Difficulties Facing Teachers in Using Interactive Whiteboards in Their Classes

Dr. Ibrahim Mohamed Al-Faki
Associate Professor
English Language Institute
King Abdul Aziz University – KSA
Wadi El-Neel University – Sudan

Abdelmoneim Hassan Adam Khamis
Al-Aqasa School, Jeddah, KSA

Abstract

This study investigates the difficulties that teachers experience when they use the interactive whiteboard in English language classes. Although, the interactive whiteboard is easy to use, difficulties occur when teachers use it. While ICT presents new challenges for teachers, it also offers great opportunities for teacher education. ICT's media can improve training through providing access to educational resources, breaking the traditional isolation of teachers, and enabling individualized training opportunities. There are a few research studies, which investigate the drawbacks of IWB. This study focuses on the difficulties, which teachers face in the classrooms in the Saudi contexts. Those difficulties are categorized into four groups. These are: teachers', school administrations', technical support's and students' factors. Each factor entails a number of challenges.. The findings of the study have revealed that there are many challenges that teachers face when using the interactive whiteboard. Those challenges interact together to hinder IWB integration into teaching and learning.

Keywords: ICT, IWB, ELT, teaching performance, learning enhancement, educational aids

1.0 Introduction

It is certainly true that Educational Technology has greatly changed education. It has morphed how teachers teach and how learners learn. Classroom has been equipped with tools and devices to enhance the teaching and learning environment. There is another kind of classroom, which its walls have disappeared. These changes do not change the fundamental learning approaches, but they have changed the way people do things and how they see them. The traditional view of the learning process has been shifted to a new view, which incorporates hi-tech as a tool for teaching and learning processes.

Educational Technology refers to hardware and software, which are being used in educational setting to enhance the teaching and learning environment. Interactive Whiteboard (IWB) is one of the technologies that transform classroom activities and teachers' role. Chalkboard has been developed into interactive electronic board. A learner can see and feel his/her achievement at the same time. By finger-touch, a user can write, draw, drag an object, manipulate a text or shape something. It is true that IWB is a teaching tool and learning resource at the same time. A teacher can bring the outside world inside the classroom through the Internet.

However, many teachers who are incompetent in computer knowledge face some challenges. In many schools now, teachers have Interactive Whiteboards (IWBs) inside the classrooms, yet they are doing '*chalk-and-talk thing*' (*Walker 2002a, p. 2*) and pen-paper based assessment. They stand at the front lecturing instead of letting the technology do the job.

The learners of today are more familiar with technology than their teachers are. They are growing up in today's world that relies heavily on technology. It has become their first language (L1) in a sense of entertainments such as computer, I pads, Tablets, Ipods, etc…; video and play-station games. Learners have become preoccupied with these high-tech inventions for entertainment to spend their time, so they learn how to use these technologies unconsciously. The use of the IWB is a boon, but when any new piece of technology enters the educational setting, it is important to look at how it will be used for teaching and learning at the same time. In fact, technology imposes some challenges. Those difficulties make the challenge for incompetent teachers even more difficult.

Charalambos Vrasidas & Gene V. Glass (2005, p. 5) think that "*old curricula and pedagogical approaches should be reformed, and if necessary replaced, to take advantage of the affordances of the new media.*"

1.1 Statement of the Problem

Many old teachers had neither used ICT- based learning strategies as learners themselves, nor as trainees. They have no previous experiences in teaching with high technology such as Interactive Whiteboards (IWBs). The challenge for these teachers is even more difficult. This is due to the rapid change of technological context, in which classroom activities occur. English language teachers face difficulties while using the Interactive Whiteboards. They experience difficulties in integrating it into teaching and learning of English language. Teachers need practical answers to the increasing challenges imposed by new technologies such as IWB to the teaching profession.

1.2 Aims of the Study

This study aims to:

1. Identify the challenges which face teachers when using Smart Board in teaching English language.
2. Raise teachers' awareness of today's learners, ***Digital Learners***, who speak a different language.
3. Highlight the need for a strong pedagogical support as well as technical support.

1.3 Questions of the Study

1. What computer skills do teachers have?
2. What type of professional training do teachers have in using the IWB?
3. What type of technical support do teachers have?
4. How do teachers and learners co-operate to use the IWB?
5. What problems do teachers face when they use the IWB in English language classes?

1.4 Hypotheses

1. Most teachers lack computer competency.
2. There is a lack of pedagogical in-service training in using IWB.
3. Ongoing technical support is insufficient.
4. Learners know technology better than teachers do.
5. Teachers face several types of difficulties when they use the IWB in teaching English language.

1.5 Significance of the Study

The findings will hopefully help school teachers to seek to understand technology and the important role of ICT skills for educational and learning English language in particular. Teachers, inspectors, syllabus designers, and policy makers will find relevant points to their decisions.

1.6 Research Methodology

The instrument of data collection for the research was a questionnaire consisting of twenty-five statement besides the researcher's observation and his own experience. The subjects were chosen purposively from Jeddah Schools' English language teachers. The researcher conducted a pilot survey and used statistical techniques through which validity and reliability of the questionnaire were verified. The overall research method used was the descriptive analytic method.

1.7 Delimitation of the Study

The study was conducted in Jeddah Schools, Jeddah, KSA. Jeddah Schools include elementary, intermediate, and secondary schools. The schools are more than 300 schools. Not all schools in Jeddah are equipped with Interactive Whiteboards, data projectors or computers. Some however are. Employees of different nationalities work as English language teachers in the schools. The research was conducted in the school year (2013).

2.0 Literature Review

2.1 SMART Board or Interactive Whiteboard (IWB)

Interactive Whiteboard (IWB) is a large touch-sensitive display unit, connected to digital data projector and computer. IWB functions as interactive board, computer screen (monitor), and mouse at the same time. Users can change monitor to whiteboard and vice versa (vs.), or use them at the same time. The Users can use their finger, special electronic pen (stylus), pointer or a pen to operate the board and/or control computer icons.

All the works, which would be done on IWB, could be saved and revisited for revision, warm up etc., evens the handwriting of the teacher's and/or learners' could be stored and are accessible at any time.

Many people called it Smart Board because SMART Technologies Company was a pioneer provider to the education sector. The first SMART Board was introduced in 1991. It was used in business presentation. Nowadays, it is used in classrooms, lectures halls, and language labs. In 1992 Microsoft Company took interest in the idea and became a minority investor in the IWBs and other collaboration tools such as interactive pen display, interactive digital signage, wireless slates, multimedia cabinets and software. (Schut.2007)

There are several types of IWBs versions because of the development of software and manufactures. According to design, there are two kinds of Interactive Whiteboards (IWBs) :

1. ***Front projection board***
2. ***Rear projection board***

The former works with an existing data projector and computer. The IWBs are always fixed to classroom walls while the data projector is hooked to the ceiling of the classroom.

2. 3 The Impact of Interactive Whiteboard

The review of literature on the introduction of interactive whiteboards (IWBs) in educational setting indicates that they have had a positive impact on teaching, learning and motivation, but the impact is not limited to these three areas.

2.4 Impact of IWB on teaching

Based on the British Educational communication and Technology Agency's (***Becta's***) analysis (2003), interactive whiteboard could have positive effects on teaching. Interactive Whiteboard as presentational tool help teachers in many ways. This assistance included increasing teaching time by allowing teachers to present more than one resource in the lesson and more efficiently (*Walker, 2003*). IWB: enables teachers to use face-to-face instructions and CALL environment at the same time.

1. Enables teachers to use web-based resources in whole-class teaching. They could bring the outside world inside classroom that is the Internet.
2. Enables linking objects which is an excellent way to make classes non-linear and to bring the Internet straight into English classes.
3. Enables teachers to use multimedia materials that help them to present and explain various concepts.
4. Enables teachers to save and print what is on the board, including notes made during the lesson, reducing duplication of efforts and facilitates revision for future use. (*Walker, 2002*).
5. Enables teachers to provide authentic materials and information through text, pictures, sounds, video segments, and animation.
6. Enhances learners' engagement more than conventional whole-class teaching does.
7. Encourages more varied, creative and seamless use of teaching materials.
8. Allows teachers to share and re-use materials, reducing workloads (*Glover & Miller, 2001*).
9. Inspires teachers to change their pedagogy and encouraging professional development (*Smith A., 1999*).
10. Inspires teachers to re-think their approach to teaching and learning. The flexibility and the scope for creative lesson planning are huge.
11. Supports classroom management with the ability to walk around the classroom, and be near learners; this could make a difference in learners behaviors.
12. Enables teachers and students to add amazing interactive charts to every presentation. IWB is finger driven-easy to use without worrying about the mouse.

2.5 Impact of IWB on learning

Interactive whiteboard affects learning in several ways, including raising the level of students' engagement in a classroom, motivating students and promoting enthusiasm for learning. Interactive whiteboard supports many different learning styles and is used in a variety of learning environments. Interactive whiteboard plays important roles in the learning process:

1. Interactive whiteboard facilitates learner's participation by enabling them to interact with materials on the board.

2. IWB provides more opportunities for interaction and discussion in the classroom, especially compared to other ICT.
3. Smart Board facilitates communication among learners, and between learners and their teacher.
4. Different learning styles could be accommodated, as teachers could call on a variety of resources to suit particular needs.
5. IWB captures learners' attention and encourages the involvement of learners in the subject.
6. Learning techniques involves visual rather than verbal instruction. Learners are able to see their work on the board.
7. IWB enables teachers to mix face-to-face interaction and e-learning platform – to create a rich learning environment.
8. IWB contributes to cognitive and conceptual developments of the learners.

2.6 Impact of IWB on motivation

Improved motivation was seen as a key advantage of interactive whiteboard. Motivation in the context of the classroom is measured by a learner's drive to participate in Smart Board's activities. Though learners might be similarly motivated to participate in the activities, the source of their drive might be different. Interactive whiteboard appealed to both intrinsically and extrinsically motivated learners. IWB contributes to motivation in many ways, this includes:

1 Interactive whiteboard increases enjoyment and motivation for learning.
2 IWB increases enjoyment of classes for both learners and teachers through more varied use of resources.
3 High level of interaction - learners enjoy interacting physically with IWB, manipulating text, image, matching and drag and drop objects.
4 The capacity to present and discuss learners' work – focusing on student-original helps keep the class on task and raises self-esteem.
5 IWB is a colorful tool. Marking could be customized both in the pen and in the highlighter features to display a number of different colors. Learners respond to displays where colors are employed.

2.7 Use of the Interactive Whiteboards

Learning to use computer and the Internet is an easy task, but mastering ***ICT*** use as an effective tool to improve teaching and learning processes is not. ***ICT*** presents new challenges to teachers. Teachers need training not only in computer literacy but also in the pedagogical application of those skills to improve teaching and learning. Technical support and pedagogical support are issues. They play important roles in implementing Smart Board in teaching and learning a second language like English language.

