

Introduction

Human being has faced increasing development in all fields related to man life, the educational side in general and in learning side especially, that speed development had accompanied with information technology in man life.

So educationalists has called to reconsider instruction or education perspective and policies to cope with incremental developments and to adapt also with information opening era, globalisation and technology revolution.

Due to skill to use hi tech, has became one of the most crucial issues in recent societies. so modern education process has focused on using or applying hi tech in education, where to be a basic part in education not add one.

Pupils with especial needs in general and with deaf handicapped in private are an important part in target system to use or to apply "hi tech" on them.

Internet use skill helps them to enhance their life style positively, also has changed their life methods in many stuffs like: how to learn, how to connect with others, how to find information, also internet use has influenced on their decision making process or their attitudes, finally affected on their way to reach to a lot of services through internet as marketing or governmental services.

Despite the importance of internet applications for handicapped pupils (with deaf) but they not find their needs to use the sources of information or its application, where it was notices that internet applications or websites was designed to ordinary ones not for handicapped, so they hardly navigate on web, the current study has offered some standards to assist defeat handicapped pupils through web designing or developing.

Study problem:

Study problem was considered as lacking in internet using skills among the 2nd class of prep- schools with deaf handicapped, also it was low in study achievement among them, there were no
standards to design or to produce educational web site designing process (with deaf handicapped)

The researcher has affirmed that hypothesis in light of previous studies, pilot study findings and interview with sample of students with deaf and teachers.. so as a try to resolve that problem, he has tried to design internet web site to assists pupils with deaf handicapped in light of web designing standards for those category of special needs pupils. So the main study question was shaped as following:

What the effect to use both of synchronize and asynchronize electronic education among pupils with deaf handicapped problem to develop their skills to use internet?

Also there were sub-questions as following:
1- What are the internet skills that prep. Schools deaf handicapped pupils must have?
2- What is the desired achievement level among that prep. Schools deaf handicapped pupils to use internet?
3- What are the designing basics of website (synchronize and asynchronize electronic education applications) to develop internet using skills?
4- What is the effect of synchronize education program to develop internet skills among deaf handicapped pupils?
5- What is the effect of asynchronize education program to develop internet skills among deaf handicapped pupils?

Study goals:
The current study aimed to the following:
1- To develop internet using skills among deaf handicapped pupils.
2- To identify the influence of education application on developing internet using skills among deaf handicapped pupils.

Study importance:
The importance of current study as following:
1- Pupils wit deaf handicapped problem as:
   • To develop internet skills to use
   • To reconsider the pupils confidence of their capabilities to learn despite their handicap.
• To provide their needs during designing electronic curriculum to adapt with their handicap.

2- The teachers.
- To reduce the burden on them to communicate with.
- To develop teacher role to apply the new hi tech in education process.

3- About web site developers & education applications:
- To prepare standard list to be a guide to design and to develop web sites for deaf handicapped pupils.
- To offer web site based on that standards.

4- For researchers: the current study results provide a new filed for other studies related to the effectiveness of developing electronic applications based on standards relevant to pupils with deaf handicap problem in all stages and subjects.

Study limits:
The current study focused only on the following:

a- Pupils with deaf handicapped problem in 2nd class in Al Amal prep. School, Fayoum governorate.

b- Web search unit, held in school book “computer & information technology” for prep. school pupils.

c- To measure the effectiveness of web site for:
- To achieve the cognition side related to internet use skills (the study goal)
- Performance of internet use skill.

Study methodology:
(1) Descriptive approach, to survey studies, educations, to specify program goals and to shape list of standards to use internet (skills).

