RESEARCH ARTICLE

THE IMPACT OF USING INSTRUCTIONAL COMPUTERIZED SOFTWARE ON ACADEMIC ACHIEVEMENT AMONG DEAF AND MUTE STUDENTS IN ELEMENTARY SCHOOLS OF JARASH – JORDAN

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ARTICLE INFO	ABSTRACT
	The study aimed to prepare, design and produce an instructional computerized software to the deaf and mute students in the primary schools, the study aimed also to identify the impact of using instructional computerized software on checking homework lessons and remaining of the impact of learning and attitudes among the deaf and mute students in the basic level in subject of computer skills. The researchers had developed a study unit through programming PowerPoint PC program to the 1st level. Also he conducted a Pro & Pre Test then analyzed the study contents through designed a questionnaire to measure the role of PC and using PC Software and its impact on processes of learning and education among the deaf and mute students. The study conducted during the year (2012 – 2013) on the deaf and mute students at basic level within the centers of Jerash for the special needs, the researcher followed the descriptive and analytical approach in additional to the experimental approach, the community sample consists of dump and deaf students at the basic level within the center of Jerash for the special needs, the total numbers of community sample were 120 students, among them (50) students of basic level were selected as a study sample and divided into two groups : one of them is experimental and the other is a control group. The study showed that there is a statistically significant at the level of (P <0.05) to use PC in upgrading the ability of checking lessons of dump and deaf students at the basic level. The researcher recommended for providing a tutorial software in all institutes and programs of those with special needs with full concentration on providing the modern tools that considered the easiness of using and effectiveness of performance, in addition to necessity of training to the teachers who teaching students with special needs on using these tutorial software besides, providing a technology specialist to teach those with special needs in every institute.

INTRODUCTION

Considering the speeding-up and noticeable development in computer technology and their several uses in the field of networks and communications, E-learning has become one of the most important techniques used in the fields of education in general and in teaching special needs in particular. E-learning has become the optimum method to provide data or tools required to support curricula content which has become a tool to help learners acquire meaningful knowledge that can qualify them to self-learners through using technology which facilitates learning process. As for hearing impaired students, a system of E-learning should be used for the purpose of academic and vocational training for lifetime. On the other hand, there are still challenges facing mute students getting to knowledge, especially illiterate and semi- illiterate, to access internet and learning computer skills. In this matter, a research was conducted on building computer software for deaf students in order to teach them computer skills according to Cognitive Development theory. Despite utilizing new technology resulting from merging Information Technology and education technology, there has been a necessity imposed on education system to make a great jump in the goals needed to be achieved. So, teaching students modern life skills required in information age including self-learning skills and informatics as well as self-management skills. We can also mention the big challenge facing our schools today; which is 'how are schools changing to meet future requirements'. That includes utilizing various techniques effectively and occupying a place in what is called "high way to information". In general, in order to prepare public schools to use modern technology; we should

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provide good infra-structure, flexible education system and effective management regarding E-learning for students with hearing and pronunciation problems. This includes the additional needs which can't be met but through the alternative ways that represent learning environment that meets the need of the deaf students. One of the models can be learning environments with bilingual information, high levels of visualization, learning interactively and by discovery, the ability to learn interactively in groups of peers through video conference. (Flowers, 2007,25). Also, support systems face some challenges with learners and teacher. Most teachers use computers just as ineffective, time-wasting word processors which require development of multimedia programs. So, accepting E-learning depends on the dynamism of the learner as an individual but they lose concentration due to indirect interaction with teachers and other learners (Ye and JiaCheng, 2009, 3129). These challenges are linked to content of learning and internet educational content as it often lacks a lot of materials and organization. The repetition of websites and interference of their content. Therefore, the researcher is looking forward to provide a framework to enable deaf children to get materials like cartoons, photos and symbols, especially, a user interface for deaf students that can make E-learning must easier and provide them with computer skills, etc.