2.7.1Technical Support

Understanding the techniques used in IWB presentation minimizes difficulties. It is common that teachers face technical problem when working in technology-integrated-classroom. An insufficient training in digital literacy might make it a challenge for teacher to use IWB in the classroom. Technical support is considered a significant factor for successful integration of ICT in the teaching and learning processes. Technical difficulties might occur inside classroom as a result of:

1 Run out of electronic pen (stylus) .
2 No connection between the interactive whiteboard and computer.
3 Orientation of the data projector.
4 No correlation between board and projector–jamming of handwriting.
5 The system does not enable immediate interactivity between the movement of users' hands and Smart Board – slow boot/delay loading.
6 Virus problems, which lock programs and files.
7 Low quality of speakers.
8 Computer programs which are not updated such as multimedia program
9 Dust on projectors lens causes unclear picture on the board.
10 Sun light affects the visual element - learners cannot see what is on the board.
11 Some types of IWB do not support some programs and files - they are not compactable with interactive whiteboard software.

2.7.2 Pedagogical Support

A radical transformation of learning environments is taking place. Teachers are no longer dispensers of knowledge; they are facilitators and guiders of learners' learning. Some studies have reported the great potential of the IWB to prompt change in teacher's pedagogy and produce enriched learning environment.

Glover, *Miller*, *Averis* and *Door* (*2005, p. 155*) state that, there is an increasing awareness of the need to understand the match between *technology* and *pedagogy* in the development of interactive learning supported by IWB in schools. *Miller* and *Glover* added that, "*pedagogic structures developed to enhance conceptual cognitive understanding and awareness of interactivity as the key to this enhanced understanding*" (*Miller &Glover, 2006, p.2*).

2.8 Previous Studies

1. *UK* run a pilot program, '*Embedding ICT in the Literacy and Numeracy Strategies*', in the late 1990s (*Higgins et al., 2005*) where IWBs were installed in several regions' primary schools. The evaluation of this program was based on students' attainment, teachers' opinions and students' view. The results showed positive changing in teachers' practices in the use of IWBs and classroom interaction. A systematic observation confirmed the impact of IWBs on teaching and learning. Nevertheless, the impact of IWBs in term of students' attainment in national test was less than the desired national policy objectives. This raised two questions about the integration of the IWBs into classroom. The first question concerned the IWB as a tool of teaching and a tool that might improve students' learning. The second question was wider and challenging to policy level, which runs and evaluates the program. That was the government approach; how educational research was valued and used at its level. However, *UK* has to continue to promote the '*embedding*' of such technologies in schools.

2. *Glover* & *Miller* (*2001, p. 261*) found initial training by companies and supplier successful in '**firing**' teachers with initial enthusiasm. They also quoted *Walker* (*2003b p. 2*) "*if you don't catch them at the start, provide support and show them how to use learning materials, their enthusiasm quickly wanes.*" These two examples by *Glover* & *Miller* and *Walker* indicate that methodological training and lack of practice might impede and frustrate such lessons. *Levy* (*2002*) states that '*early adopters*' were able to experiment and develop their own IWBs use following initial training. In other words, teachers who are already confident ICT users tend to become enthusiastic. Teacher's computer competency plays an important role in the use of IWBs.

However, a user who lacks computer competence is less able to be self-reliant. *Granger et. al.* have coined the term "*need to know basis*" for those who are less experienced with ICT and less confidence. Those teachers struggle to manage the IWBs. Therefore, co-operation work between experienced users and beginners is needed (*Glover* & *Miller*, *2001*). Teachers need technical support when some difficulties arise immediately during lessons. Such as slow log-on when they use the internet, slow or non-existent response from electronic pens if they use stylus pen, freeze or unresponsive or awkward to move images and objects on the surface of the IWB, a lack of signal between individual slates and the board if they use wireless IWB. In such cases, rapid *troubleshooting* technical support is a priority (*levy, 2002*).

There are other types of drawbacks in term of practicalities. Such as the physical environment in which the board is located, as the height of the board at where was placed (low or high) might be an issue. Pupils found it too difficult to write on, manipulate, drag…etc.; even teachers might have some difficulties. Classroom environment such as temperature, sunlight, shadow and dust might impede the board works properly. When sunlight is shining directly on the IWB, learners found it difficult to see what is on the board. The shadow, when a teacher/a learner steps into the light produced by projector, makes it impossible to see what s/he is actually writing or doing. Hot weather and dust could stop the board operation. IWB requires cool classroom. Nevertheless, health and safety are to be considered. Those are the light, which is shining from the projector, and the multitude of wires required for the IWB and associated equipment. All these might cause problems. Therefore, teacher should stand to the side of the board or away from the shadow that cast over the screen. Many teachers report that there is a difficulty in movement of the board or the projector, especially when the board is permanently fixed. This caused disturbance of the calibration, which requires re-alignment. That happens when learners try to use the board for discovering new things or for just fun. Both teachers and learners need technical training to overcome the difficulties that occur inside the classes.

3. "*Looking for clarity amongst the challenges faced by teachers as they consider the role of **ICT** in classroom literacy learning experiences*" (***Jessica & Lisa**, 2007, p. 170*) is chapter ten of ***Jessica Mantei** & **Dr. Lisa Kervins'*** study of Australian primary schools in 2007. In general, ICT referred to computing technology (hardware, software, the internet, network, or people who use these technologies). In ***Jessica's*** study, ICT referred to new methods, ways and tools (technologies) of doing what teachers have always done to communicate message or information. Research shows that many primary school teachers "*continue to feel ill-equipped*" using technology as learning tool in spite of the in-service training, they had received (***Lisa & Jessica**, 2007, p. 170*).

Many schools have equipped their classrooms with technologies (hardware and software) and have provided professional development for teachers; with the expectation that ICT would be put to use. However, the study investigated the difficulties reported by a variety of teachers from different schools as they tried to use ICT to support learners' literacy learning. Observation and interviews were used to collect the data. The findings indicated that teachers were *under pressure* to embed new technologies as learning tools. ***Lisa** & **Jessica*** pointed out that technologies should be considered in ways that were meaningful to the needs of contemporary learners. Technology helps develop learners' reading and writing skills. Teachers need to shift from the old view of learning process; the traditional notion of classroom in which teacher's role is transmitting information or knowledge, to a new one that fosters learners to gain the knowledge. The focus should be on strategies and skills that enable learners to gain information or knowledge.

In spite of the evidences, the research revealed that there were still some tensions and challenges faced by teachers as they incorporated ICT into classroom literacy experiences (***Jessica** & **Lisa***, *2007*).

4.   Cary Academy School is an independent school located in ***Raleing***, ***North Carolina***. It uses educational technology widely in order to facilitate both teaching and learning processes. In 1994 IWBs were installed in language classrooms (English and/or foreign language). There was one computer for each student in these language classrooms. During the first operational year, 1997, French instructor and Spanish instructor ***Fabienne Gerard and Jamey Windener*** (*1997*) investigated the impact of the IWBs as a language acquisition tool. Their study focused on how Smart Board/interactive whiteboards were used in language classrooms. Would IWBs facilitate teaching and learning? Moreover, they identified the drawbacks of this tool.

3.   Method of the Research

3.1 Introduction

The method used to conduct this study was the descriptive research method. A questionnaire was designed and used for data collection. The researcher used Microsoft Office Program, "***Excel 2010***", for analyzing the data. The collected data was transformed into figures and tables to facilitate interpretation.

3.2 Subjects

The population used in this study, was chosen randomly from ***the English language teachers of Jeddah Schools, KSA***. It consisted of forty-five teachers of remarkable English language teachers, who were teaching English language through the Smart Board as a helping tool, in the school year 2013. They were from different nationalities: Egyptian, Sudanese, Jordanian, Tunisian, Kenyan, Pakistani, and South African. They were qualifications and experiences. They represented teachers who teach English as EFL/ESL through Smart Board in Jeddah educational district, Saudi Arabia.

3.3 Instrument

The instrument, which was used as a data-collecting tool, was a questionnaire, the researcher's observation and his own experiences. The questionnaire included twenty-five items in order to attain the objectives and the aims of the study.

3.4 Validity

After the researcher designed the questionnaire, he conducted a pilot survey. It included three examples of challenges that faced teachers. They were teacher factor, technical support factor and student factor. This pilot survey form needed teachers to write real examples of challenges. In the light of the survey, some modifications were made to the questionnaire.

The questionnaire was sent through e-mail to a number of judges. The questionnaire was revised and modified in the light of the comments and suggestions made by the judges.

They were from Saudi Arabia universities and abroad. They expressed their opinions by making certain omissions, additions and modifications. Some of the statements were rephrased for the sake of clarity and comprehension. They agreed on all the statements of the questionnaire after reassessment and modifications were made. According to observation of the judges, the questionnaire was valid and all its items were accurate.

3.5 Reliability

To determine the reliability of the questionnaire, the researcher administered the questionnaire to forty-five English language teachers in Yanbu Schools.

To ensure the reliability of the tool the researcher designed calculated Pearson Correlation coefficient. The Pearson Correlation between the two fold of respondents was (**0.95855**), which meant that the questionnaire was reliable.

3.6 Procedure

The questionnaire was given by hand to the sample. They responded by putting a tick in the appropriate space opposite to an item in one of the following choices: ***strongly agree, agree, neutral, disagree and strongly disagree***. After that '***strongly agree'*** and '***agree'*** were summed up and '***disagree'*** and '***strongly disagree'*** were summed up. The responses became only three columns: ***agree, neutral and disagree.*** These three responses were given values as '***excellent'***, '***v. good'***, and '***good'***. The responses below '***good'*** were rejected. According to the scale, which was designed by the researcher, the general mean was (***3.57***).

4.0 Data Analysis

In this section, the collected data will be presented, analyzed, discussed and interpreted. The collected data were transformed into graphs and tables to facilitate interpretation.

