Teacher Attitudes Regarding the Use of Digital Technology in Classrooms: Early Years Settings in Saudi Arabia

اعداد

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Abstract

The ability of Information Communication Technology (ICT) to enhance learning in schools is currently a matter of debate and stakeholders in education are eager to ensure children receive the benefits of the modern cyber era without being disadvantaged by it in any way. Teachers are often best placed to judge the impacts of learning materials upon performance since they work directly with pupils, are the ones who apply the materials in class, and are able to judge the impacts upon students first hand. Although much research has been conducted on the use of technology in secondary and higher education, there is currently a lack of material concerning the preliminary stages. However, this stage may be the most critical since early experiences can be highly influential upon the rest of a child's academic career. This dissertation explores the use of technology within early years classrooms in Saudi Arabia. It begins by examining the Saudi education system and emphasizing the importance of this new curricular subject to the Kingdom. The study sets out its aims of exploring teacher attitudes about using technology in classrooms as well their perceptions of the barriers that exist to its integration. The study adopts a mixed research design, using questionnaires and interviews to gather a range of data from teachers working in public, private and religious schools across Al-Jubail city. The study finds that teachers are currently using a wide variety tools, despite perceiving they do not possess enough training to do so. Some tools are very popular although they have not been discussed in the available literature.

Introduction

Information and Communication Technology (ICT) is making dynamic changes in society and transforming the way people think and behave (Mikre, 2011), yet the debate over its usefulness within education remains a point of divergence between commentators (Scoter and Ellis, 2001). Although there is evidence that technology can assist both teaching and learning, a number of potential disadvantages to learning has been identified (Kleiman, 2000) and it is important to continue testing how technologies are affecting pupils. Technology within early years settings raises a number of particular issues of concern (Plowman, et al. 2010), due to their limited cognitive and sensory motor capacities.

Teaching and Learning with ICT in the Kingdom of Saudi Arabia

The Kingdom of Saudi Arabia (KSA) has recognised the centrality of technology in the modern era and is gradually ensuring its integration throughout its infrastructure. Within schools, ICT investment concerns the three main areas of equipment infrastructure: the educational system, production of educational contents, and services (Ministry of Education, 2004). It is essential that the Kingdom can target its investment to ensure the optimum experience for pupils. All educational policy within the Kingdom must be set according to the objectives of furthering loyalty to Islam and demonstrating its compatibility with science (Ministry of Education, 2004).

Aims and Research Questions

The main research questions are as follows:

1-What type of digital technology tools are preschool teachers aware of within the KSA? Do they use digital technologies in classrooms and if so, which ones do they use?

2-What are the attitudes of teachers towards the use of ICT in their classrooms? Do they believe it promotes or hinders learning and development?

3-Do teachers face any challenges when using digital technologies? Have they experienced problems with accessibility? What teaching skills are required?

4- What factors facilitate the use of ICT within schools? What factors do preschool teachers believe could improve learning with technology?

Definition of ICT

`ICT` stands for Information and Communication Technology. Some scholars provide a holistic definition of the term, such as Blurton (2002) who refers to it as a diverse set of technological tools and resources used to communicate, and to create, disseminate, store, and manage information.

ICT in Education

The idea of using computers in education was first embraced by administrations around the world in the early 1980s, as microcomputers became affordable for mainstream consumers (Pelgrum and Law, 2003).

Arguments for ICT in Education

ICT can help students become computer literate in technology or may be used as a platform to teach other curricular subjects (Brooker, 2003; O'Hara, 2004). All use of ICT generally involves the learning of basic computer skills, such as the ability to use a mouse and keyboard (Tinio, 2002). This may have particular implications for early year's education since young children have less dexterity and are generally less sophisticated when manipulating physical objects. Younger children may be better able to use machines such as cameras, which require only the click of a button. ICT can, however, be used to enhance skills across the early years curriculum, including reading and writing, reasoning, mathematics and science (Leask and Meadows, 2003).

Using ICT in Early Childhood Education

Before discussing ICT in early years education, it is important to recognise that some studies use the term ‘young children’ to refer to children up to the age of 8 while others refer to schools that accept children from the age of 2 (Bolstad,

2004). The UK has a system of nursery and reception classes, which cover children aged between 3 and 5.

The Importance of ICT in the Early Years

Much of the findings about education in general may be applied to the early years setting. However, there are some differences since younger children are generally more active and playful with technical equipment. Many complex functions such as navigation and command creation may be too advanced for infants. ICT in later academic stages can therefore serve a wider range of learning and support functions and is a separate field of study to the present. Bolstad (2004) argues a main reason for teaching ICT in early childhood is that it is already being widely used in the environments where children are being raised.

Criticisms of ICT in Early Years Education

While some consider the distrust of ICT for young children to reflect only panic and nostalgia (Buckingham, 2000, Stephen and Plowman, 2003) others are legitimately concerned about the physical effects of children's prolonged computer use, such as radiation and for this reason, schools should investigate how much exposure children receive at home before submitting a student to prolonged exposure in school. Some research has been conducted into this area by Graham and Banks (2000) although there are no comprehensive studies published to date.

Education in the Kingdom of Saudi Arabia

All Saudi schools separate boys from girls although Kindergarten is the only stage where girls and boys are educated together (Computer and Information Centre, 2005). The Kingdom is governed through a framework of governmental ministries. The Ministry of Education was established in 1954 and administers schooling for students at all levels (Alshumaimeri, 2001).

ICT in the KSA Educational System

KSA has recently witnessed a dramatic increase in ICT and the technology sector is estimated to be worth 120 billion Riyals (£20.16 billion), making it the second largest sector in the Kingdom (Algahtani, 2011). It was estimated that 20% of the population were using the Internet in 2006 although other sources have suggested that figure is as high as 64% (MOCIT, 2008). The KSA government has stated it aims to introduce the latest developments of science and technology into the national curriculum, as a means of preparing students for the twenty first century.

Teachers' Attitudes towards Using ICT

Another main aspect of the present research concerns teachers' attitudes and perceptions of ICT in KSA. It is to be expected that cultural differences between Islamic and Western countries may mean research material on the Western experience is not directly applicable. In particular, since the KSA system is highly centralised, many teachers will not have much choice about whether to use IT tools or not, and negative opinions may be suppressed for fear of disrespecting employers.