Research problem

There are a lot of difficulties in teaching and learning "Computer concepts and skills" subject for deaf and mute, male and female students in elementary and kindergarten grades. That indicates problems due to loss of information culture among students and parents. Teachers also face problems in teaching these subjects in addition to non-development of curricula related to this field in order to be suitable for the deaf and mute. Also, lack of technology resources in education centers and schools in Jordan. The problem is in computer skills teaching methodology and in not using modern education techniques which studies assured its effectiveness in teaching including multimedia interactive programs. If sound teaching methodology was found, learning computer subjects would be more useful. Especially in the early learning stages. Some studies results showed that most inhibited cities' schools and deaf centers in Joran lack modern technology. Deaf students face difficulties as they are taught the same curricula and courses as normal students. In addition to that, there is not any study that shows the type of modifications needed for this group. There is no continuous evaluation that is why there is no development of the quality of education services. There should be more effort in training teachers because it must have the ability to help teachers and learners be more creative in learning and teaching (El-Zraigat & Smadi, 2012, 150). The study of (Shane and Molton, 2005) studied the positive effects of multimedia on learning reading of twenty-six students with hearing loss. The experiment consists of three types of interference: text, text and diagram, text and sign language video. Results indicated that text only caused weakness in reading and comprehension of students but multimedia presentation resulted in better performance in reading comprehension. It also mentioned that there is scarcity in studies and researches that talked about cognitive

development theory regarding E-learning for special need students especially in computer skills curricula in elementary schools. There are some applications in the internet that translate vocal signals into sign language for deaf students and vice versa. However, these applications are not effective enough and inappropriate for students until now because they do not provide electronic tools to enable students to use modern techniques like videos and photos. There is a real need to provide required techniques to teach reading and writing skills in vocal signals and sign language. This research aims to present a framework for teachers about deaf students to provide them with ways to be used to access computers and internet. On the other hand, we can consider it a theory to help software developers to take in account requirements of deaf students.

Study aims

This study aims to achieve the following:

* Preparing, designing and producing learning software for elementary deaf and mute students.
* Recognizing the effect of using learning software on academic achievement and attitudes of impaired students in "computer skills" subject.

Operational terms

Hearing impairment: they are problems that prevent hearing system from functioning or reduces its ability to hear different sounds. These impairments differ in acuity from light to severe causing deafness.

Deafness and hearing loss can be distinguished as the following:

Deafness: losing hearing more than 70 decibel
Hearing loss: losing hearing more than 35 decibels and less than 70 causing the individual to face problems understanding what they hear.

Hearing Impaired definition:

In terms of medicine: A person who has got his hearing system damaged preventing them from living normally. This disorder can be in outer, middle, internal ear.
In terms of education: A person who cannot depend on the sense of hearing to learn language or make use of different learning programs. This person is in need for special education programs to compensate hearing loss.

Computer skills:

A process of providing students with basic and advanced skills to deal with computers and utilizing it in learning, office, home environments.

Information technology:

It is a part of education system with its inputs and outputs. Processing is a series of procedures and processing-oriented activities.

The concept of educational technology (as a theory, research, and practical) and notably the definition developed by (Khamis 2008) where he defined education technology as: " cognitive construction of research, theories and practices of human learning processes, and efficient recruitment, human or non-human elements of system analysis and process of learning and studying its problems, design processes and appropriate sources as practical solutions to these problems, and development (production, evaluation), use, administration and evaluating it to improve the efficiency and effectiveness of education and achieving learning (Zaitoun, 2007). And education technology is a broad concept of educational process and it means layout and design of educational programs and curricula, methods of implementation of those programs, curricula, including the production of educational materials and educational situations and what goes on between the teacher and students and manage those situations, and then it is extended to include practical evaluation in all its dimensions, and perhaps rightly only uses the term educational technology when the intended teaching so that part is not called like all, from this definition, it is clear that education technology is not just electrical and electronic equipment, but a method of performance quality and improve application and development of work (Fathallah, 2006). Education technology comes as a differentiated application primarily by analyzing the educational problems of all manifestations of human learning, and the design, implementation and controlling solutions to overcome these problems in order to achieve overall human development and face the challenges. Some educators say that if power disappeared, we use education technology because it's not just a device, this shows the comprehensiveness of education technology as it is not just machines and devices (Zaitoun, 2007). Educational technology is the knowledge resulting from the application of the science of teaching and learning in the real world to the classroom, in addition to the tools and methodologies that are being developed to assist in these applications, and others mention: "Education technology is concerned with the general methodology and set of methods that are used in the application of scientific principles" .And a third definition confirms: "Education technology is the effort with or without machines, and this effort is used to control the environment of individuals to effect change in behavior or get other learning outcomes" (Abdul Abdullah Abdul Rahman Al Kandari, 1999:11).