4.1 Data Analysis and Discussion

The items (1 to 8) tested teachers' practical experience of using the interactive whiteboard. The statements examined how teachers perceived the Smart Board and how they used it in the English language classes. These items also examined teachers' ways of teaching whether they changed their method or not. The items (9 to 13) tested teachers' opinions about schools' administration role in implementing Smart Board in the schools. The items (14 to 19) examined teachers' attitudes towards ongoing technical support. Moreover, how technical support facilitated the use of the Smart Board inside the classrooms. The statements (20 to 25) elicited teachers' personal views on how they saw their students and if the use of the interactive whiteboard engaged, motivated students, enriched their learning. These twenty-five items converted into numbers and bar graphs to facilitate analysis, discussion and interpretation as follows:

Figure (4.1.1)

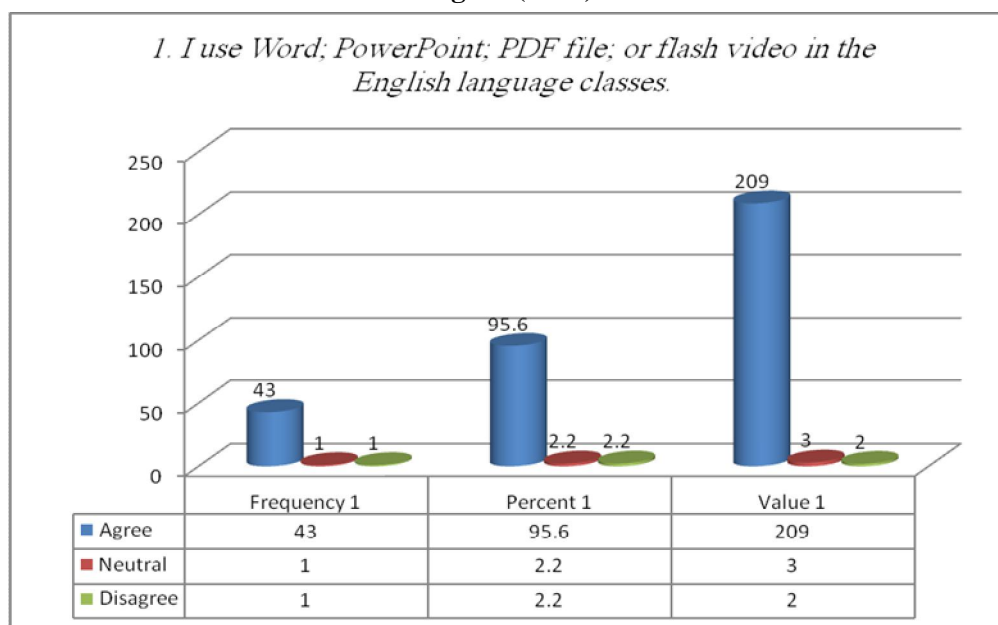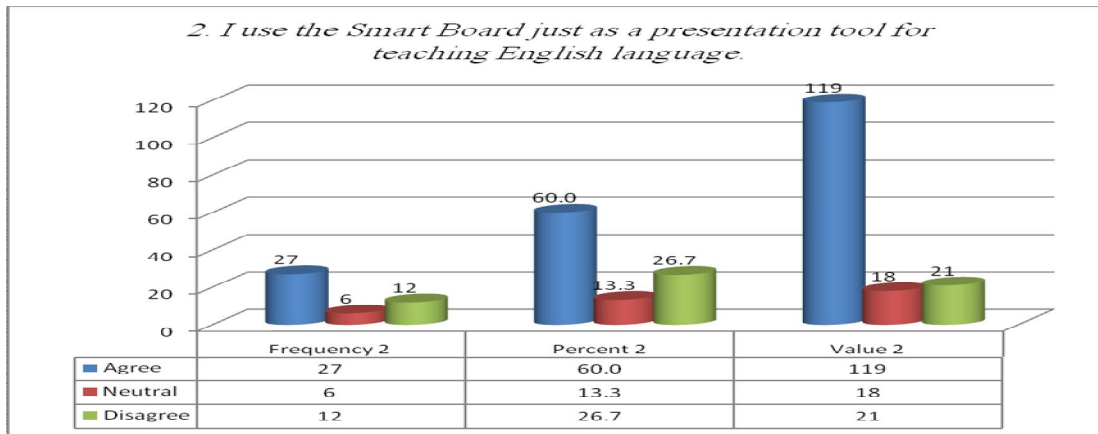|	Frequency 1	Percent 1	Value 1
■ Agree	43	95.6	209
■ Neutral	1	2.2	3
■ Disagree	1	2.2	2

Figure and Table (4.1.1) show that forty-three respondents about 95.5 % used Word, PowerPoint, and PDF file, or flash video in the English language classes. One disagreed and another was neutral. These two respondents presented 4.4 % of the sample. This means that teachers use traditional ways with new technology instead of using new methods. That high value of using these programs, Word; PowerPoint; PDF; or Flash videos, indicates that teachers do not use interactive digital learning resources in the English language lessons. Smart Board offers more than simply information delivery in the form of PDF, PowerPoint, Word, or flash videos.

Figure (4.1.2)

	Frequency 2	Percent 2	Value 2
Agree	27	60.0	119
Neutral	6	13.3	18
Disagree	12	26.7	21

In figure two (4.1.2), about 60% of the subjects were satisfied that they used the interactive whiteboard just as presentational tool for teaching English language. Twelve teachers were not satisfied and six teachers were neutral. So there is a need to incorporate IWB as a teaching and learning tool.

Figure (4.1.3)

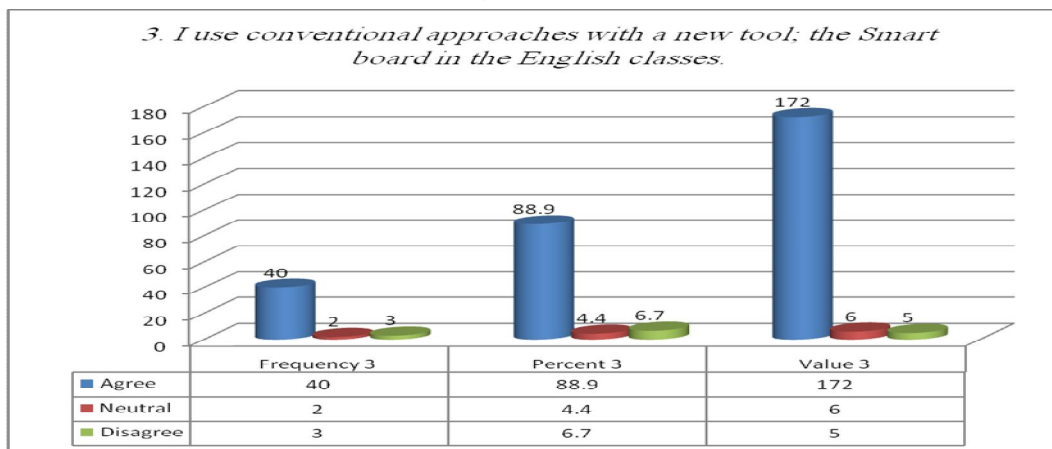|	Frequency 3	Percent 3	Value 3
Agree	40	88.9	172
Neutral	2	4.4	6
Disagree	3	6.7	5

Table (4.1.3) shows that forty subjects used the conventional approaches with a new technology such as the Smart Board. Two teachers were neutral and three teachers disagreed.

Figure (4.1.4)

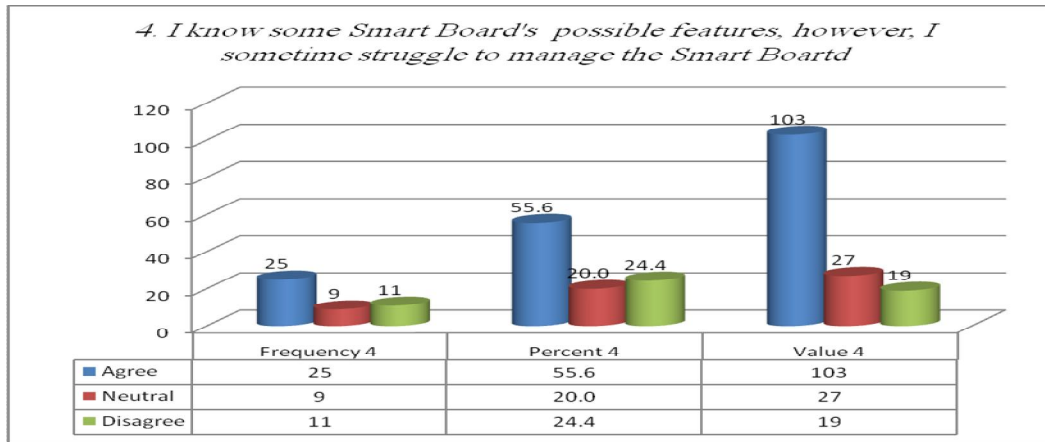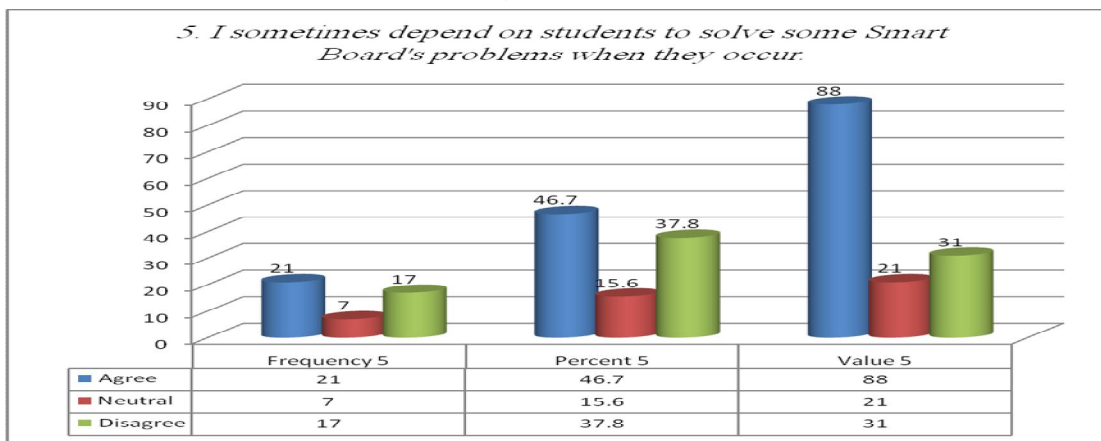|	Frequency 4	Percent 4	Value 4
Agree	25	55.6	103
Neutral	9	20.0	27
Disagree	11	24.4	19

Table (4.1.4) shows that about 55.5% of teachers sometimes struggled to manage the Smart Board. Nine teachers were neutral and eleven disagreed. More than half of the subjects faced some problem with the Smart Board in English language classes. Only eleven teachers out of forty-five answered '***disagree'***.

Figure (4.1.5)

	Frequency 5	Percent 5	Value 5
Agree	21	46.7	88
Neutral	7	15.6	21
Disagree	17	37.8	31

According to table (4.1.5), 46.7% agreed that they depended on students to solve some Smart Board's problems when they occurred. About 15% of respondents were neutral and 37.8% disagreed. In addition, sometimes learners even taught their teachers about interactive whiteboard's (IWB's) tools.

Figure (4.1.6)

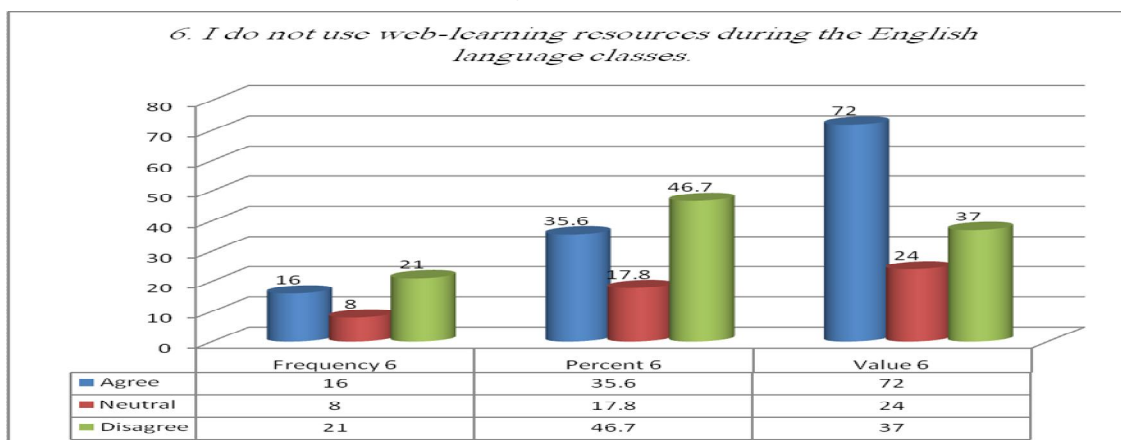|	Frequency 6	Percent 6	Value 6
Agree	16	35.6	72
Neutral	8	17.8	24
Disagree	21	46.7	37

Figure & Table (4.1.6) demonstrate web-learning resources usage during the English language classes. The table lists sixteen teachers used web-learning resources and eight teachers were neutrals. About 46.7% did not use web-learning resources in their English language classes.