Barriers to Using ICT in the Classroom

The final part of this paper researches the barriers teachers perceive when attempting to use digital technologies and it is noted that a relatively large amount of literature exists within this field. Mikre (2011) suggests that the costs of ICT integration may be prohibitive for some schools, especially those in developing countries, for example, where ICT requires expensive maintenance. Binglimas (2009) recognises barriers can exist on a number of levels; relating either to the teachers themselves, the students or the administrative environment. Lack of teacher confidence and a 'fear of failure' (Beggs, 2000) may lead to an aversion to using technologies, in particular if students

Methodology

The methodology chosen for a study both reflects and defines the research and choices in the design have a defining impact on the nature of the data received (Newby, 2010). This chapter sets out the stages by which data for this study was obtained. A number of different methods may be applied to collect similar kinds of data and it is also possible to study the same phenomenon in different ways. Questions are raised over reliability where different methods achieve different results for the same phenomenon (Newby, 2010). Methods must be chosen carefully and aligned to the research questions, as well as tested through means of a pilot study, to ensure they are suitable to investigate the topic in question.

appear more proficient than they do.

The Research Design

This study has used a questionnaire and interviews to collect qualitative and quantitative data. Data was sought in the form of facts and general information, as well as in the form of opinions, which are discussed in more detail below. Ten questionnaires were distributed to teachers in public, private and religious schools, making a total of thirty questionnaires. The interviews were administered to three school managers. This was to ensure the study took a wider range of views from within the education system into account.

Questionnaires

Questionnaires enable large quantities of information to be collected and are often relied upon for collecting statistical data (Fink, 2008). Questionnaires were used to gain background information on the teachers' experience and the frequency with which ICT is being used in KSA classrooms. The questions used in this study appear in Appendix. Some questions used a multiple choice system, for example, the question about teacher qualification levels enabled participants to indicate whether they had achieved either undergraduate, Masters, Doctoral or vocational level. Other questions used categorisation, for example, where

teachers were asked to indicate the length of time they had been teaching. Options included a period of less than one year, between 1−5years and over 6 years. Categorisation helps results to be analysed on an average basis and data with potentially wide variations to be displayed clearly in tables. Other questions asked used rating scales, such as where the opinions of teachers were being sought.

Interviews

The questionnaire method enabled the study to gather an overview of teacher attitudes, although an in-depth insight into KSA preschools and ICT practice was also sought. It was considered that such insight would be better obtained through qualitative methods. Interviews permit open-ended questions to be asked and rich, original qualitative data received (Khan, 2009; Hayes, 2005). They enable a researcher to investigate the boundaries of an issue in an empirical way, without the restrictive influence of predetermined questions. Interviews also enable a researcher to clarify ambiguities and identify where a participant is confused by the questions (Robson, 2002). Interviewees are also able to request clarification on the questions if they require. This study opted to use an interview as well as a questionnaire, to ensure the right quality and range of data was received. All interviews were recorded and notes taken to ensure details in the responses were not missed. As with structured interviews, the researcher asked all participants the same set of questions. However, the researcher also sought to conduct the process in a flexible way, so that matters could be explored and investigated further, according to the normal flow of conversation and respondents be given the chance to add detail where appropriate. For these reason, the interviews followed a semi-structured approach. The main disadvantage of interviews is that they can often take up a lot of time (Kumar, 2005), due to verbal conversation and the possibilities for digression, in particular where follow-up questions are asked. Interviews must also be arranged in advance for mutual convenience.

Sampling

This research sought to gain questionnaire responses from 30 teachers, able to report on the issues to be studied by this research. Only staff members who taught children of Kindergarten age were approached, although it was not necessary for teachers to have already integrated ICT within their lessons. It was assumed, therefore, that some teachers would be speaking hypothetically.

Pilot Study

A pilot study was conducted by administering the questionnaires to two test respondents. This helped to determine whether or not the instrument was suitable for the research objectives. It was important that the questionnaires were succinct, clear and did not appear unduly time-consuming.

Access

The questionnaire was distributed in electronic form, through email. Teachers were asked to indicate their scores on the document by modifying the format on their own computers. It was also possible for teachers to print the questionnaire to complete by hand and then mail back, either by post or fax.

Data Collection

Schools were approached for their willingness to participate in the study. In the event, consent progressed through a number of stages, with the school administration being contacted initially, followed by the teaching staff. Communication was conducted initially by email and telephone, depending on the best means of contact specified by the participants. It was anticipated that a number of those contacted would not wish to participate and the researcher had to make a number of enquiries at the initial stages.

Data Analysis

The data gathered was analysed according to information type. Since different type of data was being gathered, it was recognised that different techniques would need to be employed. Both qualitative and quantitative data were analysed independently as well as together, to get a view of the data as a whole.

Quantitative data, such as responses from multiple choice questions and rating scales, was analysed statistically for frequency. Once figures for each question were determined, some were analysed again, together with other findings, so that further findings might be determined. For example, data on ages, proficiency and ICT training was analysed together, to see if any links or inferences might be drawn by comparing them with each other. Data on the frequency of use of each particular technology was also put together, for example to see how camera use varied from other electronic devices such as e-books. The statistical information was put into graphs and tables to visually demonstrate the results. Data analysis in this study therefore spanned a number of research paradigms, including the interpretive paradigm (Goddard and Melville, 2007), which recognises researchers can sometimes collects and interprets data subjectively and have considerable influence over the conclusions drawn.

Ethical Considerations

As with all studies, research must be conducted ethically both to ensure the researcher meets the standards expected within the academic field and to meet the needs and expectations of the respondents (Denzin and Lincoln, 2000). It is possible that data collected in an ethical way will have greater reliability, since there is less chance the respondents will be answering under pressure or resenting the collection process (Bryman, 2008).

Limitations

This study encountered a number of potential limitations. For example, the accuracy of a study’s findings is often improved by the amount of data collected.

Research Implications

This research is investigating the attitudes of teachers towards the integration of technology in their classrooms through the use of questionnaires and interviews.

This study has therefore gathered first hand primary data, which means it will useful to bridge the gaps within this academic field.

Results and Analysis

This chapter presents the data collected in the study. The first part presents and analyses the quantitative findings and the results are displayed visually in graphs. Of the 28 quantitative respondents, six were aged between 18 – 25, 13 were between 25 – 33, five between 35 – 45 and four between 45 – 60 (Question 1). The vast majority (96%) had degrees and only one held a Doctorate (Question 2). Although the research sought to interview respondents from an equal number of public, private and religious schools, participants from each type of school numbered 10, 7 and 9 respectively (Question 4). The second part of this chapter presents the qualitative findings. There were two qualitative respondents, referred to in the study as T1 and T2. T1 was under 25 years old with a graduate degree and taught at a public school. T2 worked at a religious school, was aged between 35-45 years and held a Master's degree.

Quantitative Data

The questionnaire divided the questions into various sections. The ‘About You’ (Section A) and ‘About Your School’ (Section B) parts gathered preliminary data about each participant (Fig. 1).

