037*

*Sig. < 0.05

Research Objective Four

Research Objective Four was to compare teachers' use of ICT facilities between the two schools. According to this objective, the researcher set up a "Research Hypothesis 2", which is "There is a significant difference of teachers' use of ICT facilities between the Escola Técnica Profissional Becora Dili and the Escola Técnica Profissional Dom Bosco Fatumaca Baucau, Timor-Leste.

In order to test the Research Hypothesis 2 about teachers' use of ICT facilities in the two schools, the sum scores of fourteen items of abilities were calculated and compared by the independent samples t-test.

As Table 4 shows, since the probability significance was 0.001, which was smaller than 0.05, the research hypothesis was accepted and thus meant" There is a significant difference of teachers' use of ICT facilities between the two schools. The result shown that teachers from the Escola Técnica Profissional Dom Bosco Fatumaca are more effective using ICT facilities than teachers from the Escola Técnica Profissional Becora Dili.

Table 4: Comparison Teachers' Use of ICT Facilities between Two Schools

No.	School	Mean	S.D.	t-Test for Equality of Means		
				t	df	Sig. (2-tailed)
1.	Escola Técnica Professional Becora Dili	2.86	0.97	3.290	88	0.001*
2.	Escola Técnica Professional Dom Bosco Fatumaca Baucau	3.51	1.03			

*Sig. < 0.05

Discussion

About the teachers' use of ICT facilities in the Escola Técnica Professional Becora and the Escola Técnica Professional Dom Bosco Fatumaca.

According to this study, it found that ICT facilities from the Escola Técnica Profissional Becora and the Escola Técnica Profissional Dom Bosco Fatumaca, with total mean scores of 1.80 was in the range of 1.51-2.50 and this was interpreted as "*Inadequate*", in general.

As for ICT facility readiness in both schools, this study found that the schools have enough computers. The schools are still lack the presence of a virtual library; educational software for teaching; photocopiers; multimedia facilities are available for teaching and printers. The schools do not have projectors; the computers are not connected to the internet; the schools do not have interactive boards and television sets that they use for teaching.

Information communication technologies (ICT) facilities readiness are information handling tools that are used to produce, store, and process, distribute and exchange information. These different tools are now able to work together, and combine to form a networked world which reaches into every corner of the globe. Ogunsola (2005) stated that ICT "is an electronic-based system of information

transmission, reception, processing and retrieval, which has drastically changed the way we think, the way we live and the environment in which we live". It can be used to access global knowledge and communicate with other people.

This study's findings confirmed the Abdul-Salaam Aminat Obakhume's (2012) study finding, which was conducted in Nigeria and African countries. Many results of Aminat Obakhume's (2012) study findings were similar to this study, inclduing (1) Teachers generally have access to ICTs in their various schools except for E-mail and Internet because their schools are not connected. Technical support is lacking in the schools and teachers' lack of expertise in using ICT was indicated as being the prominent factors hindering teachers' readiness and confidence of using ICTs during lesson. (2) Teachers perceived ICT as being easier and very useful in teaching and learning. For continuous uses of ICTs by teachers, it was recommended among others that teacher training and professional development oriented policies should support ICT-related teaching models that encourage both students and teachers to play an active role in teaching/learning activities. And that emphasis must be placed on the pedagogy behind the use of ICTs for teaching/learning. (3) ICT facilities were not readily available in the schools covered. It also showed that most of the schools were not connected to the internet. Schools with computers did not have the relevant educational software required by their students. In addition, the computers available in these schools could not meet the needs of the large population of students in these schools. Some schools with internet connectivity had been cut off because they have not been able to pay their access fees. (4) Most teachers in secondary schools did not use ICT teaching students, for administrative purposes and for their personal purposes. It observed that most of these teachers lack the knowledge and competence to use ICT to facilitate the teaching-learning process.

Fakeye (2010) also confirmed and attributed to the non-availability of ICT facilities. He believed that the non-availability of these facilities greatly hinders access and inadequate training of teachers in the use and application of the computers. From his study, it was concluded that ICT facilities are not readily available in the secondary schools and that there was a low level of ICT utilization in African secondary schools. The study revealed that most teachers lack the basic skills to use the computers and other ICT devices.

From the previous study results and this study finding, we can conclude that the ICT readiness of schools in Timor-Leste, in Nigeria and African countries is quite inadequate at this stage. The governments should try to improve the schools' ICT facilities as the primary task along with the development of the economy as well.

About the teachers' use of ICT facilities in the Escola Técnica Profissional Becora and the Escola Técnica Profissional Dom Bosco Fatumaca.

This study, found that teachers' use of ICT facilities from the Escola Técnica Profissional Becora and the Escola Técnica Profissional Dom Bosco Fatumaca, with total mean scores of 3.20, it was in the range of 2.51-3.50 and it was interpreted as "*Moderate*" in general.

The result of this study showed that most teachers in these two schools do not use ICT in the teaching-learning process, administration purposes and for their personal purposes. It observed that most of these teachers lack the knowledge and competence to use ICT to facilitate the teaching-learning process.