Figure (4.1.7)

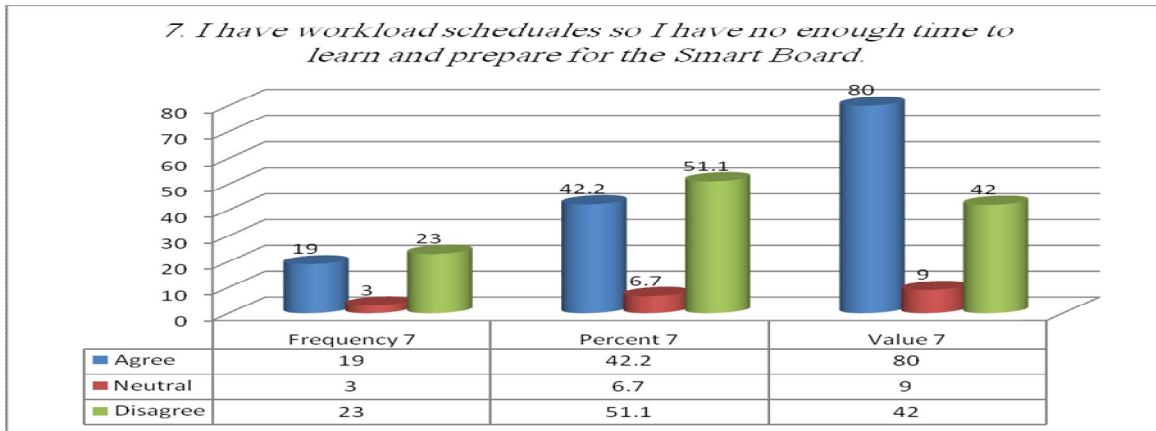|	Frequency 7	Percent 7	Value 7
Agree	19	42.2	80
Neutral	3	6.7	9
Disagree	23	51.1	42

Table7 Figure (4.1.7) illustrate that about 42.2% of teachers agreed and 51.1% disagreed that they had workload schedules. Only three teachers (6.7%) remained neutral. So about half of the English language teachers develop themselves and learn about the Smart Board on their own. On the other hand, nearly a half of teachers complained about workload schedules.
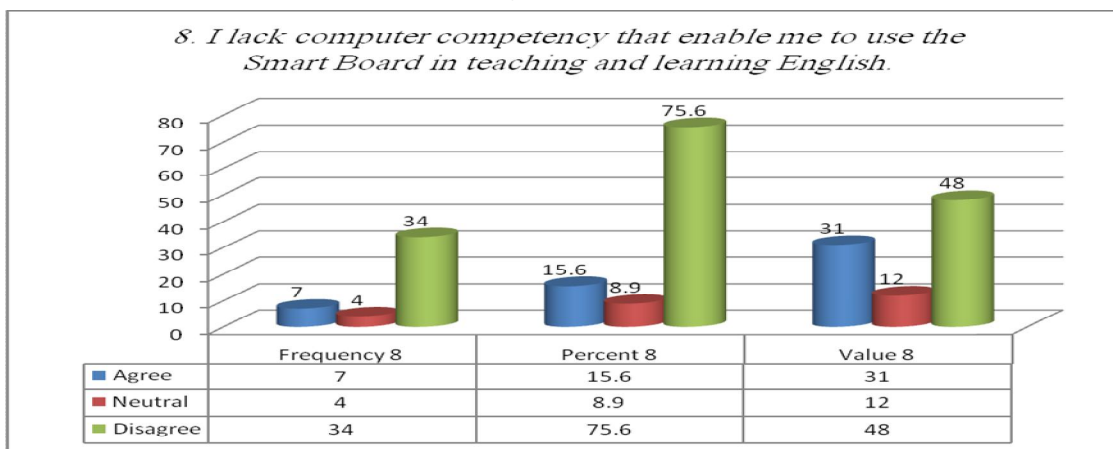
Figure (4.1.8)

	Frequency 8	Percent 8	Value 8
Agree	7	15.6	31
Neutral	4	8.9	12
Disagree	34	75.6	48

Table and Figure (4.1.8) show that about 75.6% responses were '*disagree'*, 8.9% neutral and 15.6% agree.

Figure (4.1.9)

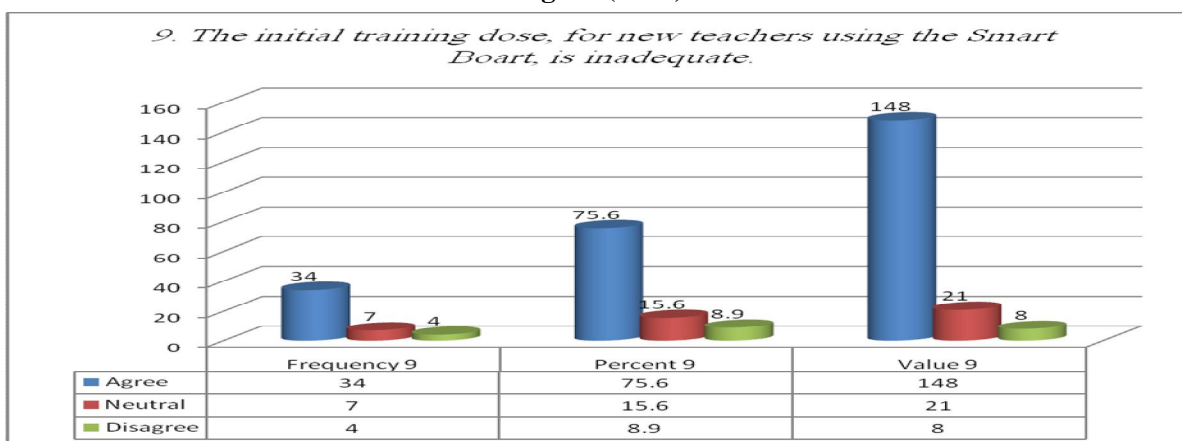|	Frequency 9	Percent 9	Value 9
Agree	34	75.6	148
Neutral	7	15.6	21
Disagree	4	8.9	8

Table and Figure (4.1.9) illustrate responses to item nine. The initial training dose, for new teachers using the Smart Board, is inadequate. Thirty-four respondents agreed and only four respondents disagreed. In addition, there were seven neutral. This indicates that teachers need new technical skills. The rapid pace of technology change requires training.

Figure (4.1.10)

10. There is no in-service training on how to integrate Smart Board into English language teaching.

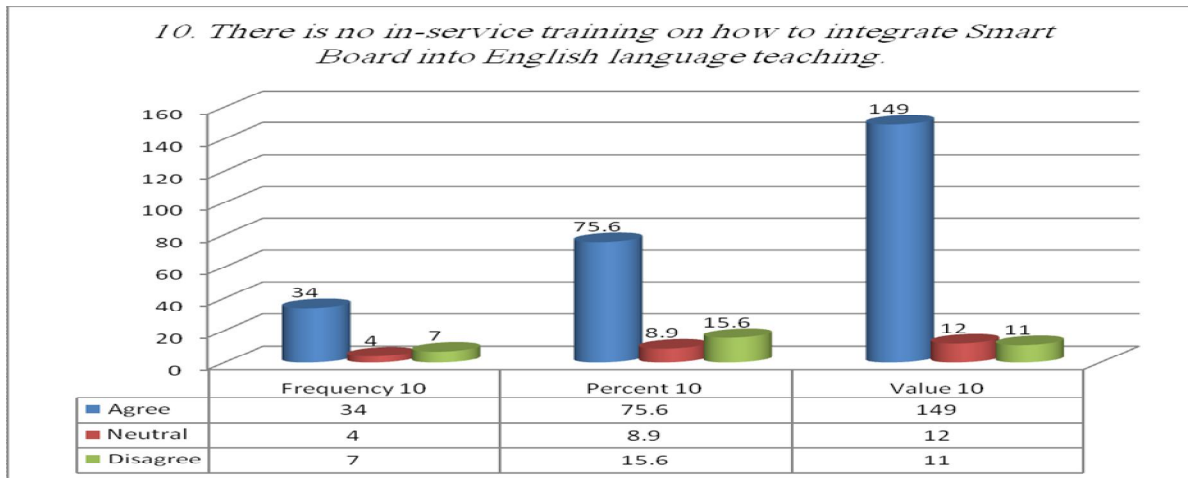|	Frequency 10	Percent 10	Value 10
Agree	34	75.6	149
Neutral	4	8.9	12
Disagree	7	15.6	11

Table and Figure (4.1.10) show that there was no in-service training on how to integrate Smart Board into English language teaching. Thirty-four (75.6%) of respondents agreed. 15.6% of the respondents disagreed and 8.9% were neutral.