Section A: About you

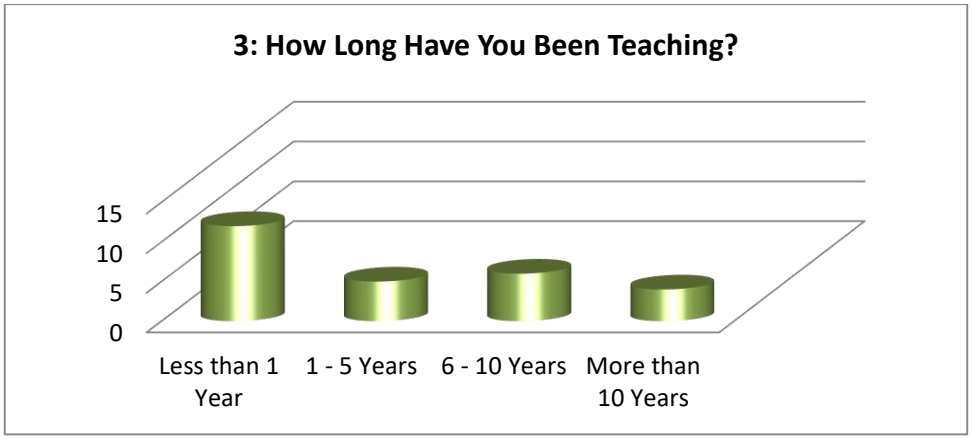

Figure (1)

The third section, 'Your Experience and Proficiency' (Section C) examined issues concerning competency, experience and training, from both the perspective of formal education as well as their self-perceptions (Fig. 2a,b,c,).

Section C: Your experience and proficiency

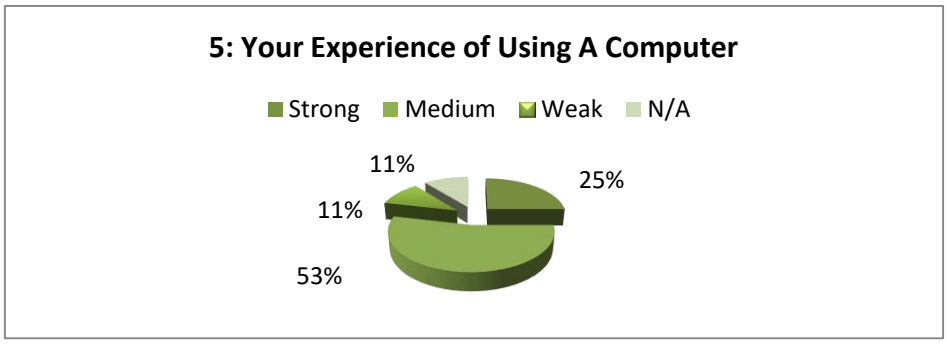

Figure 2a

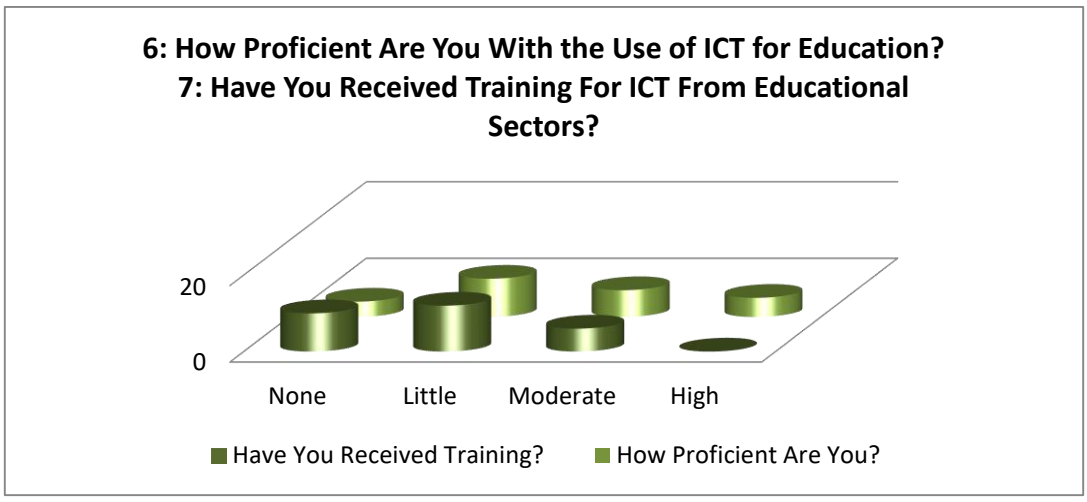

Figure 2b

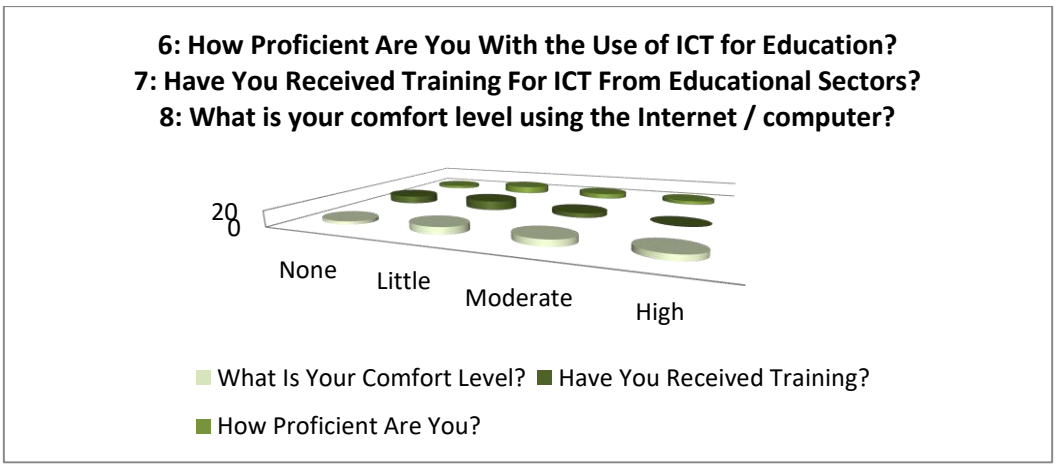

Figure 2c

In Section C, the category N/A was used (Fig 2a) where teachers did not have any experience using a computer at all. The questions “How proficient are you with the use of ICT for educational purposes?” and “Have you received training for ICT from educational sectors?” were posed as separate questions although it was useful to compare these statistics together (Fig 2b), to examine the relationship between them. Comparing the data from these questions reveals there is a correlation between training and proficiency. While some considered themselves as expert technology users, even though none reported receiving high training, the overall results suggest a greater amount of training will result in higher reported feelings of proficiency, at least at the lower levels of expertise. It is important to mention it was not possible to verify teachers' actual expertise (for example by asking them to complete a test), as compared to the levels of expertise they reported. The researcher also considered it useful to test the relationship between proficienty, training, and teacher’s self-reported levels of comfort when using technology (Fig 2c). The ‘Frequency of Technology Use’ Section (D) gathered insight into the amount o f time teachers were spending with different devices (Fig 3a,b,c,d,e,f).