(2) Quasi experimental approach, to apply study experiment and to identify the influence of educational program on developing internet use skills among sample of the study “two group”

Experimental designing:
The researcher has applied quasi experimental approach on two group, the 1st study electronic synchronize learning, the 2nd to study asynchronize electronic learning.
Study hypothesis:
The current study has submitted to the following hypothesis to confirm its validity:
1- There is no statistical differences between average of sample degrees (two experimental group) in pre and pro tests to achieve cognitive knowledge related to internet use skills.
2- There is no statistical differences between average of sample degrees (two experimental group) in pro tests to achieve cognitive knowledge related to computer use skills.
3- There is no statistical differences between average of sample degrees (two experimental group) in pre and pro tests related to performance observation card for internet use skills.
4- There is no statistical differences between obtain rate for the 1st experiment group (to use suggested program in synchronize style) and obtain rate for the 2nd experiment group that using suggested program (asynchronize training style) to affect knowledge achievement test related to computer use skills.
5- There is no statistical differences between obtain rate for the 1st experiment group (to use suggested program in synchronize style) and obtain rate for the 2nd experiment group that using suggested program (asynchronize training style) to affect knowledge achievement test related to internet use skills.

Instruction materials & measuring tools:
1- Education materials: internet research web site for deaf handicapped pupils (on sample of 2nd prep school, by the researcher)
2- Measuring tools..
   A- To test cognitive achieving side, related to computer use skills “by researcher “
   B- Observation card for internet use skills among deaf handicapped pupils “by the researcher “

Study steps:
To answer the study questions, to testify their hypothesis validity, the current study has focused on the following:
1- For the first question “What are the internet skills that prep. Schools deaf handicapped pupils must have?” the researcher has concentrated on:
- Content analysis for 4th & 5th chapters in light of curriculum goals to identify the most influences skills inside 2nd prep curriculum.
- To analysis pupils features (educational needs for internet use skills)
- To prepare skills list in light of (curriculum goals – learners needs)
2- To answer the 2nd question as “What is the desired achievement level among that prep. Schools deaf handicapped pupils to use internet?” the researcher has concerned with:
- To apply achieve test on 4th, 5th chapters “2nd prep school book” and to judge on by group of arbitrators to assure their validity to apply or to amendment in light of arbitrators views subjectively.
- To prepare observation card for 4th & 5th chapters, and offer them on group of arbitrators to assure their validity to apply or to amendment in light of arbitrators views subjectively.
- To apply the test and observation card on two experiment group “pre “
- To realize the test results on pupils level.
To answer the 3rd question “What are the designing basics of website (synchronize and asynchronize electronic education applications) to develop internet using skills?” the researcher has followed:
- To access to previous studies and literature related to the current study variables, to apply relevant subjective approach to design and to produce the study programs.
- To design scenario relate to synchronize learning and to judge it by arbitrators to assure its validity to apply.
- To design scenario relate to asynchronize learning and to judge it by arbitrators to assure its validity to apply.
- To produce educational program in light of study variables, judge it by arbitrators to assure its validity to apply.
- To test one of web sites on internet to upload educational application and to test it.
To answer the 4th question “What is the effect of synchronize/asynchronize education program to develop internet skills among deaf handicapped pupils?” the researcher has followed:

- To testify study sample ad to divide it to two experimental group( the 1st to study synchronize and the 2nd to study asynchronize learning )
- To apply study tools “ pre test “ on both two group .
- To apply basic study experiment “ pro study “
- To apply measuring scales on both two group “ pro “
- To monitor data and to calculate them statistically to find results and present them , discussing in light of theoretical frame and previous study results.
- To make recommendations & suggestions.

Study results:
The current study statistically affirmed the following:

- To describe the results related to effectiveness of suggested program regardless of the applied style , at cognitive achieving level and skills performance rete:
  a- For cognitive achievement related to computer use skills on two experimental groups , the study indicated that there is difference statistically on study sample . in pre & pro tests , for cognitive achievement in computer use skills , it was evidence that there is progress in achievement level among deaf handicapped pupils , also the results assured the effectiveness of applied website . so the 1st , 2nd hypothesis were rejected.
  b- For sample performance rate ( both experimental two groups) to use internet skillful , the results indicated that there is difference statistically between sample performance rate ( both experimental two groups) in pre & pro tests for observation card to use internet skillful ( study target ) it was to pre test . so the 3rd hypothesis was rejected