Figure (4.1.11)

11. There is no professional development program for teachers to upgrade their skills of using computer.

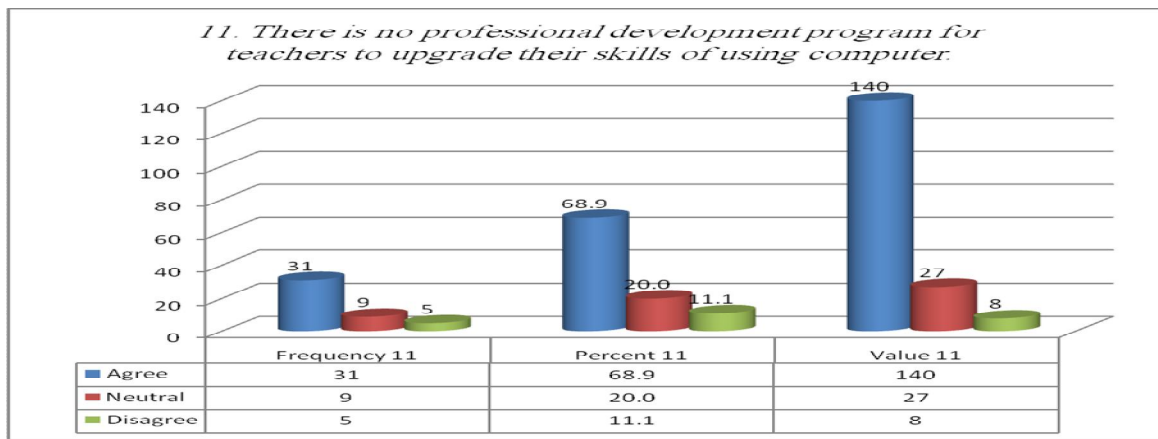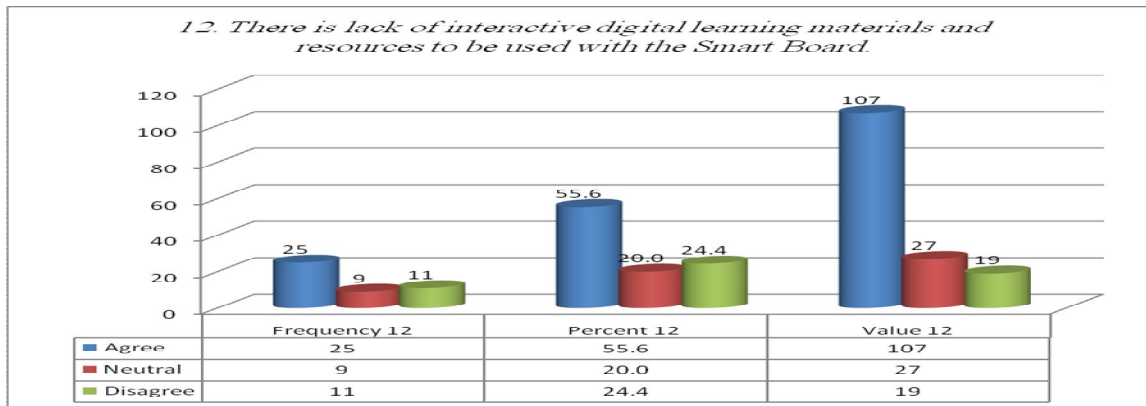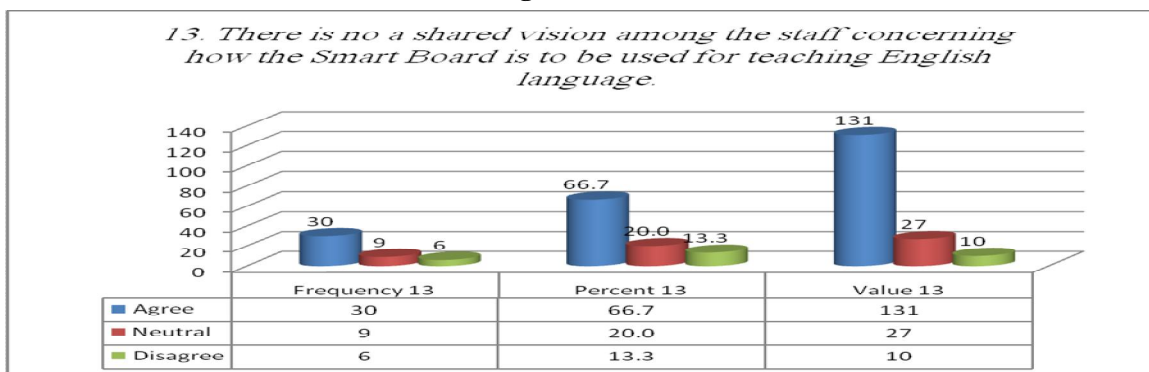|	Frequency 11	Percent 11	Value 11
Agree	31	68.9	140
Neutral	9	20.0	27
Disagree	5	11.1	8

Figure and Table (4.1.11) show that 68.9% of respondents agreed. Nine respondents were neutral (20.0%). Only five respondents, represented 11.1%, disagreed that there was no professional development program for teachers to upgrade their skills of using computer. This reveals that there was some computer training programs. However, most of the subjects thought that it were not professional development programs. A few respondents thought that teachers received training on computer skills.

Figure (4.1.12)

12. There is lack of interactive digital learning materials and resources to be used with the Smart Board.	Frequency 12	Percent 12	Value 12
Agree	25	55.6	107
Neutral	9	20.0	27
Disagree	11	24.4	19

In the Figure and Table (4.1.12), more than half of the respondents answered "Agree". Nine teachers were neutral and eleven teachers disagreed about the lack of adequate educational software. This emphasizes that there is a lack of interactive digital learning resources to be used with interactive whiteboard.

Figure (4.1.13)

13. There is no a shared vision among the staff concerning how the Smart Board is to be used for teaching English language.	Frequency 13	Percent 13	Value 13
Agree	30	66.7	131
Neutral	9	20.0	27
Disagree	6	13.3	10

As seen in Figure and Table (4.1.13), 66.7% of teachers agreed that there was no shared vision among the staff concerning how the Smart Board to be used for teaching English language. Yet, 6 disagreed and nine teachers were neutral. Teachers worked individually to integrate Smart Board into teaching and learning.
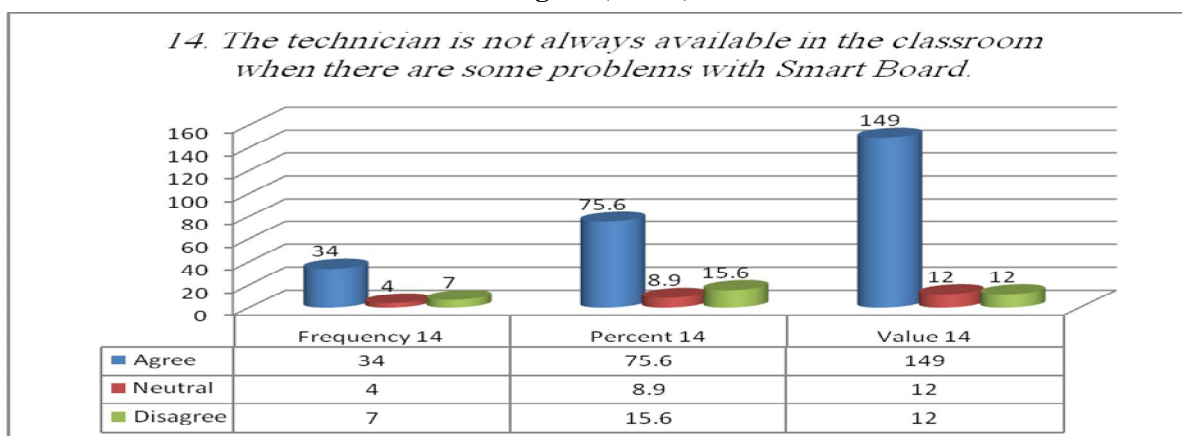
Figure (4.1.14)

14. The technician is not always available in the classroom when there are some problems with Smart Board.	Frequency 14	Percent 14	Value 14
Agree	34	75.6	149
Neutral	4	8.9	12
Disagree	7	15.6	12

Figure and Table (4.1.14), show that 34 subjects (75.6%) answered '**Agree**'. Seven respondents (8.15%), '**disagree**' and only four respondents were neutral. These results emphasize that the technical support is not always available in the classroom when there are some problems with Smart Board.

Figure (4.1.15)

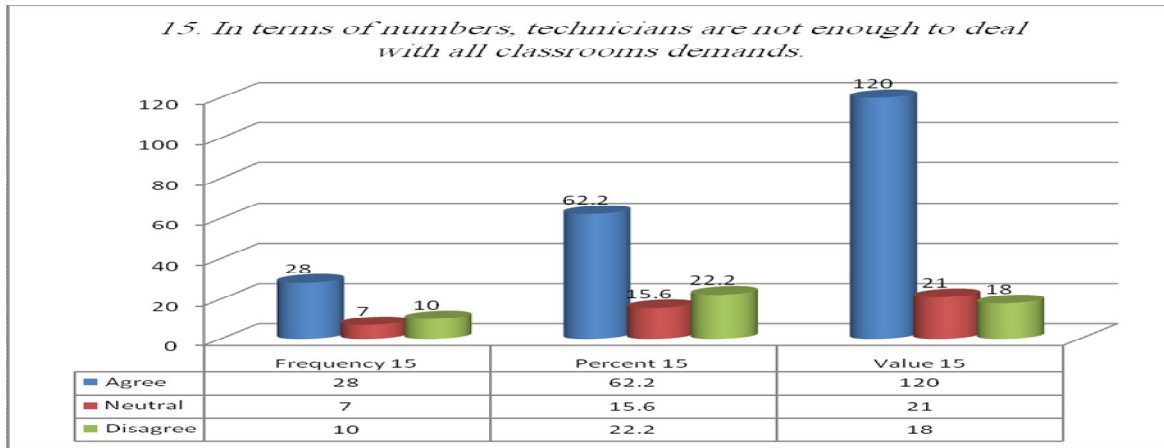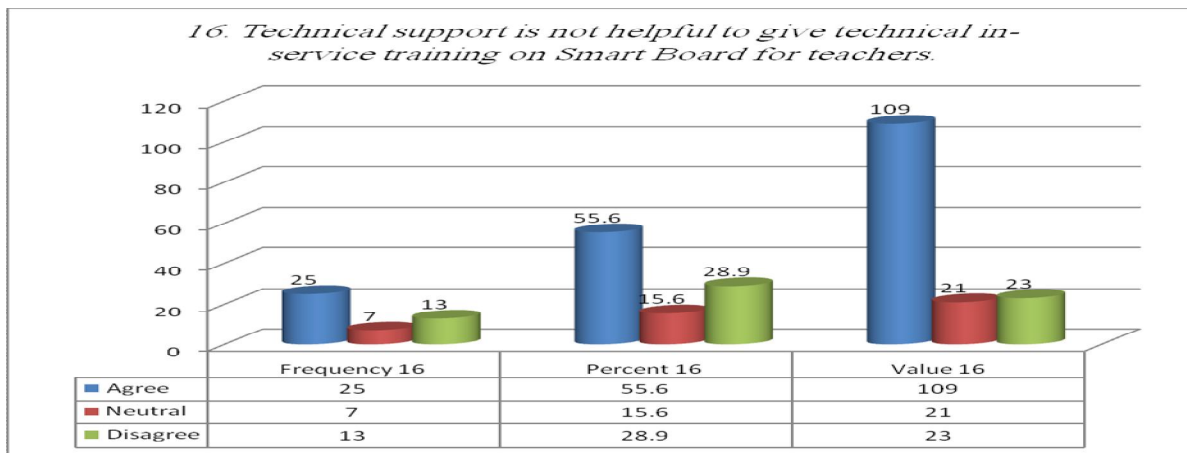|	Frequency 15	Percent 15	Value 15
Agree	28	62.2	120
Neutral	7	15.6	21
Disagree	10	22.2	18

Figure and Table (4.1.15) indicate that 62.2% of the respondents agreed, 22.2% of the respondents disagreed and 15.6% of the respondents were neutral. In terms of numbers, these results indicate technicians are not enough to deal with all classrooms demands.