Section D: Frequency of digital technology use

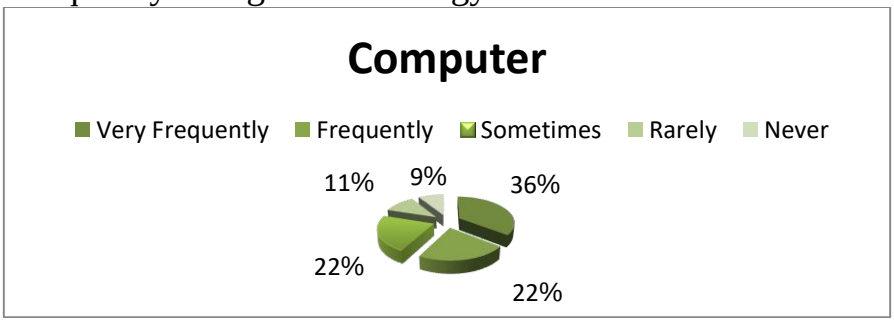

Figure 3a

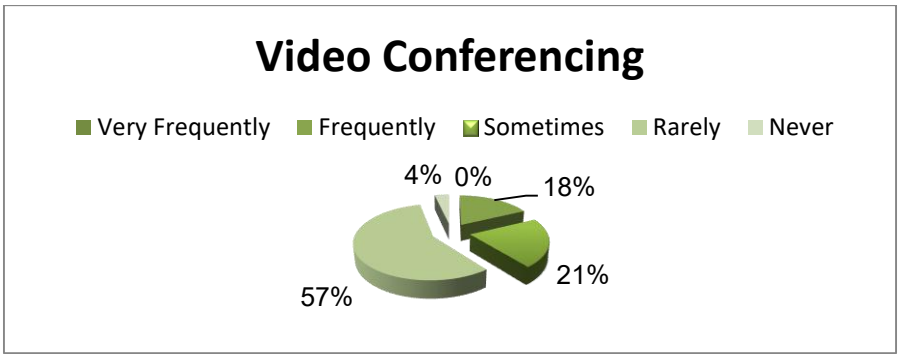

Figure 3b

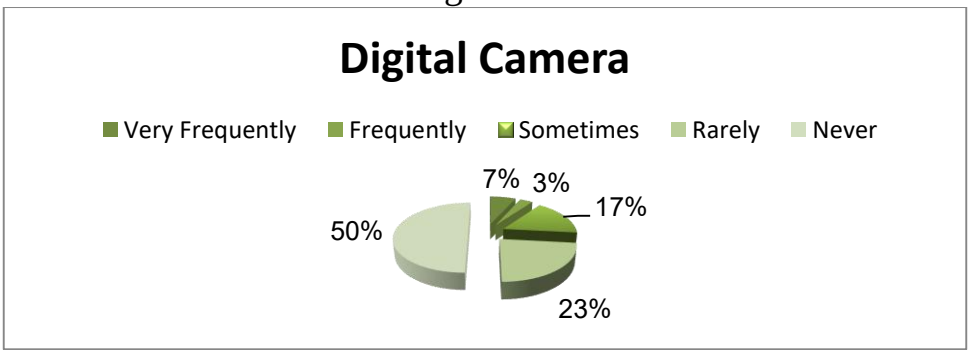

Figure 3c

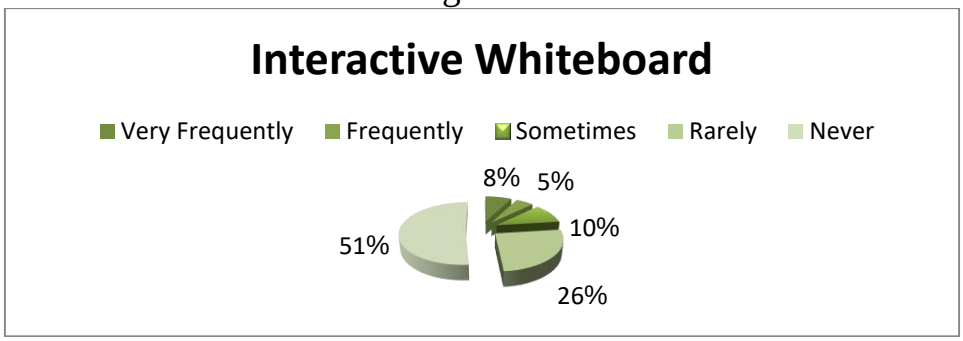

Figure 3d

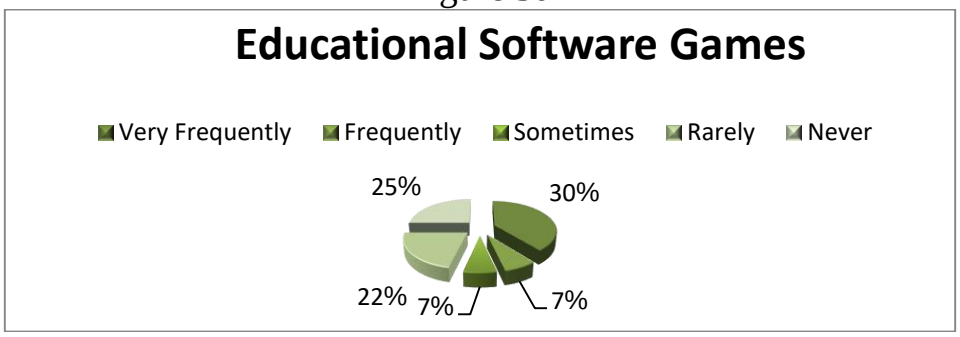

Figure 3e

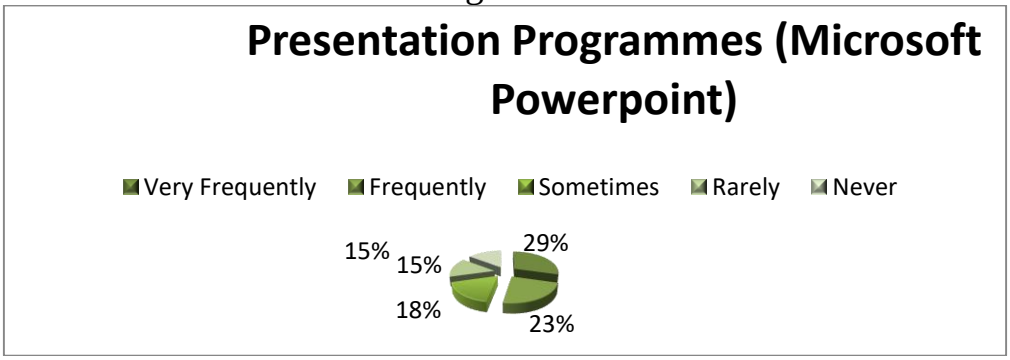

Figure 3f

The questions in Section D sought to measure the frequency with which several specific digital tools were being used. The question asked, 'How often to you use..'' and was followed by various different technology options. The results are displayed in Figures 3a,b,c,d,e,f. Nearly half of teachers were using computers frequently or very frequently in class (Figure 3a). However, some were still not using computers at all and 28% reported using them rarely or never. Nearly 60% of teachers were using video-conferencing rarely only and none were using it very frequently (Figure 3b). Similarly, nearly 75% of teachers were using digital cameras rarely or never (Figure 3c). Also just 8% were using an interactive whiteboard very frequently and about 5%1 never used interactive whighteboard (Figure 3d). The largest percentage was 36%, which represented very frequent use of computer. A quarter of the sample never used educational software games although 30% were using them very frequently (Figure 3e).