Gentry came up with these definitions: "Education technology is a comprehensive and systematic application of strategies and methods derived from physical and behavioral science concepts and other concepts in problem solving." The definition of (Ahmed Hamid Mansour, 1989) was stated as: "All methods and tools and materials and regulations used in a particular educational system in order to achieve specific educational goals, it also aims to develop and raise its efficiency (System) is a way of thinking to develop an educational system. (Faisal Al-Faris, 1988:35). It means that the integrated process involving all elements of the teaching and learning process implementation planning and calendar, "Hokridg" and "Charles Holman" referred to (Bashir Abdel Halim Club, 1999:35): "Technology alone means tools and methods as educational technology includes everything in education curricula to teaching methods and classroom

schedules using computer, integrated planning, human and machine, thoughts, opinions and working methods, so it all works within one as a figure 1 shows integration of education technology.

Form (1) integrated management of educational technology source: (Bashir Abdel Halim Club, 1999:35)

Attitudes

Attitude is an organized way of thinking, feeling and reaction to people, groups and social issues, or any event in the environment. This means that the main attitude components are thoughts, beliefs, feelings and emotions, and tendencies towards reaction. Therefore, Attitude is formed when these components are interrelated to the extent that this particular emotion and to react in a coordinated manner with attitude. As (Lindal Davidoff, 1988:15) defined it that the concept of learner or evaluation is connected with our thoughts and our feelings and our behavior. And (Ahmed Abdellatif, 1978:40) defined itself preparation or State of mind – a relatively stable-derived from the environment inferred from an individual's response acceptance or rejection of a particular situation. There is a broad definition of attitude of Therston (1929), he defined attitude as: output of tendency and feelings of individual; his bigotry, bias, thoughts, opinions, fears, threats and belief about the goal represents the idea about which are certain verbal expression unit symbolizes a certain attitude (Jaafar Moussa Haidar, 1982 : 20). Attitude is either a psychological situation when an individual (Orientation) bears positive or negative feeling toward something position or idea, or something with ready to respond in predetermined manner about such matters or the relevant, (Adas and Tok, 2005, 416) and attitude is "feeling or belief of relatively stable towards certain people or groups or ideas or functions and other topics."

Educational Software

It is a general term used to describe single program or group of programs, data and information stored, comparing software with equipment consisting of physical materials such as metals, plastics, software build knowledge and planning, examination and called the person who makes the software programmer, programmers used their knowledge of how to work the computer for programming and checked and adjusted so as to give correct results required, they also are those materials that are designed and programmed by computer to be courses, to support its determination to divide the work into smaller parts a logical sequence.

Special need students

They are a group of abnormal members of society due to their special physical, psychological and mental characteristics, which requires special care commensurate with their abilities and potentials and special conditions, so that their access to a better level of personal and psychological and social compatibility (Al-Metleq, p 8, 2006). Special need child is the one who is different from natural child in mental, physical, linguistic or educational capacity to a degree that it becomes necessary to provide special services and special way in

behavioral and educational pedagogy, the arrival of any child, means a change in the family and that means more financial, moral and social obligations. And change creates effects in the social roles of parents and family members and increases responsibility for children with special needs no doubt would be more impact and needs plenty of sacrifice and commitment.