- To describe and to discuss the effectiveness of results related to varying in suggested program (synchronize & asynchronize approaches) based on cognitive achievement and skill performance rate …
a- Related to cognitive achievement related to internet use skills, between two groups (synchronize & asynchronize) it was indicated to …there was no differences statistically between degree of sample “1st group “synchronize . and average of degree for 2nd group asynchronize to apply pro test for cognitive achievement for internet use skills , so the 4th hypothesis as rejected .

b- For the performance of both to groups (synchronize & asynchronize) to use computer skills:
- The final results indicated to there were no difference statistically between average of performance level for experiment 1st group that used synchronize training , and rate of performance for 2nd group . applied on pro test for observation card to use internet skills. So the 5th hypothesis was rejected .

**Study recommendations:**

In light the final results of current study , the researcher has recommended the following ones:

“1- to continue to teach internet use skills to 2nd prep. School class pupil with deaf handicapped problem, according to the designed web site .

“2- to increase the ministry of education concerning to reshape handicapped pupil curriculum according to their features and nature .

“3 – to redirect teachers sights to necessity to adopt new education modules relevant to pupil with deaf handicapped during teaching process .

“4 – to concern to designate educational web pages on ministry web portal adapted to pupil with deaf handicapped .

“5- to train web developers & designers based on electronic portal, considering pupil with deaf handicapped features .

“6- to depend on signal language whatever visual (video – signal alphabetical) to suite with pupil with deaf handicapped .

“7- to organize training courses for teachers in Al – Amal school to use internet, to know how to design or develop courses on internet and administer it electronically – how to teach with hi tech.

“8- to offer computers connected to internet for each pupil, to use during school day, any time .
“9- to benefit from designing prototype, the researcher has developed and electronic learning programs for pupil with deaf handicapped.

“10- to prepare forums and workshops to promote electronic learning culture and its importance for pupils in Al Amal school.

“11- to redirect third party concerning with educational process, for the importance to focus on using visual stimulus when designing electronic courses for pupil with deaf handicapped.

“12- it is necessary for national council for electronic learning to adopts electronic courses for pupil with deaf handicapped according to worldwide standards.

“13- it is necessary to integrate among designers & developers and instruction technology specialist to consider pupil with deaf handicapped needs specially the social and educational interaction with internet websites.

“14- to study problems and obstacles that prevent to use electronic learning for pupil with deaf handicapped.

“15 – to make more studies and researches that focus on pupil with deaf handicapped needs, concerning with to identify their problems and to resolve it, and to transfer their education courses electronically according to their handicapped nature.

Suggested studies:
In light the current study results, the researcher recommends to study the following:

- To make more relevant searches to current one, to design electronic courses through internet, relate to other subjects to pupil with deaf handicapped and to measure its effectiveness on other study subjects.

- To make survey on websites that provide education services in Arab world to identify the obstacles the handicapped pupils face and prevent them to benefit.

- To apply researches about effectiveness of structural variables on producing electronic learning courses through internet for pupil with deaf handicapped.

- To apply studies concerning with developing instruction technology specialist skills to use and apply hi techs to serve pupil with deaf handicapped.
- To measure the influence of using synchronize and asynchronous electronic learning courses to develop pupil with deaf handicapped skills to build electronic circuits.

- To design two electronic programs, the 1st based on web, the other based on pupil with deaf handicapped, to measure the most effective one of them to affect the pupil cognitive achievement and technology awareness.

- To evaluate the mixed electronic learning effectiveness for pupil with deaf handicapped to obtain math. Solve skills and decision making.

- To build system to introduce electronic courses through web for pupil with deaf handicapped, and to measure the influence of it on pupil attitudes toward learning on website.
The Effect of the Asynchronous and Synchronous e-Learning for Hearing Impaired pupils on the Development of some Internet use Skills

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