SECTION E (Table 2): ABOUT DIGITAL TECHNOLOGY

Question Number	Strongly Agree	Agree	Unsure	Disagree	Strongly Disagree
1: Technology is an important tool for teaching children.	7	16	3	2	0
2: Using computer makes teachers feel more competent	9	11	3	2	0
3:Computer promotes the development of communication skills (writing, reading, speaking).	4	16	4	2	2
4: Using ICT makes classroom management more difficult	4	5	2	11	5
5: Using ICT Is effective in classroom because I believe I can implement it successfully.	14	5	5	2	3
6: Using Technology enhances my professional development.	6	8	10	4	0
7: Computers motivate	7	17	3	1	0

children to get more involved in learning activities.					
8: I think it is a good idea to introduce ICT in the classroom.	8	16	4	0	1
9: It is comfortable in using digital technology while you teaching.	2	8	13	2	3
10: Ministry of Education gives teachers the appropriate training in using technology.	1	2	14	9	2
11: Integrating technology could reduce the number of teachers employed in the future.	0	2	5	2	18
12: Using computer limits my choices of instructional materials.	4	12	2	6	3
13: Using technology requires extra time to plan learning activities.	4	13	3	7	1
14: There is enough encouragement from head teacher to use technology in classroom.	4	16	6	3	0
15: I believe that technology enhances children's learning.	14	9	4	1	0
16: We have enough technical support.	0	5	3	12	6
17: There are enough computers in the classroom.	0	3	13	9	3
18: It is difficult to prepare a lesson using ICT.	2	4	2	26	3
19: The use of computer in teaching is complicated.	3	5	2	14	4
20: Computer is not useful as a teaching tool in the classroom	1	0	4	5	18
21: Lack of time is a barrier to using technology in the classroom	0	6	3	17	2
22: Lack of resources is a barrier to using technology in the classroom	19	3	3	2	1

23: Lack of training programme experience is a barrier to using technology in the classroom	11	17	0	0	0
24: Technology helps me to make difficult ideas easy for children to understand.	12	10	5	1	0

In Section E, 'About Digital Technology', there was a list of 24 items asking participants to rate how far they agreed with a particular statement. The number of teachers who ticked each option is represented in Table 2. For example, out of 28 teachers, seven strongly agreed that technology is an important tool for teaching children. Most teachers thought technology is an important teaching tool (1, 20) enhances learning (15), helps make difficult ideas easier to understand (24) and promotes the development of communication skills (3). Twenty four out of 28 agreed or strongly agreed with the statement that "computers motivate children to get more involved in learning activities" (7) and 24 out of 28 agreed or strongly agreed that it was a good idea to introduce technology in class (8).

Qualitative Data Analysis

The results of the qualitative interviews were analysed separately to the quantitative results. In response to Question 1, T1 stated she did consider ICT was important. The researcher then used the flexibility of the semi-structured approach to explore why she thought that was the case. The teacher responded it was because she thought it would help prepare children for higher education, which is predominantly taught with computers. This was an issue unexplored by the present research although it indicates that ICT is already being adopted to a large extent in later academic stages. T1 reiterated this at another point during the interview. T2 agreed ICT was important and suggested it was because ICT made more interesting for both teachers and pupils. T2 reiterated this point in her answer to Question 4 (discussed below), saying she thought technology could help to make lessons easier to understand. This is interesting since it may

be that the enthusiasm of teachers towards ICT influences the way they apply it and ultimately the experiences of the pupils. This was explored to some degree since teachers' proficiency and perceptions of competence were measured. Both qualitative and quantitative respondents indicated a lack of training was an issue and operating as a barrier. However, there may be other factors involved in the levels of interest experienced by teachers and these could be explored by further research. In response to the question concerning the provision of training by the Ministry of Education, T1 responded she would have liked the government to provide more technology to support their teaching processes. This raises the question of how technology may be used to assist with the delivery of teaching, as well as for its uses within the educational administrative framework, such as for staff communications and handling of material. This topic was not explored deeply by this study since the focus was primarily on the use of technology in classrooms. However, T1's response suggested there was a problem with the amount of technology available and indicated there was a need to invest more in equipment and software. As T1 suggested, this implies there will be a need for adequate training as the new opportunities become available. T2 considered the government was providing support but that it was slow and insufficient to realise their objectives.

Discussion

This chapter will discuss the findings as presented in the previous Results and Analysis chapter. Issues are discussed according to the research questions, yet also with a focuses on a number of key areas of concern to the researcher, namely, the relationship between the teachers level of proficiency and their attitude towards ICT; the ability of ICT to promote teachers' performance and children's learning; whether or not a lack of experience, resources or training is preventing teachers from using ICT and whether teachers are receiving enough support from the KSA government and their managers.

Conclusion

This chapter presents the conclusions of the study and considers various final points, including the limitations encountered when completing the resarch, implications materialising and suggestions for future research to follow the present findings.

Limitations

Although the study was performed effectively and according to the methods selected, it may have been more effective to visit schools and speak to the participants in person. This was recognised as a limitation at the beginning of the research, which could not practically be overcome. It would also have been beneficial to interview a greater number of teachers in order to follow up some of the issues raised by T1 and T2. It is suggested this could have distorted the results since the survey was conducted on a relatively small scale. A study that sought to measure regional differences would need to be conducted using a larger sample than was permitted by the present timeframe, in order for a picture of each region as a separate variable to be gathered.

Implications of the Study

Although many teachers confirmed they considered standards were not being met by the Ministry of Education, this is in many ways accepted in mainstream literature as an issue for KSA. With its long and well-established history of deference to Islam, it is to be expected that the focus of its educational policies have been the Qur’an and making sure materials conform to the required standards. This is perhaps why a centralised system is more accepted in KSA, as an Islamic state, to make sure teachers do not teach pupils material that is inconsistent with Islam. This is a forceful argument and many would agree KSA children should not miss out on the beneficial opportunities being enjoyed in other jurisdictions. This also raises questions about the Islamic basis of education and the degree to which other subjects should be included or focused upon. This research overlooks this issue somewhat because technological

applications may be regarded as a science and Islam has a well-established history of compatibility in this respect. However, the point is important, especially since the Internet provides access to resources from around the world. The qualitative respondents explained that significant timesaving could be achieved if teachers had more access to a computer, since they would be able to undertake training, mark homework or create teaching materials etc.