Research materials and Methodology

Study Design

Researcher used descriptive analytical approach which is considered the most suitable practical approach to address the problem of this research as it helps to highlight different aspects through descriptive concentrated analysis and deep understanding of current circumstances and variables through collecting extensive information about further clarify various aspects and dimensions which helps explain and predict future trends (Assaf, 1980:8). The researcher also used the experimental method (Experimental Research) as it is considered the closest of scientific research methods to solve problems in a scientific way, and is considered the most suitable practical approaches to address the problem of this research as it helps to highlight different aspects by trial and concentrated analysis and deep understanding of current circumstances and variables through information that further clarify the different dimensions and aspects which helps explain and predict future trends (Assaf, 2000 : 8).

Research sample and population

This study society consists of all deaf and mute students in Jarash in (2011) as indicated by the records of student affairs in Jarash governorate rehabilitation centers which are about 120 students. The study sample was selected by convenient sampling. The sample of the study consisted of two groups control sample consisted of 25 students studied in traditional methods without education program from level 1 students and the second group is the case group which consisted of 25 students from level 1 who are deaf and mute. As table 1 shows:

Table 1. Study sample divided according to gender

Group	Number	Percentage
Male	26	52.0%
Female	24	48.0%

Study and correction tool

A questionnaire was set up of several areas: the behavior of students in computer skills and computer skills material and educational software and student attitudes towards substance computer skills test was performed pre-test and after-test in computer skills, and it was handed in by a jury composed of (4) teachers who specialize in the study subjects were chosen from Jordan's universities. The researcher explained the means as shown in Table 2

Table 2. Distribution of means as the researchers sees them

5-4.2 Very high level	4.19-3.6 High level
3.59-2.8 Average level	2.79-2.2 Low level
2.19 Below average level	

Statistical processing

The researcher used SPSS to calculate means, standard deviations as well as making the test (independent samplet-test) to know differences between variables. The researcher also extracted duplications and percentages. Also, made a binary analysis of variance test to find out the marital differences impact of educational software on performance and achievement, as well as simple regression analysis was used to determine the impact of educational software on student performance and achievement.

RESULTS AND DISCUSSION

The results of the first study tool (pre-test and post-test)

The first question is: "Does the study sample student achievement varies in different computer skills teaching method (code tutorials, traditional way)?" Arithmetic averages were extracted and standard deviations by the way variables and gender as in Table (3).

Table 3. Arithmetic means and standard deviations for each gender from each group (control and experimental)

Groups	Gender	Arithmetic means	Standard deviations	Number
Control	Male	13.6154	1.32530	13
	Female	13.5000	.79772	12
	Total	13.5600	1.08321	25
Experimental	Male	16.9231	1.60528	13
	Female	17.8333	1.46680	12
	Total	17.3600	1.57797	25
Total	Male	15.2692	2.21915	26
	Female	15.6667	2.49637	24
	Total	15.4600	2.34050	50

Table 3 shows differentiation in means according to gender and to show the significant statistical differences binary analysis was used in table 4 and this indicates that there are differences between control and experimental group

Table 4. Variance analysis of student achievement in computer skills depending on how variables and gender and the interaction between the test post

Source	Total of squares	Freedom	Average of squares	Value of f	Indication
Group	182.162	1	182.162	101.364	.000
Gender	1.971	1	1.971	1.097	.300
Gender * total	3.282	1	3.282	1.826	.183
Error	82.667	46	1.797		
Total	12219.000	50			

Table 4 shows that there are significant statistical differences ($\alpha = 0.05$) due to the way as the value of F is 101.364 with statistical value of 0.00. Also there are no significant statistical differences ($\alpha = 0.05$) due to gender as value of F is 1.097 with statistical value of 0.183. And this indicates that there are significant statistical differences between control and experimental groups in the favor of experimental groups. And the researcher sees that there is a very big effect of educational software on students achievement and performance in

computer skills. And these results go with (Larson‹Susan Hatlestad (2007), Killy (2002) and others like Abu Jaber and Al-Badainah (1993) which assures the effect of educational software on students performance.

Results of the second study tool (questionnaire)

To answer the second question, which is:

What are the attitudes in these exam papers and opinions of deaf students about computer stuff?