It seems that currently in the schools, teachers can boot the computer; use Microsoft Word to type questions and other documents; can use the computer to keep records only. They cannot use Power Point to present lessons or Microsoft Excel to teach basic mathematics. And as for "browse the Internet to get materials for teaching, use Downloader to download any document; use the computer to teach their students; use a search engine such as Google; use a scanner to copy images; operate a printer that is connected to the computer; use YouTube; use e-mail for communication with their students and friends; and set up a multimedia projector", most teachers just in the period of not knowing or knowing very little.

These findings showed the truth of teachers' ICT ability; it was not that surprising since the study found that both schools indeed lack of ICT facilities for the research objective one, but the truth needs carefully attention by school leaders and educational experts.

Abdul-Salaam Aminat Obakhume (2012) developed the Teacher Evaluation of ICT usage by UNESCO (2004) ICT Teacher Survey to analyze the situation of ICT facilities and teachers who use ICT in Nigeria and African countries. The population of the study consisted of 120 secondary schools teachers. The results of his study showed that ICT facilities were not available in most of the schools covered. It was also found that most teachers used as the sample for the study, were not competent in the use of ICT facilities.

Successful integration of ICT in the school system depends largely on the availability and competence and the attitude of teachers towards the role of modern technologies in teaching and learning. Research in the previous study has shown that most secondary schools have either insufficient or no ICT tools to cater for the ever increasing population of teachers in schools and where they are available (Chattel, 2002; Cheng, 2003; Chiemeke, 2004). Therefore, when the schools were lacking in ICT facilities, the teachers' ability to use ICT was lower for sure.

Fakeye (2010) also found out in a study carried out in Ibadan, Nigeria that most schools covered in the study do not have computers, hence are not connected to the internet. He also added teachers who have computers do not use them for teaching but solely for administrative purposes and personal purposes due to lack of ICT use knowledge.

In another study by Okwudishu (2005), he found out that the unavailability of some ICT components in schools hampers teacher's use of ICTs. The lack of adequate search skills and access points in the schools was reported as forces inhibiting the use of the internet by secondary school teachers (Adomi and Kpangban, 2010).

All in all, the researcher found that the two schools do not have an adequate ICT facility to support the teaching and learning process related to the 21st century. This study found another truth, which was: the teachers also do not have a basic knowledge of ICT; therefore they were unable to use the ICT facilities effectively for teaching and learning in schools.

About the differences of ICT facility readiness between the Escola Técnica Profissional Becora and the Escola Técnica Profissional Dom Bosco Fatumaca?
In a comparison of the ICT facility readiness, the test results showed probability significance of 0.037, which was less than 0.05. Therefore it was concluded that there was a significant difference of ICT facilities readiness between the two schools.

From mean scores of ICT facility readiness, it was observed that the Escola Técnica Profissional Becora Dili was a bit higher than the Escola Técnica Profissional Dom Bosco Fatumaca Baucau.

The possible reasons for the difference of ICT facility readiness between the two schools, according to the researcher's observation was, most public technical schools were fully supported by the government, therefore the Escola Técnica Profissional Becora Dili as a public technical school might have more adequate ICT facilities compared to the private technical school the Escola Técnica Profissional Dom Bosco Fatumaca Baucau, where the schools' ICT facilities were mostly relying on students fees.

About the differences of teachers' use of ICT facilities between the Escola Técnica Profissional Becora and the Escola Técnica Profissional Dom Bosco Fatumaca?
In a comparison of teachers' use of the ICT facilities, the test results showed probability significance of 0.001, which was less than 0.05 even 0.01. Therefore it was concluded that there was a significant difference of teachers' use of ICT facilities between the Escola Técnica Profissional Becora Dili and the Escola Técnica Profissional Dom Bosco Fatumaca Baucau.

From mean scores of ICT facilities readiness, it was observed that teachers from the Escola Técnica Profissional Dom Bosco Fatumaca Baucau can use ICT facilities more effectively than teachers from the Escola Técnica Profissional Becora Dili.

According to the researcher's observations and this study's findings of teachers' demographics, the possible reason for teachers use of ICT facilities between the two schools may be that teachers from the Escola Técnica Profissional Dom Bosco Fatumaca Baucau school were mostly still young and they were enthusiastic to use ICT tools compared with teachers from the Escola Técnica Profissional Becora Dili where majority are older, who got used to teaching in the traditional way and resisted using ICT tools for the classes.

Watts - Taffe (2003) found that teachers can act as catalysts for the integration of technology via ICT. If the incentive, equipment and technological support needed are available from institutes for teachers, the development of a class of ICT will be easier for them. The main responsibilities of these teachers will be changing the format of the course, creating and explaining the new assignments, and arranging for the computer lab through their experts in learning or technology assistants. Therefore, the schools' leaders also should lead the teachers to change and assist them to learn how to use the new technology in their teaching and life, and then the quality of teaching and learning in fact can be improved as well.

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