Conclusion

The present researcher enjoyed the process of data collection and considers the findings meet a gap in the available literature concerning technology for early years classrooms in KSA. The qualitative findings revealed information that was not investigated in the quantitative questionnaire, since the questionnaire only included standard questions.

Appendix

Sample Interview

ABOUT YOU

1. What is your name?
2. What age group do you fall under? (Less than 25 years / 25-35years / 35-45 years/ Above 45 years)?
3. What is your Qualification? (Degree / Masters / Doctorate / Other)?

ABOUT YOUR SCHOOL

4. What is the name of your school?
5. What is your school? (Public / Private / Religious)

ABOUT DIGITAL TECHNOLOGY

6. Do you think it's a good idea to introduce ICT in the school?
7. Does the Ministry of Education gives teachers the appropriate training in using technology?
8. Do you support/ motivate teachers in your school to use digital technology? How ?
9. Do you think integrating technology could reduce the number of teachers employed in the future? Why?
10. What are the factors / barriers that you thinks prevent teachers from using technology in their classrooms?
11. What do you think the effects of using technology will be on the teaching process?

Sample Questionnaire

I am conducting a research on the use of digital technology in the schools of Saudi Arabia as a part of my Master's Degree programme. This questionnaire consists of some questions which will help me to understand the level and extent to which the digital technology is used in the schools and how can it be improved.

SECTION A: ABOUT YOU

1. What age group do you fall under?

☐ 18-25 ☐ 25-35 ☐ 35-45 ☐ 45-60

2. Qualifications:

☐ Degree ☐ Masters ☐ Doctorate ☐ Other (*Please Specify*)……

3. How long have you been teaching?

☐ Less than one year

☐ 1-5 years

☐ 6-10 years

☐ more than 10 years

SECTION B: ABOUT YOUR SCHOOL

Your school is (*Please tick as appropriate*):

☐ Public ☐ Private ☐ Religious

SECTION C: YOUR EXPERIENCE AND PROFICIENCY

4. Your experience of using Computer?

☐ Strong ☐ Medium ☐ Weak ☐ N/A

5. How proficient are you with the use of ICT for education use?

☐ None ☐ Little ☐ Moderate ☐ High

6. Have you received training for ICT from educational sectors?

☐ None ☐ Very little ☐ Some ☐ Strong training

8. What is your comfort level using the Internet / computer?

☐ Very good

☐Good

☐ Satisfactory

☐ Sufficient

☐ Unsatisfactory

9. What is your level of expertise in using computer for teaching childre?

(*Please tick as appropriate*)

☐ Beginner ☐ Intermediate ☐ Advanced ☐ Not Expert ☐ Expert

10. What is your level of expertise in using video-conferencing for teaching children?

(*Please tick as appropriate*)

☐ Beginner ☐ Intermediate ☐ Advanced ☐ Not Expert ☐ Expert

11. What is your level of expertise in using digital camera? (*Please tick as appropriate*)

☐ Beginner ☐ Intermediate ☐ Advanced ☐ Not Expert ☐ Expert

12. What is your level of expertise in using interactive whiteboard for teaching children?

(*Please tick as appropriate*)

☐ Beginner ☐ Intermediate ☐ Advanced ☐ Not Expert ☐ Expert

13. What is your level of expertise in using educational software games for teaching children? (*Please tick as appropriate*)

☐ Beginner ☐ Intermediate ☐ Advanced ☐ Not Expert

☐ Expert

14. What is your level of expertise in using presentation programs (Microsoft power point) for teaching children? (*Please tick as appropriate*)

☐ Beginner ☐ Intermediate ☐ Advanced ☐ Not Expert

☐ Expert

SECTION D: FREQUENCT OF DIGITAL TECHNOLOGY USE

1. How often do you use the computer in teaching in the classroom? (*Please tick as appropriate*)

☐ Very frequently

☐ Frequently

☐ Sometimes

☐ Rarely

☐ Never

2. How often do you use video-conferencing in teaching/classroom? (Please tick the appropriate)

☐ Very frequently

☐ Frequently

☐ Sometimes

☐ Rarely

☐ Never

3. How often do you use a digital camera in the classroom? (Please tick the appropriate)

☐ Very frequently

☐ Frequently

☐ Sometimes

☐ Rarely

☐ Never

4. How often do you use interactive whiteboard in teaching in the classroom? (Please tick the appropriate)

☐ Very frequently

☐ Frequently

☐ Sometimes

☐ Rarely

☐ Never

5. How often do you use educational software games in teaching in the classroom?

(Please tick the appropriate)

☐ Very frequently

☐ Frequently

☐ Sometimes

☐ Rarely

☐ Never

6. How often do you use presentation programs (Microsoft power point) in teaching in the classroom? (Please tick the appropriate)

☐ Very frequently

☐ Frequently

☐ Sometimes

☐ Rarely

☐ Never

SECTION E: OPINIONS ABOUT DIGITAL TECHNOLOGY

In what extend do you agree or disagree with the following statement?

	Statement	Str on gly ag ree	Ag ree	Un su	Di sa	Str
		Please circle one only for each statement				
1	Technology is an important tool for teaching children.	1	2	3	4	5
2	Using computer makes teachers feel more	1	2	3	4	5
3	Computer promotes the development of	1	2	3	4	5
4	Using ICT makes classroom management more difficult.	1	2	3	4	5
5	Is effective because I believe I can implement it	1	2	3	4	5
6	Technology enhances my professional development.	1	2	3	4	5
7	Computers motivates children to get more	1	2	3	4	5
8	I think it is a good idea to introduce ICT in the	1	2	3	4	5
9	I am comfortable in using digital technology while you	1	2	3	4	5
10	Ministry of Education gives teachers the appropriate	1	2	3	4	5
11	Integrating technology could reduce the number of	1	2	3	4	5
12	Using computer limits my choices of instructional	1	2	3	4	5
13	Using technology requires extra time to plan learning	1	2	3	4	5
14	There is enough encouragement from head	1	2	3	4	5
15	I believe that technology enhance children learning.	1	2	3	4	5
16	We have enough technical support.	1	2	3	4	5
17	In our school we have a good computer lab.	1	2	3	4	5
18	There are enough computers in the classroom	1	2	3	4	5
19	It is difficult to prepare a lesson using ICT	1	2	3	4	5
20	The use of computers in teaching is complicated	1	2	3	4	5

21	Computer is not useful as a teaching tool in classroom	1	2	3	4	5
22	Lack of time is a barrier to using technology in the	1	2	3	4	5
23	Lack of resources is a barrier of using technology	1	2	3	4	5
24	Lack of training program/ experience is a barrier to	1	2	3	4	5
25	I am very comfortable using a computer	1	2	3	4	5
26	Technology helps me to make difficult ideas easy for	1	2	3	4	5

Letter for manager at schools

To Managers in
Al-Jubail School
Date: 01/07/2012

Dear Madam,

RE: SEEKING TO UNDERTAKE MY POST GRADUATE RESEARCH IN YOUR SCHOOL.