To answer that question, the researcher extracted arithmetic means, as shown in the Table (5):

Table 5. Arithmetic means and standard deviations of fields of study

Field	Arithmetic means	Standard deviations
Attitudes of students towards computer skills	3.6618	.71323
Behavior of students with computer skills	3.5880	.68947
Computer skills material	3.5800	.71482
Educational software	3.5533	.71640
The tool all in all	3.6000	.67019

The previous table shows the calculation of averages ranged between study tool (3.5-3.66), a medium to high, where the attitudes of students with a high degree of arithmetic average (3.6) and standard deviation (0.71), while the behavior of the students at intermediate level in arithmetic (3.5), computer skills were also at intermediate level in arithmetic (3.5), educational software got the arithmetic mean (3.55), either tool as a whole came to a high level in arithmetic (3.6) and standard deviation (0.67).

Students behavior:

Table 6 shows the arithmetic of the field behavior of students in a computer has ranged between (3.4-3.6), and to a medium to high, where the paragraph reading "the student stays calm in place" arithmetic mean (3.68) and standard deviation (0.68), second only to "student preparation duties required of him" arithmetic mean (3.64), standard deviation (0.776), in third place, the student maintain classroom property "arithmetic mean (3.63), standard deviation (0.766).

Table 6. Arithmetic means and standard deviations of student behavior field in descending order according to the arithmetic means

Item	Arithmetic means	Standard deviations
Students stay quiet in their seats	3.68	.683
Students do the tasks asked	3.64	.776
Students keep intact all of classroom objects	3.63	.766
Students keep getting to classroom early	3.62	.805
Students are not violent	3.62	.725
Students respect instructions	3.60	.808
Student keeps classroom tools intact	3.56	.884
Students keep focus and attention	3.54	.838
Students interact actively with the teacher	3.50	.839
Students pay a lot of attention during computer skills period	3.48	.839
Students behavior in computer skills subject	3.5880	.68947

In the penultimate place came "the student interacts heavily with a teacher article" arithmetic average (3.5) and standard

deviation (0.89), either in last place came the paragraph reading "there is great attention by the student when he learned computer skills article" arithmetic average (3.48) and standard deviation (0.68).

Computer Skills subject

Table 7 shows the arithmetic averages ranged between (3.5-3.6), as the paragraph which States "material computer skills upgrading education students" arithmetic mean (3.62), standard deviation (0.78), in second place came the paragraph "enhance computer skills material modes of communication between the student and society" arithmetic mean (3.6) and standard deviation (0.782), ranked second to last paragraph were enjoying a student's computer skills "arithmetic mean (3.52) and standard deviation (0.88) , Either in last place came "enjoys a student's computer skills" arithmetic mean (3.52) and standard deviation (0.886).

Table 7. Arithmetic means and standard deviations in computer skills ranked in descending order according to the arithmetic means

Item	Arithmetic means	Standard deviations
Enhances article computer skills upgrading student's tutorial	3.62	.780
Computer skills enhance modes of communication between the student and the community	3.60	.782
Computer skills in substance supports the student-led computers	3.60	.728
Engages students in computer skills	3.60	.857
Computer skills contribute in developing students ' knowledge	3.60	.833
Computer skills increase student's confidence in themselves	3.52	.814
Students enjoy computer skills	3.52	.886
Computer skills	3.5800	.71482

Educational software

Table (8) shows that arithmetic means for educational software field has ranged between (3.3-3.6), and to a medium to high, where these paragraph came "means to increase the level of student understanding of educational material" means helping to increase the level of student understanding of educational material on top of the arithmetic mean total (3.6) and standard deviation (0.884), followed by "affect the student's educational level means positively" arithmetic average (3.66) and standard deviation (0.823), either in the penultimate place came " You thrill elements in teaching aids to increase the focus and efficiency of the students "on the arithmetic mean (3.4) and standard deviation (0.83), either in last place came" contribute images and side explanations in answering some questions students "arithmetic average (3.34) and standard deviation (0.68).