Figure (4.1.16)

	Frequency 16	Percent 16	Value 16
Agree	25	55.6	109
Neutral	7	15.6	21
Disagree	13	28.9	23

In Figure and Table (4.1.16) more than half of the respondents (55.6%) believed that technical support was not helpful to give technical in-service training on Smart Board for teachers. Some teachers (15.6%) took neutral position while (28.9%) did not believe that Technical Support was helpful.
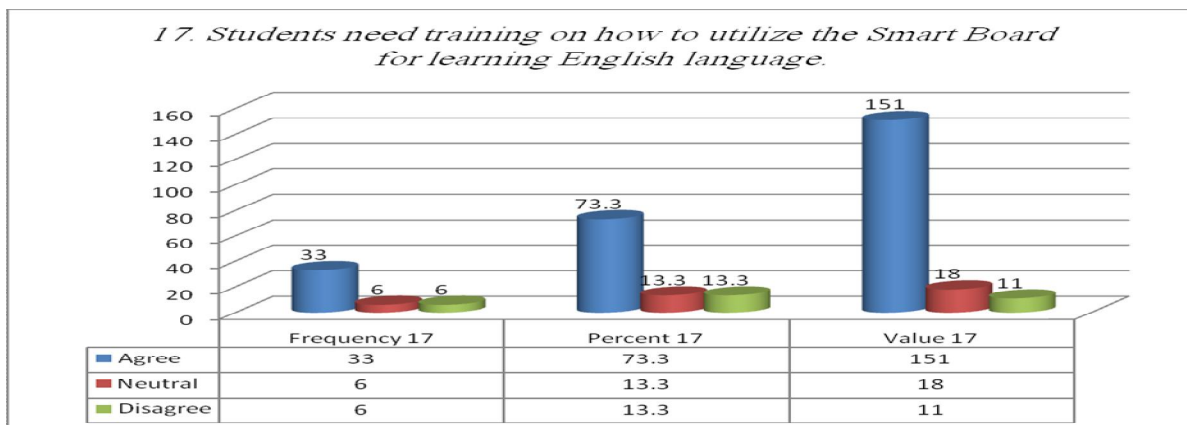
Figure (4.1.17)

	Frequency 17	Percent 17	Value 17
Agree	33	73.3	151
Neutral	6	13.3	18
Disagree	6	13.3	11

Figure and Table (4.1.17), show that 73.3% of teachers responded '*agree*'. Teachers who responded '*neutral*' and *disagree*' were equal 13.3%. The highest score of the respondents indicates that, teachers believed that students needed training on how to utilize the Smart Board for learning English language.
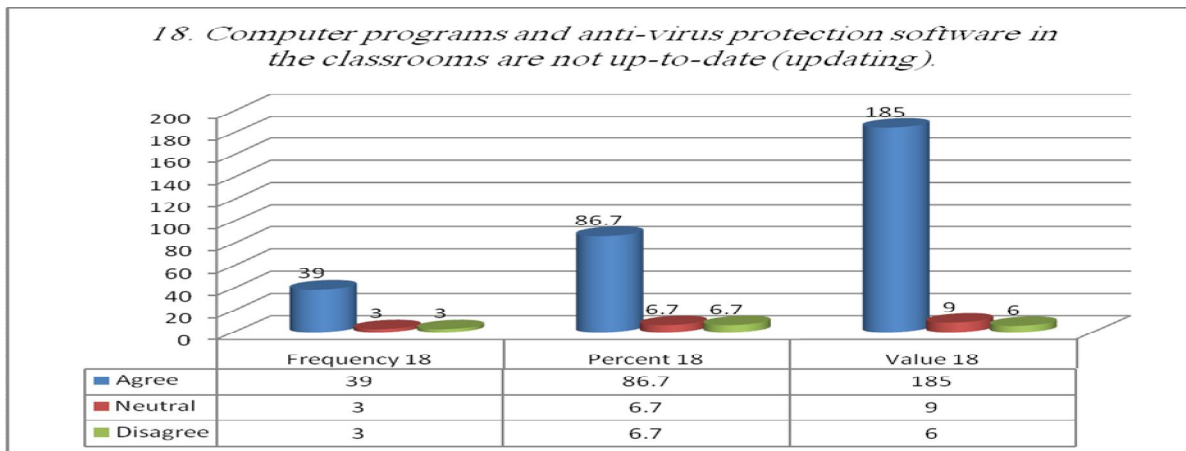
Figure (4.1.18)

	Frequency 18	Percent 18	Value 18
■ Agree	39	86.7	185
■ Neutral	3	6.7	9
■ Disagree	3	6.7	6

Figure and Table (4.1.18) indicate that 39(86.7%) respondents agreed, three respondents were neutral and three respondents disagreed. The highest percentage (86.7%) indicates that teachers had computer literacy, which would enable them to know whether computer software was up to date or not updated.
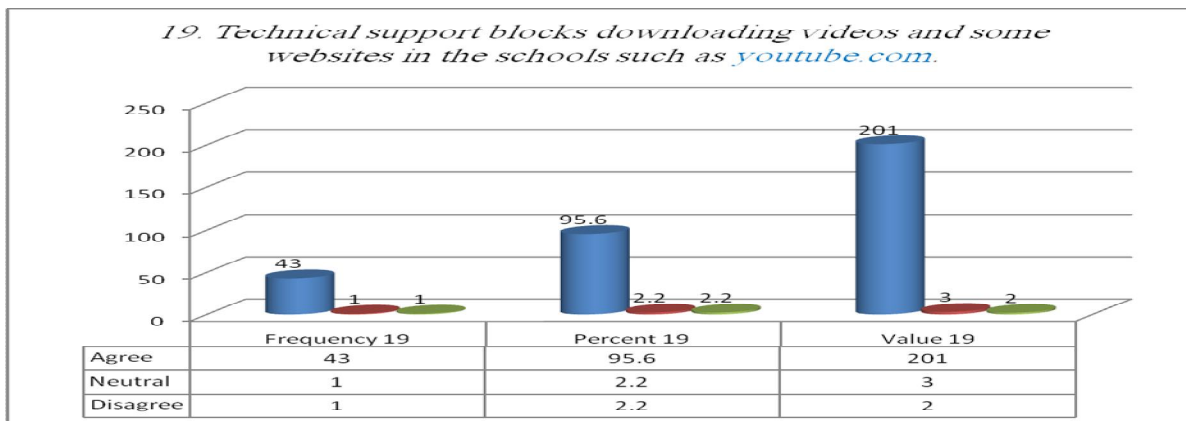
Figure (4.1.19)

	Frequency 19	Percent 19	Value 19
Agree	43	95.6	201
Neutral	1	2.2	3
Disagree	1	2.2	2

Figure and Table (4.1.19) show that there one respondent disagreed and a respondent was neutral. Most of the respondents (95.6%) responded '*agree*', that schools' *IT* department block downloading videos and some websites such as *youtube.com*. As consequence, any content related to *youtube.com* already is blocked. Most educational websites, however, and their multimedia contents link to *youtube.com*.

Figure (4.1.20)

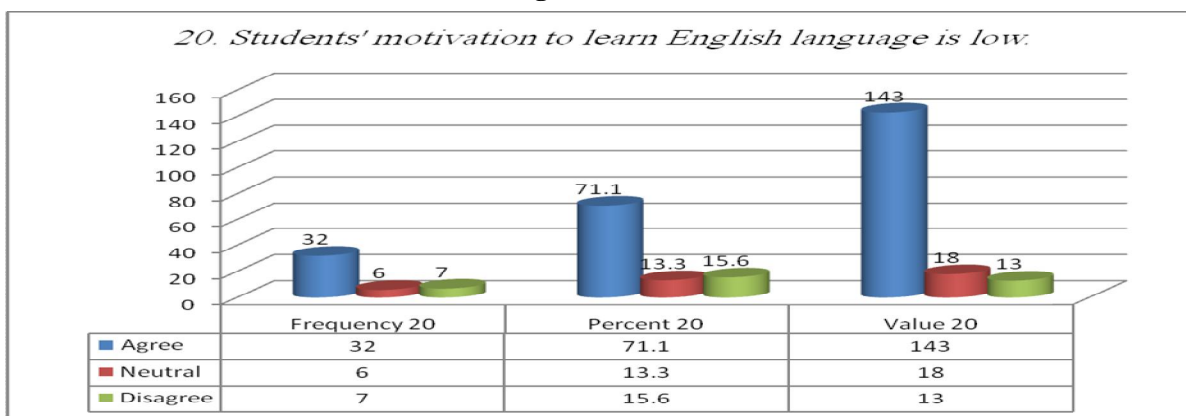|	Frequency 20	Percent 20	Value 20
■ Agree	32	71.1	143
■ Neutral	6	13.3	18
■ Disagree	7	15.6	13

Table and Figure (4.1.20) indicate that 71.1% of teachers agreed that students' motivation to learn English language is low. Seven teachers, who represented 15.6%, disagreed and six teachers represented 13.3% were neutral. Those statistics indicate that teachers encounter a high challenge on how to motivate their learners to love and acquire English language.
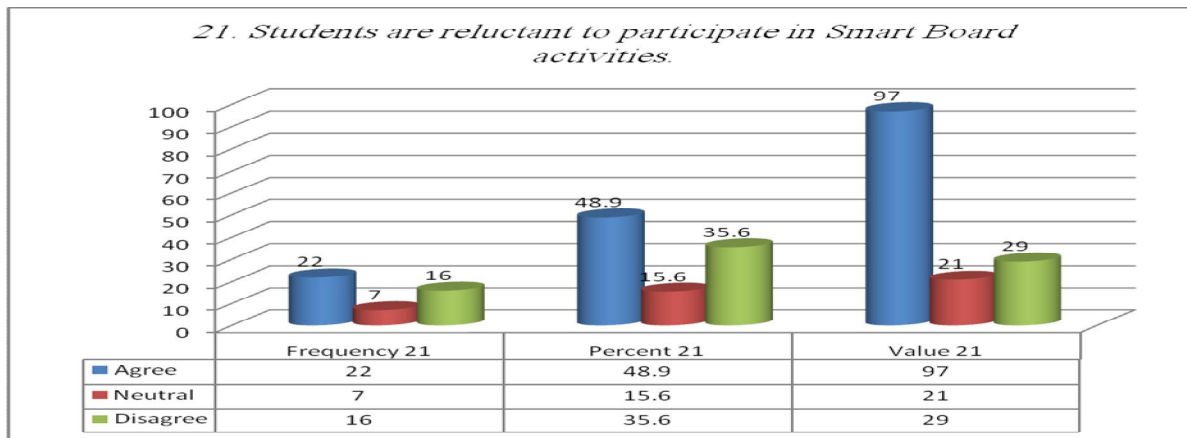
Figure (4.1.21)

	Frequency 21	Percent 21	Value 21
Agree	22	48.9	97
Neutral	7	15.6	21
Disagree	16	35.6	29

Table (4.1.21) shows that 48.9% of the respondents '*agreed*', 15.6% were '*Neutral*' and 35.6% '*disagree*' that students were reluctant to participate in Smart Board's activities. Those statistics reflect the previous assumption about students' motivation

Figure (4.1.22)