I am a Post Graduate Student in the Department of Education, at Hull University. One of the conditions for completing my studies is that I conduct a research project on a relevant topic. I intend to conduct my research on teachers' attitudes towards use of technology in their classrooms in Saudi Arabia. I therefore have to collect primary data from an institution of academic learning. I would like you to allow me to conduct my research at your school. I am confident of collecting much of the data that I require from your school, and therefore your institution is relevant to the success of this research. I intend to abide by your school policies and the policies stipulated by my University. I can offer my assurance that I shall only ask questions that are relevant to my research topic, that I will not jeopardize your school in any way and that any information collected shall be used for no other purpose, nor distributed to anyone else other than for this research. The questionnaire will take approximately 10 minutes to complete. I therefore seek your permission to conduct this research, because it will help me gain a greater understanding of the issues that relate to the use of ICT in the classroom. I look forward to your most considerate response. If you require any further information about the questionnaire or the research, please do not hesitate to contact me or my supervisor.

Yours faithfully,

Samira Alaklabi
Email: S.Al-Aklabi@2011.hull.ac.uk
Supervisor **Dr. Ioanna Palaiologou**
Email: I.Palaiologou@hull.ac.uk

Letter for teachers at schools

To Teachers in
Al-Jubail School
Date: 01/07/2012
Dear Madam,

RE: SEEKING TO UNDERTAKE MY POST GRADUATE RESEARCH IN YOUR SCHOOL.

I am a Post Graduate Student in the Department of Education, at Hull University. One of the conditions for completing my studies is that I conduct a research project on a relevant topic. I intend to conduct my research on teachers' attitude towards using technology in their classrooms in Saudi Arabia. I therefore have to collect primary data from members of staff in an institution of academic learning. I would like you to allow me your input on this project as one of my main respondents. This will involve asking questions to you as a member of staff in the institution. The questions will mainly relate to aspects of your work on the basis of my research topic given above. The questionnaire will take approximately 10 minutes to complete. Your situation of being a teacher is will provide me with relevant data that will go a long way towards my research being successful. I have permission from my University to seek data from the relevant respondents and, having identified you as a potential respondent, I have decided to write to you. Your participation is voluntary and you can withdraw at any stage. However, it is preferable if you are able to fully participate. I therefore look forward to your most considerate response and I further look forward to working with you for the duration of this research. If you require any further information about the questionnaire or the research, please do not hesitate to contact me or my supervisor.
Yours faithfully,

Samira Alaklabi
Email: S.Al-Aklabi@2011.hull.ac.uk
Supervisor **Dr. Ioanna Palaiologou**
Email: I.Palaiologou@hull.ac.uk

Sample of interview in Arabic

أسئلة المـقابلـــة

اسئلة عامة

١٢. ماهو اسمك؟
١٣. ما الفئة العمرية هل تندرج تحتها (أقل من ٢٥ سنة / سنوات ٢٥-٣٥ / 35-45 / years / فوق ٤٥ سنة) ؟
١٤. ما هو مؤهلك ؟ (كلية / الماجستير / الدكتوراه / أخرى) ؟

اسئلة عن مدرستك؟

ما هو اسم مدرستك؟

١٥. ما هي مدرستيك (عامة / خاصة / الدينية) ؟

اسئلة عن استخدام التكنولوجيا الرقمية؟

١٦. هل تعتقد انها فكرة جيدة لإدخال تكنولوجيا المعلومات والاتصالات في المدارس؟

١٧. هل وزارة التربية والتعليم تعطي التدريب المناسب على استخدام التكنولوجيا للمعلمين؟

١٨. هل تؤيد / تحفيز المعلمين في المدرسة لاستخدام التكنولوجيا الرقمية ؟ كيف؟

١٩. هل تعتقد دمج التكنولوجيا يمكن أن تقلل عدد المعلمين العاملين في المستقبل ؟ لماذا؟

٢٠. ما هي العوامل / الحواجز التي يعتقد أنه يمنع المعلمين من استخدام التكنولوجيا في الفصول الدراسية؟

٢١. ما هي الآثار من استخدام التكنولوجيا في رأيك ستكون على عملية التدريس؟

Sample of questionnaire in Arabic

أسئلة الاستبيان

أنا اجري بحث على استخدام التكنولوجيا الرقمية في مدارس المملكة العربية السعودية كجزء من برنامج الماجستير. يتألف هذا الاستبيان من بعض الأسئلة التي سوف تساعدني على فهم مستوى ومدى استخدام التكنولوجيا الرقمية في المدارس وكيف يمكن أن يتم تحسينها.

القسم A: اسئلة عنك

٧. ما الفئة العمرية التي تندرج تحتها ؟

☐ 18-25 ☐ 25-35 ☐ 35-45 ☐ 45-60

٨. المؤهلات الاكاديمية؟

☐كلية ☐ماجستير ☐دكتوراه

اخرى.....

٩. متى وأنت تدريس؟

☐ سنة واحده او اقل

☐ ١-٥ سنوات

☐ ٦-١٠ سنوات

☐ اكثر من ١٠ سنوات

القسم B: اسئلة عن مدرستك

١٠. مدرستك هي (يرجى وضع علامة حسب الاقتضاء) :

☐حكومية ☐ خاصة ☐ دينية

القسم C: اسئلة عن خبراتك ومهاراتك

١١. تجربتك في استخدام الكمبيوتر؟

☐ ضعيفة ☐ متوسطة ☐قوية ☐ لا اعرف

١٢. كيفك مع استخدام تكنولوجيا المعلومات والاتصالات في التعليم؟

☐ ضعيفة ☐ متوسطة ☐قوية ☐ لا اعرف

١٣. هل تلقيت التدريب في استخدام تكنولوجيا المعلومات والاتصالات من القطاعات التعليمية؟

☐ ضعيفة ☐ متوسطة ☐قوية ☐ لا اعرف

١٤. ما هو مستوى راحتك في استخدام الإنترنت / الكمبيوتر؟

☐ جيد جدا ☐ جيده ☐ مرضية ☐ كافية ☐ غير كافية

٢٢. ما هو مستوى خبرتك في استخدام الكمبيوتر لتعليم الاطفال؟

(يرجى وضع علامة حسب الاقتضاء)