Students attitudes towards studying computer skills

Table 9 shows arithmetic means ranged between (3.42-3.82), as the paragraph reading "study computer skills easy" on the highest average total account (3.82) and standard deviation (0.72), while in second place came the paragraph "feel that computer skills too close on my daily" arithmetic average (3.7), standard deviation (0.82), in third place came "I love being a specialist in computer skills" arithmetic average (3.72) and standard deviation (0.75).

Table 8. Arithmetic means and standard deviations of area of educational software in descending order according to arithmetic means

Item	Arithmetic means	Standard deviations
These educational tools help improve students' understanding	3.68	.844
These educational tools make positive effect on students	3.66	.823
There is ease for students to deal with the educational material	3.66	.872
There is ease for students personally when dealing with the tools	3.56	.837
The quality of these tools help students understand better	3.54	.813
These education tools helped improve students' achievement levels	3.54	.734
These education tools helped improve students' interest in the subject	3.52	.839
These tools help make lessons more fun	3.48	.839
Pictures and other explanation method helps answer students questions	3.34	.688
Educational software	3.5533	.71640

Table 9. Arithmetic means and standard deviations of student attitudes towards computer skills ranked in descending order according to the arithmetic means

Item	Arithmetic means	Standard deviations
Studying computer skills is easy	3.82	.720
I feel that computer skills is very close to my daily life	3.74	.828
I would love to specialize incomputer skills	3.72	.757
I make benefit from computer skillsto improve my other skills	3.70	.735
I wish there will be more computer skills periods.	3.70	.839
Studying computer skills fills my spare time	3.68	.819
Learningcomputer skillsneeds systematic thinking	3.68	.913
I think of topics ofcomputer skills.	3.62	.945
Studying computer skillshelps me be more capable of daily life skills	3.62	.855
The teacher encourages us to read more books and resources about computer skills	3.58	.859
Computer skills made me more able to deal with modern technology	3.42	.785
Attitudesof students towardscomputer skills	3.6618	.71323

Table 10. Arithmetic means and standard deviations of answers according to the way and gender

Field	Group	Gender	Arithmetic means	Standard deviations	Number
Students behavior in Computer Skills	Control	Male	2.8231	.41664	13
		Female	3.3917	.48889	12
		Total	3.0960	.52953	25
	Experimental	Male	3.8308	.16525	13
		Female	4.3500	.47194	12
		Total	4.0800	.43108	25
	Total	Male	3.3269	.60037	26
		Female	3.8708	.67854	24
		Total	3.5880	.68947	50
Computer Skills	Control	Male	2.8901	.36024	13
		Female	3.2976	.48525	12
		Total	3.0857	.46474	25
	Experimental	Male	3.7802	.20715	13
		Female	4.3929	.65924	12
		Total	4.0743	.56412	25
	Total	Male	3.3352	.53748	26
		Female	3.8452	.79586	24
		Total	3.5800	.71482	50
Educational software	Control	Male	2.8632	.51948	13
		Female	3.2130	.48654	12
		Total	3.0311	.52462	25
	Experimental	Male	3.9060	.21681	13
		Female	4.2593	.56919	12
		Total	4.0756	.45216	25
	Total	Male	3.3846	.65939	26
		Female	3.7361	.74414	24
		Total	3.5533	.71640	50
Students attitudes towards Computer Skills	Control	Male	3.0280	.59773	13
		Female	3.4545	.64048	12
		Total	3.2327	.64340	25
	Experimental	Male	3.7902	.15474	13
		Female	4.4167	.52647	12
		Total	4.0909	.49097	25
	Total	Male	3.4091	.57797	26
		Female	3.9356	.75514	24
		Total	3.6618	.71323	50
The tool all in all	Control	Male	2.9064	.39930	13
		Female	3.3491	.50530	12
		Total	3.1189	.49768	25
	Experimental	Male	3.8274	.09000	13
		Female	4.3559	.49108	12
		Total	4.0811	.43264	25
	Total	Male	3.3669	.54860	26
		Female	3.8525	.70842	24
		Total	3.6000	.67019	50