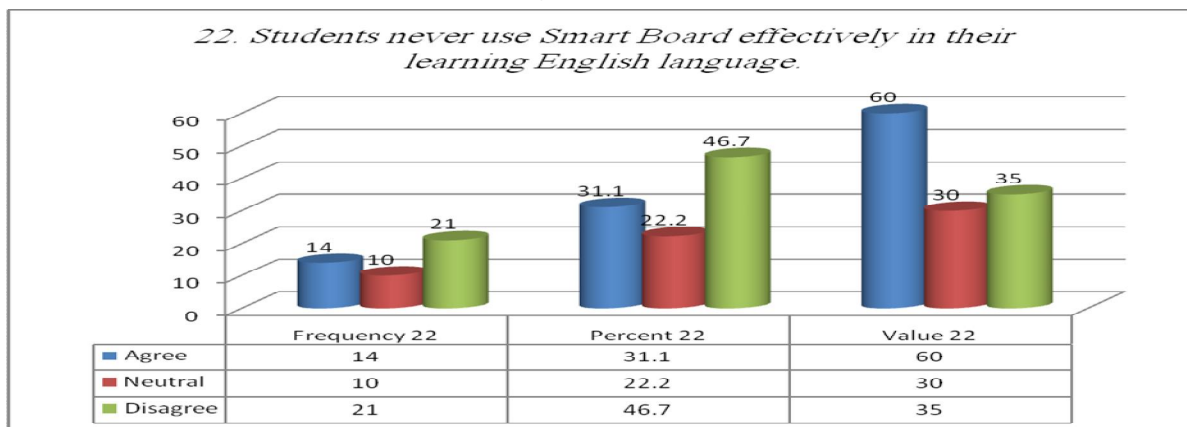|	Frequency 22	Percent 22	Value 22
Agree	14	31.1	60
Neutral	10	22.2	30
Disagree	21	46.7	35

Figure and Table (4.1.22) illustrate that there were different opinions about students' use of Smart Board in their learning English language. While 31.1% of the respondents agreed, 46.7% of the respondents disagreed that students never use Smart Board in their learning of English language. Ten teachers (22.2%) remained neutral.

Figure (4.1.23)

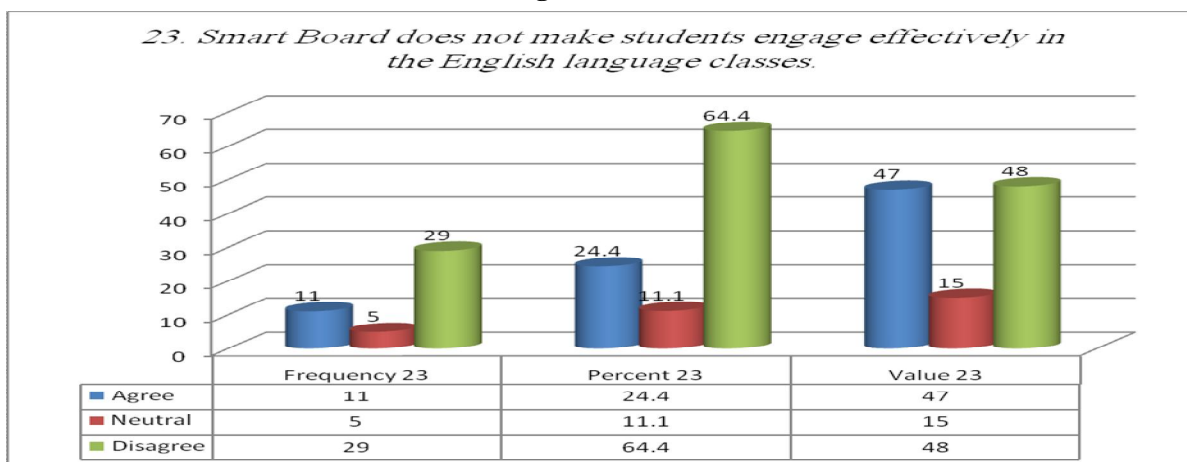|	Frequency 23	Percent 23	Value 23
Agree	11	24.4	47
Neutral	5	11.1	15
Disagree	29	64.4	48

Figure and Table (4.1.23) show opinions about students engagement in English language Classes. (11, 24.4%) subjects '*disagree'*, (29, 64.4%) subjects were *'neutral'* and (5, 11.1%).These statistics reveal to some extent that interactive whiteboard enhances students' engagement in the English language classes.
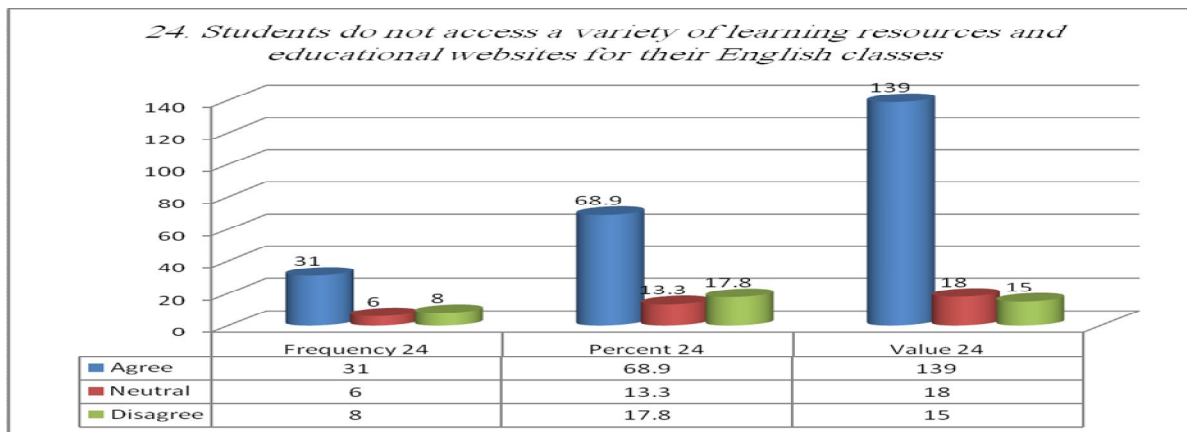
Figure (4.1.24)

	Frequency 24	Percent 24	Value 24
Agree	31	68.9	139
Neutral	6	13.3	18
Disagree	8	17.8	15

Figure and Table (4.1.24), illustrate that 68.9% of respondents agree that students did not access a variety of learning resources and educational websites for their English language classes. Six respondents (13.3%) were neutral and eight respondents (17.8%) disagreed

Figure (4.1.25)

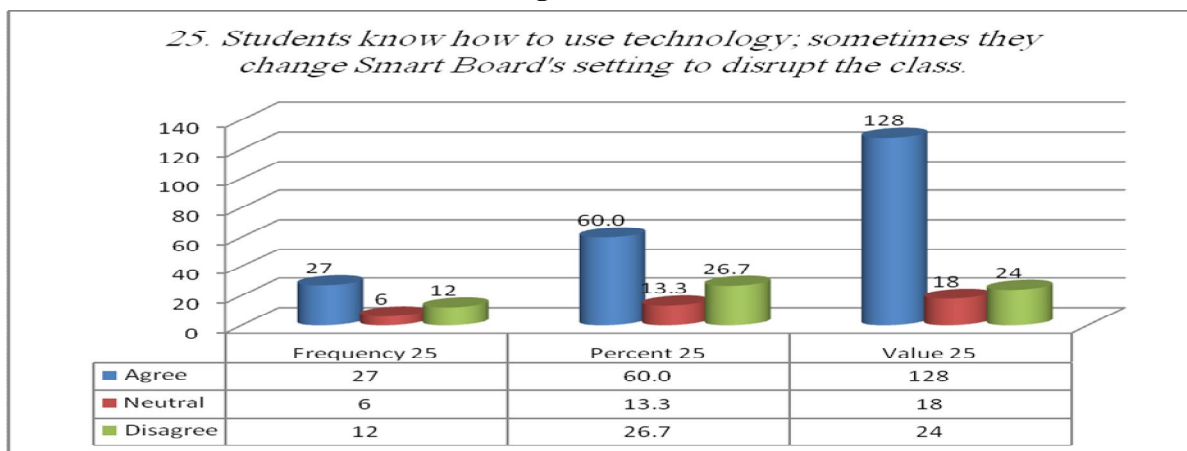|	Frequency 25	Percent 25	Value 25
Agree	27	60.0	128
Neutral	6	13.3	18
Disagree	12	26.7	24

Figure and Table (4.1.25) show that twenty-seven respondents 60.0% agreed, six respondents (13.3%) were neutral, and twelve respondents (26.7%) disagreed that students knew how to use technology; sometimes they changed Smart Board's setting to disrupt the English classes.

Figure (4.1.26)

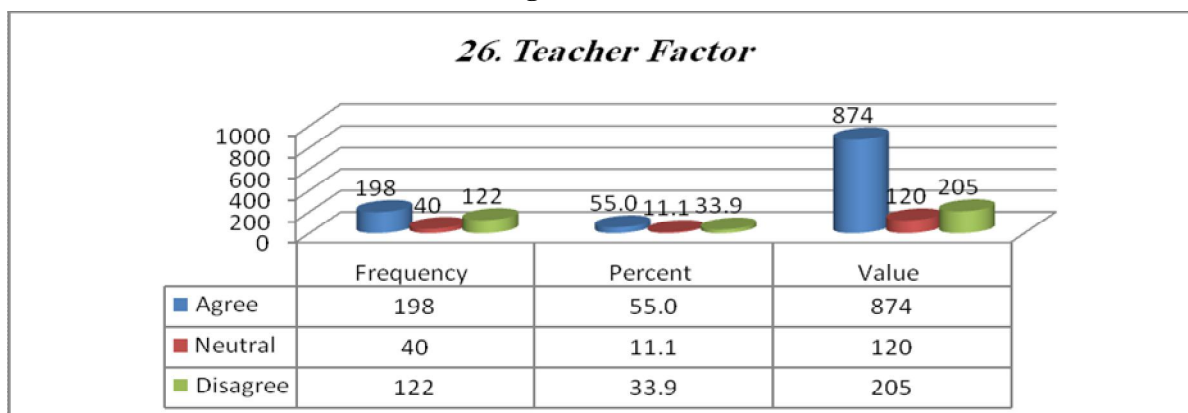|	Frequency	Percent	Value
Agree	198	55.0	874
Neutral	40	11.1	120
Disagree	122	33.9	205

Table (4.1.26) represents teacher factor, which includes the items from one to eight. The table and bar graph indicate that more than half (55%) of the respondents responded, "*agree*', 11.1% of the respondents were neutral and 33.9% of the respondents responded "*disagree*"
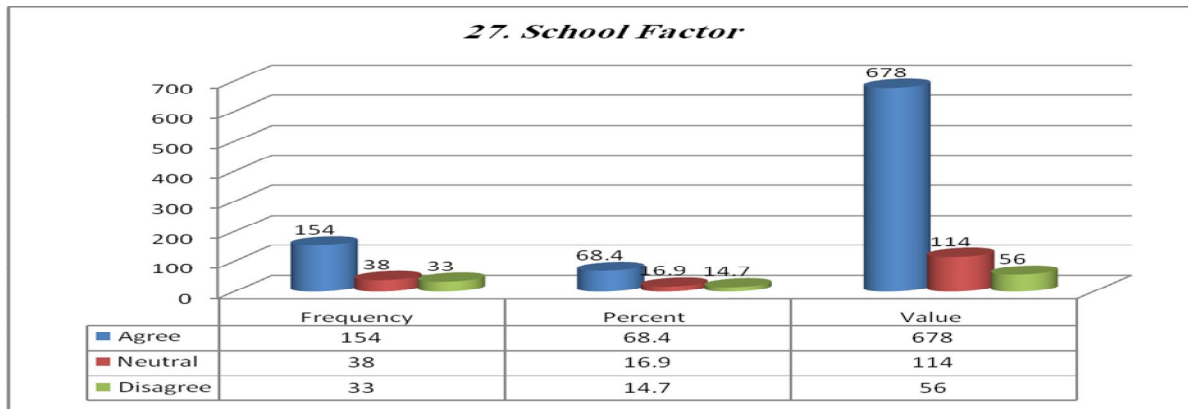
Figure (4.1.27)

27. School Factor	Frequency	Percent	Value
■ Agree	154	68.4	678
■ Neutral	38	16.9	114
■ Disagree	33	14.7	56

Figure and Table (4.1.27) represents School factor that includes the items from nine to thirteen. The table and graph indicate that more than 68% of the respondents responded, "*agree*', 16.9% of the respondents were neutral and 14.7% of the respondents responded "*disagree*".