☐ لااعرف ☐ميتداء ☐متوسطه ☐عالية ☐ خبير

٢٣. ما هو مستوى خبرتك في استخدام مؤتمرات الفيديو لتعليم الأطفال؟

☐ لااعرف ☐ميتداء ☐متوسطه ☐عالية ☐ خبير

٢٤. ما هو مستوى خبرتك في استخدام الكاميرا الرقمية ؟ (يرجى وضع علامة حسب الاقتضاء)

☐ لااعرف ☐ميتداء ☐متوسطه ☐عالية ☐ خبير

٢٥. ما هو مستواك من الخبرة في استخدام ألواح الكتابة التفاعلية لتعليم الأطفال؟

☐ لااعرف ☐ميتداء ☐متوسطه ☐عالية ☐ خبير

٢٦. ما هو مستوى الخبرة في استخدام برامج الألعاب التعليمية للأطفال التدريس ؟ (يرجى وضع علامة حسب الاقتضاء)

☐ لااعرف ☐ميتداء ☐متوسطه ☐عالية ☐ خبير

٢٧. ما هو مستوى الخبرة في استخدام برنامج العرض (مايكروسوفت باور بوينت) لتعليم الأطفال؟ (يرجى وضع علامة حسب الاقتضاء)

☐ لااعرف ☐ميتداء ☐متوسطه ☐عالية ☐ خبير

القسم D: تكرارات استخدام التكنولوجيا

٧. كيف وغالبا ما كنت تستخدم جهاز الكمبيوتر في التدريس في الفصول الدراسية؟ (يرجى وضع علامة حسب الاقتضاء)

☐ كثيرا جدا☐ أجوبة☐ أحيانا☐ نادرا☐ أبدا

٨. كيف وغالبا ما كنت تستخدم الفيديو كونفرنس في التعليم / الفصول الدراسية؟ (يرجى وضع علامة في مناسبة)

☐ كثيرا جدا☐ أجوبة☐ أحيانا☐ نادرا☐ أبدا

٩. كيف وغالبا ما كنت تستخدم كاميرا رقمية في الفصول الدراسية؟ (يرجى وضع علامة في مناسبة)

☐ كثيرا جدا☐ أجوبة☐ أحيانا☐ نادرا☐ أبدا

١٠. كيف وغالبا ما كنت تستخدم ألواح الكتابة التفاعلية في التدريس في الفصول الدراسية؟ (يرجى وضع علامة في مناسبة)

☐ كثيرا جدا☐ أجوبة☐ أحيانا☐ نادرا☐ أبدا

١١. كيف وغالبا ما كنت تستخدم ألعاب البرمجيات التعليمية في التدريس في الفصول الدراسية؟ (يرجى وضع علامة في مناسبة)

☐ كثيرا جدا☐ أجوبة☐ أحيانا☐ نادرا☐ أبدا

١٢. كيف وغالبا ما كنت تستخدم برنامج العرض (مايكروسوفت باور بوينت) في التدريس في الفصول الدراسية؟ (يرجى وضع علامة في مناسبة)

☐ كثيرا جدا☐ أجوبة☐ أحيانا☐ نادرا☐ أبدا

القسم E : اراء حول استخدام التكنولوجيا

الى أي مدى توافق او لا توافق مع العبارات التالية:

	العبارات	اوافق بشدة	اوافق	غير متأكدة	لا اوافق	لا اوافق
١-	تكنولوجيا هو أداة مهمة لتعليم الأطفال.	١	٢	٣	٤	٥

٢-	استخدام الكمبيوتر يجعل المعلمين يشعرون أكثر كفاءة	١	٢	٣	٤	٥
٣-	الكمبيوتر يعزز تطوير مهارات الاتصال مثل الكتابة والقراءة والتحدث	١	٢	٣	٤	٥
٤-	استخدام تكنولوجيا المعلومات والاتصالات يجعل إدارة الصف أكثر صعوبة	١	٢	٣	٤	٥
٥-	التكنولوجيا فعالة لأنني أعتقد أنني يمكن تنفيذه بنجاح.	١	٢	٣	٤	٥
٦-	تكنولوجيا يعزز التنمية المهنية لدي.	١	٢	٣	٤	٥
٧-	كمبيوتر يحفز الأطفال للانخراط بشكل أكبر في أنشطة التعلم.	١	٢	٣	٤	٥
٨-	هل تعتقد انها فكرة جيدة لإدخال تكنولوجيا المعلومات والاتصالات في الفصول الدراسية	١	٢	٣	٤	٥
٩-	غير مرتاحة في استخدام التكنولوجيا الرقمية أثناء التدريس.	١	٢	٣	٤	٥
١٠-	وزارة التربية والتعليم المعلمين يعطي التدريب المناسب على استخدام التكنولوجيا	١	٢	٣	٤	٥
١١-	تكنولوجيا تقليل عدد المعلمين العاملين في المستقبل.	١	٢	٣	٤	٥
١٢-	الكمبيوتر يحد من خياراتي في استخدام المواد التعليمية اخرى.	١	٢	٣	٤	٥
١٣-	استخدام التكنولوجيا يتطلب وقتا إضافيا للتخطيط أنشطة التعلم.	١	٢	٣	٤	٥
١٤-	هناك ما يكفي من التشجيع مدير المدرسة لاستخدام التكنولوجيا في الفصول الدراسية	١	٢	٣	٤	٥
١٥-	أنا أعتقد أن التكنولوجيا تعزيز تعليم الأطفال.	١	٢	٣	٤	٥
١٦-	لدينا ما يكفي من الدعم التقني.	١	٢	٣	٤	٥
١٧-	وفي مدرستنا لدينا اجهزه كمبيوتر جيده.	١	٢	٣	٤	٥

١٨-	هناك ما يكفي من أجهزة الكمبيوتر في الفصول الدراسية.	١	٢	٣	٤	٥
١٩-	من الصعب أن اعداد درسا باستخدام تكنولوجيا المعلومات والاتصالات.	١	٢	٣	٤	٥
٢٠-	استخدام الحاسوب في تدريس معقده.	١	٢	٣	٤	٥
٢١-	الكمبيوتر ليست مفيدة كأداة تعليمية في الفصول الدراسية.	١	٢	٣	٤	٥
٢٢-	ضيق الوقت يشكل عائقا من استخدام التكنولوجيا في الفصول الدراسية	١	٢	٣	٤	٥
٢٣-	عدم وجود موارد يشكل عائقا من استخدام التكنولوجيا في الفصول الدراسية.	١	٢	٣	٤	٥
٢٤-	عدم وجود خبرة تدريبية / البرنامج عبارة عن حاجز من استخدام التكنولوجيا في الفصول الدراسي.	١	٢	٣	٤	٥
٢٥-	أنا مرتاح جدا باستخدام جهاز كمبيوتر.	١	٢	٣	٤	٥
٢٦-	التكنولوجيا مساعدتي لجعل فكرة صعبة للأطفال سهلة الفهم.	١	٢	٣	٤	٥