In the penultimate place came "computer skills teacher encourages us to read foreign reference books" algorithmic interposed (3.5) and standard deviation (0.85), either in last place came the paragraph which reads "computer skill material enabled me to deal with various types of modern technology" arithmetic mean (3.42) and standard deviation (0.785), researcher finds that there is a positive impact for educational software, learners and their performance, and the results of this study have agreed (gostad, 2004), as well as the researcher believes there is a big role For computers in developing positive student attitudes toward computer study, this study also agreed with both study (Zamfirov), Saeva2 & (259, 2013 MING JU *) 2009, 91 (Shane wemolton (2005) after using computers in teaching English language course in sign language and gostad *et al*. (2002), the slave study (1996).

Answer to question 3, which reads:

Is there a statistically significant differences to perform the study sample members due to the way and gender?

To answer that question, researcher extract arithmetic means, for all areas, as shown in the Table (10):

As table shows (10) that vary depending on the ostensibly arithmetic type (male, female), and indicate the differences among these statistical function arithmetic means variance analysis was used the duo as shown in the Table (11).

Shown in Table (11) differences are statistically significant ($\alpha = 0.05$) due to the effect of teaching method, and experimental group differences were, well there were statistically significant differences attributed to the genre (male, female), and the differences in favor of females, while there was no depending on how the interaction and gender, researcher finds educational software have a significant impact on student attitudes and performance using educational software, because of its educational software to target new ways to increase motivation towards new learning, these have agreed Study with Zamfirov study), Saeva2 & (259, 2013 and MING JU *), 2009, JING-91 (f (Shane wemolton (2005)) after using computers in teaching English language course in sign language and the study of gostad *et al*. (2002).

Table 11. Analysis of variance of the study sample performance by group and type

Sources	Field	Total of squares	Freedom degree	Mean of squares	Value of f	Indication of function
Group	Students ' behavior in a computer skills	12.060	1	12.060	74.065	.000
	Computer skills	12.298	1	12.298	59.907	.000
	Educational software	13.616	1	13.616	62.820	.000
	Students attitudes towards computer skills	9.277	1	9.277	35.164	.000
	The tool all in all	11.595	1	11.595	71.382	.000
Type	Students ' behavior in a computer skills	3.692	1	3.692	22.675	.000
	Computer skills	3.247	1	3.247	15.817	.000
	Educational software	1.542	1	1.542	7.114	.011
	Students attitudes towards computer skills	3.460	1	3.460	13.114	.001
	The tool all in all	2.942	1	2.942	18.113	.000
النوع×totalة	Students ' behavior in a computer skills	.008	1	.008	.047	.830
	Computer skills	.131	1	.131	.640	.428
	Educational software	3.96e-005	1	3.96e-005	.000	.989
	Students attitudes towards computer skills	.125	1	.125	.472	.495
	The tool all in all	.023	1	.023	.141	.709
Total	Students ' behavior in a computer skills	666.980	50			
	Computer skills	665.857	50			
	Educational software	656.457	50			
	Students attitudes towards computer skills	695.372	50			
	The tool all in all	670.009	50			

Table 12. Simple regression analysis of the impact of educational software on students' behavior in Computer Skills

Independent variable	Rassociation	Explained variance	Value of F	Statistical indication of F	Value of Beta	Value of t	Statistical indication of t
Software	.840	.705	114.688	.000	.840	10.709	.000

Table 13. Simple regression analysis of the impact of educational software on Computer Skills

Independent variable	Rassociation	Explained variance	Value of F	Statistical indication of F	Value of Beta	Value of t	Statistical indication of t
Educational software	.881	.776	166.162	.000	.881	12.890	.000

Table 14. Simple regression analysis of the impact of educational software on student attitudes in Computer Skills

Independent variable	Rassociation	Explained variance	Value of F	Statistical indication of F	Value of Beta	Value of t	Statistical indication of t
Educational software	.920	.846	263.794	.000	.920	16.242	.000