Figure (4.1.28)

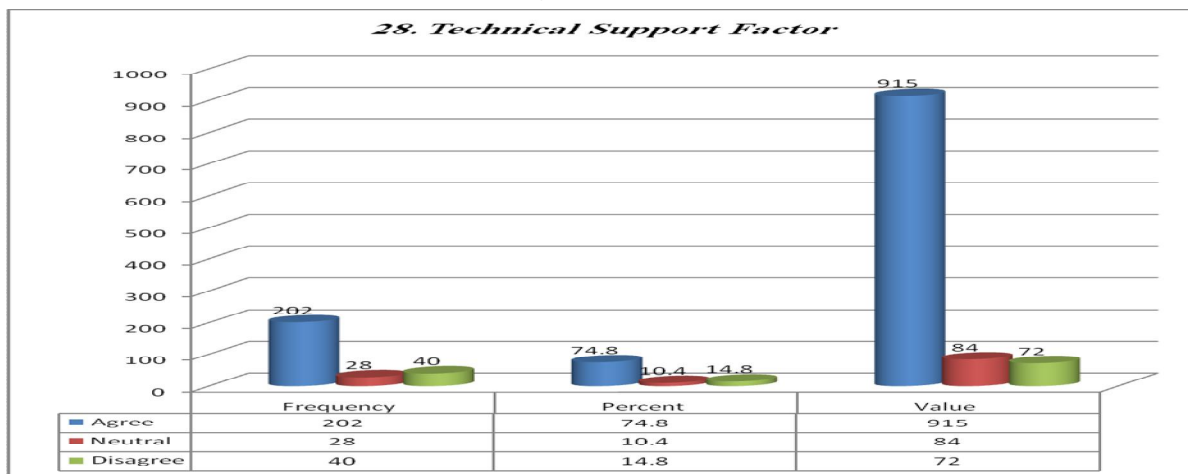| 28. Technical Support Factor	Frequency	Percent	Value
■ Agree	202	74.8	915
■ Neutral	28	10.4	84
■ Disagree	40	14.8	72

Figure and Table (4.1.28) represents Technical Support factor, which includes the items from fourteen to nineteen. The table and bar graph show that more than 74% of the respondents responded, "*agree*', 10.4% of the respondents were neutral and 14.8% of the respondents responded "*disagree*".

Figure (4.1.29)

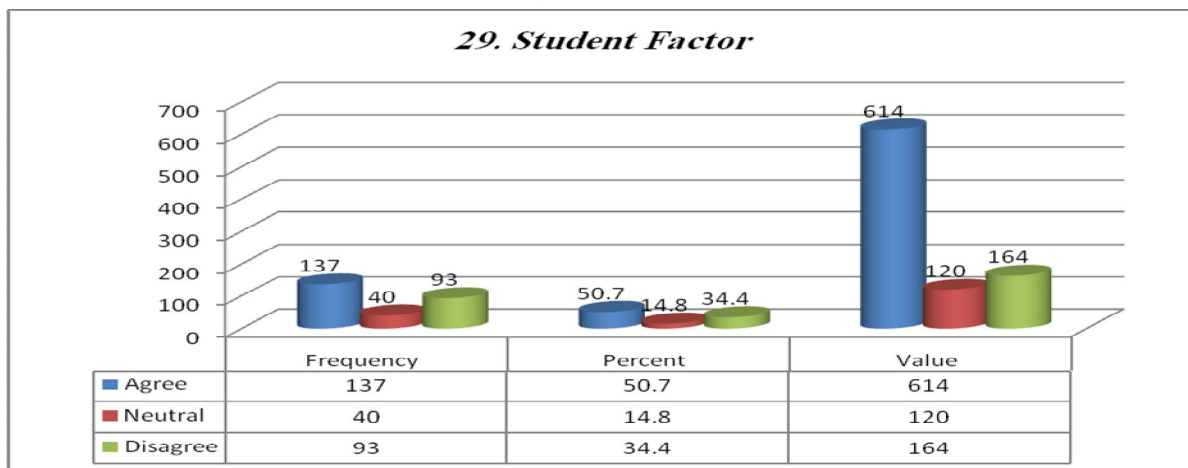| 29. Student Factor	Frequency	Percent	Value
■ Agree	137	50.7	614
■ Neutral	40	14.8	120
■ Disagree	93	34.4	164

Figure and Table (4.1.29) represent Student Factor, which involves the items from twenty to twenty-five. The table and bar graph indicate that more than 50% of the respondents responded, "*agree'*, 14.8% of the respondents were neutral and 34.4% of the respondents responded "*disagree*".

Table (4.1.30)

Answer	Frequency	Percent	Value
Agree	691	61.4	3081
Neutral	146	13.0	438
Disagree	288	25.6	497
Total	*1125*	*100.0*	

30. General Result

Table (4.1.30) represents the general results of all items of the questionnaire. The table and pie chart (30) illustrate that more than 60% of the respondents responded, "*agree'*, 13% of the respondents were neutral and 25.6% of the respondents responded "*disagree*". The largest piece of the pie represents agreed respondents.

The total number of the frequencies was *1125*. Only *288* of the frequencies disagreed and one hundred and forty-six (*146*) of the frequencies were natural. The biggest number was *691*, "*agree*" responses. Those numbers indicate that there are difficulties in the use of interactive whiteboard in the English language classes.

5.0 Conclusion

5.1 Summary

Based on data analysis, Jeddah Schools' English language teachers face challenges when they use Interactive Whiteboard (IWB) in English language classes. These challenges are due to many reasons. Those reasons are teachers' lack of computer competency, breakdown in the common understanding of the schools' goals among those who hold the decision-making power, ongoing technical support is insufficient and the learners are more familiar with technology than their teachers are. Techno-savvy learners might be a challenge to teachers, who are incompetent users of computer. Those challenges interact to hinder IWB integration into teaching and learning English language.

The study recommends that teachers need continuing pedagogical support and technical support. The schools' administration should have a clear vision concerning the smart board, providing materials and resources. The number of the team of technicians should be increased. Moreover, teachers should be aware of *digital learners'* needs.

5.2 Findings

The findings of this study show many challenges that teachers face when using interactive whiteboard. Those challenges are categorized into four categories.

5.2.1   Teacher Factor
1. There is a big gap between teachers' practice and pedagogical framework of the Smart Board. They use teacher-centered approach and Presentation Practice Production (PPP) format of lesson with Smart board.
2. Teachers use Smart board as a presentational tool for teaching English language classes.
3. Teachers adhere to conventional approach (teacher-centered approach).
4. Nearly half of the English language sample teachers face difficulties to manage Smart Board.

5. Teachers lack knowledge about troubleshooting of Smart Board.
6. More than forty-two percent of teachers complain about their busy schedules.
7. More than 35% of teachers do not use web-learning resources in English language classes.
8. More than 15% of teachers lack computer competency.

5.2.2 Schools' Administration Factor

1. Schools' Administration does not have a clear vision concerning Smart Board.
2. Schools' Administration does not provide periodical pedagogical support concerning interactive whiteboard.
3. Schools' Administration provides insufficient interactive learning materials (software) - Schools suffer from shortage of supporting materials.
4. Schools' Administration provides sufficient professional programs to raise teachers' skills of using computer and Smart Board. Technicians did the training programs.
5. Schools' Administration provides an insufficient initial training regarding Smart Board. Once per school year is insufficient, particularly because the IWB is a new technology to both teachers and learners.

5.2.3 Technical Support Factor

1. The majority of teachers emphasize that technicians are not available when Smart Board's problems occur.
2. The number of technicians is a small to deal with all classrooms demands.
3. Technicians are not helpful in training teachers to diagnose and eliminate problems of the Smart Board.
4. IT departments limit the use of the Internet in classrooms.
5. IT departments do not train students on how to utilize the Smart Board.
6. Nearly all English language teachers complain about computer programs and anti-virus protection, which are not updated regularly, in the classroom. It is considered the biggest challenge, which impedes and affects teachers' performance inside classrooms.

5.2.4 Student Factor

1. Teachers emphasize that learners' motivation is low. This factor affects learning English language.
2. Learners choose not to participate in interactive whiteboard's activities.
3. Teachers emphasize that more than thirty percentages of learners do not utilize Smart Board in their English language learning.
4. The majority of students do not access educational websites.
5. Sixty percentages of learners know better than teachers do about technology. They are competent users of technology. They can change Smart Board setting to disrupt the English language classes. They do not help teachers in troubleshooting too.

Perhaps no one of those factors by itself is a determining factor, the interaction of them; however, has a very profound effect on teachers' performance. Those factors are considered key challenges by the researcher.

5.3 Recommendations

In the light of these findings the researcher recommends that technology such as *Smart board* should be used accurately in order to facilitate teaching and provide fun opportunities for learners to learn English language. The responsibility is shared between schools' administration and teachers themselves to integrate the Smart Board into teaching and learning English language, and reduce the challenges when they occur:

1. Teachers have to start with acquiring basic ICT skills.
2. Smart Board should be installed in teachers' rooms. This encourages and enhances cooperation among the Schools' staff including English language teachers.
3. Teachers should prepare themselves for the use of technology such as IWB in particular and ICT in general in the classroom.
4. Teachers should have a clear idea of how a traditional classroom is different from classroom equipped with Smart Board.
5. English language teachers should share ideas, resources and experiences to help develop professionally.
6. Teachers should upgrade their knowledge and skills of using computer to minimize challenges when they occur inside the classroom.

7. Teachers should be aware of learners' needs and their different learning styles. They should be accommodated in English language classes
8. Teachers should read about Smart Board pedagogy – innovation in teaching and changing in methods to meet the needs of 21st century learners.
9. Schools should provide strong pedagogical support as well as technical support.
10. The number of technicians must be increased.
11. Schools should not block downloading videos and websites such as *youtube.com*.
12. Syllabuses should be transformed into software programs.

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