Answering the fourth question, which reads:

Is there a statistically significant effect of educational software on student behaviors in a Computer Skills? And to answer that question, the researcher has simple regression analysis, as shown in the Table (12):

Simple regression analysis shows the impact of educational software on student behaviors, the value of F has reached (114.688) statistical significance (0.00), R value amounted to association (0.84), and contrast the interpreter had attained (0.70), 70% of the dependent variable, independent variable, interpreted as meaningful effect to the impact of educational software on the attitudes of students, and this had stressed the value of (t) with (10 714), less significance level (0.05), indicating an effect of statistical significance impact Educational software on student behaviors in Computer Skills, educational researcher finds software may hours learners to positive interaction within the classroom, and have contributed to raising motivation and change their behaviors towards new learning as a result of the use of educational software, this study agreed with Abu Jaberwalbdainh, (1993).

Answer question 5, which reads:

Is there a statistically significant effect for educational software Computer Skills?
To answer that question, the researcher made simple regression analysis, as shown in the table (13):

Simple regression analysis shows the impact of educational software on Computer Skills, the value of p (166.162) reached statistical significance (0.00), R value amounted to link (0.88), contrast the interpreter had attained (0.77), the ratio of 77% of the dependent variable, independent variable, interpreted as meaningful effect to the impact of educational software on Computer Skills, and the value of (t) with (12.890), the level of significance of less than (0.05), indicating a significant impact Statistics of the impact of educational software on Computer Skills, researcher finds that educational software has increased the suspense and fun of students towards the new learning, as a result of the excitement and motivation that brings educational software on Computer Skills.

Answer of question 6, which reads:

Is there a statistically significant effect of educational software on attitudes in students Computer Skills?
To answer that question, the researcher has simple regression analysis, as shown in the table (14):

Simple regression analysis shows the impact of educational software on students ' attitudes towards substance Computer Skills, the value of p (263.794) reached statistical significance (0.00), R value amounted to link (0.88), contrast the interpreter had attained (0.92), a 92% of the dependent variable, independent variable, interpreted as meaningful effect to the impact of educational software on attitudes towards Student-Computer Skills material, the value of (t) with (16.242), less significance level (0.05), indicating On a statistical significance of the impact of educational software on students '

attitudes towards substance Computer Skills, researcher finds that there is a positive impact on student attitudes to learning code, so that the educational software has contributed significantly to student attitudes toward learning Computer Skills.

Conclusion and Recommendations

Study summary statistical significance of computer use in raising deaf and dumb students collection of primary school and promoting students ' attitudes towards teaching and learning processes so that the student stays calm in place and prepare the required duties and keeps the row property in addition to the student's interaction with the instructor and increase between the student and the community. In light of past results scientific researcher recommends: providing educational software in all institutes and special needs programs, focusing and providing modern methods that take into account ease of use and efficiency, the need to train special needs teachers to use educational software, the need for education technology specialist for people with special needs in each Institute, the need to activate the role of resource rooms, and create learning resources center in each Institute and program provides special needs teachers with everything that is fashionable in educational software And can these centers, training programs and workshops for teachers, the need for appropriate employment for computer courses in it departments of education focusing on the use of computers for education, the need to utilize various search tools prepared by the researcher in measuring variables associated with the design and production of educational software and finally teacher training curriculum for computing with special needs to suit the needs of this category. Perhaps all these recommendations and proposals require great expenses budget, so some international communities established a disability insurance system «Invalidate» bear those expenses, which allows to integrate many of them in the workplace, in regular classrooms in universities and colleges, and the difficulty and high cost of the benefits of information and communication technologies for persons with disabilities in developing countries remains one of the most important questions of the world under the information society so as to reduce the digital divide. As for recommendations for future studies, researchers recommended research to study the impact of educational software for students for classes and other levels in addition to other specialized courses such as Arabic language courses, English, math, science. And others, in addition to conducting a study on the possibility of building centers on the level of Saudi Arabia to produce and develop and market educational software both as his specialty and distribution centers and schools for the deaf and dumb.

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