

Cairo University Institute of Educational Studies Department of Instructional Technology

A program Based On Expert Systems Connected to The Internet for Developing Digital Indexing Skills of Instructional Technology students at The Colleges Of Specific Education

Submitted by Noheir Taha Hassan Mohammed A thesis Abstract for the PHD Degree

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Instructional:

The age we live in is described as a constant changeable life more over a rapid development at all fields . So it is been a natural thing to say that the education system elements hare affected by the great revolution at the field of the new technology by where the role of the teacher and the learner hare changed in addition to curriculum's aims components , activates , methodologies. the thinking has become the focus of the education for not only keeping knowledge but also for developing the creative thinking skills and solving problems . The learning's sources have became a complete education system for transmitting the learning , not only sole means , through which the teacher is free to use it .

That complete education system has involved " The active education based on such computer "

Active learning has an important filed called artificial intelligence that aims to understand the human intelligence .

The science of artificial intelligence has been useful at many fields in particularly at the field of the experienced systems in producing effective intelligent systems at many fields .

The researcher has argued that digital exploring skills are essential for education tech . specialists who may use program based on the experienced systems and linked in the internet to be developed.

Feeling with the problems :

- 1- The current educational plan of the programme of education tech . does not provide students with the digital exploring skills .
- 2- The curriculums have no references for that learners haven't digital exploring skills .
- 3- There are a large amount of documents and pages . may be accessed difficulty expect through specialists .
- 4- Careless using of the programs based on the experienced systems in learning students although they are effective and suitable for many skills that have included the digital exploring skills .

Through setting the problem researcher has depended on three factors as following :

First : the researcher's experience :

Through sharing with teaching the practical side of many computer subjects within more than one term , the researcher has noticed a lack of saving laboratories , devices and equipments that has made it is difficult to train students on such skills correctly , and we should notice that there are individual differences between students that aren't correctly considered because there aren't enough time for training students within the curriculum term .

Second : the scientific conference :

The seventh international conference for amplicants of the artificial intelligence (Chicago, 2004) has recommended that it is necessary to use the experienced system field in building programmes that helps in solving problems facing learners in particular at the educational fields need. to manual skills.

Third : the previous studies :

According to the mentioned above beside to the study of (Ahmed ragheeb , 2005) that discussed the importance of using the smart educational systems of develop the skills of profucing the education video programs and fixing videocamers breaking down , the study of (Magdy Mustafa , 2000) that aimed at developing a flexible system to produce industrial systems supported by an experienced system and the study of (Howard ,2003) that provide the effective using of the artificial intelligence systems in designing maps liking such as reality through uncompleted requires .

These studies and other have proved the effect of the setting programs through the experienced system in solving different problems at learning skills .

Being a group of required skills for education tech. specialties, the skills of digital exploring linked in the internet can be learnt through a program setting by the experienced system.

The problem of the research :

The research's problem has noted through answering the following questions :

- 1- what are rules of the program based on the experienced system linked in the internet to develop the digital exploring skills ?
- 2- what's the effect of using the experience system on gaining knowledge of the skills of exploring linked in the internet against the traditional methods ?
- 3- what's the effect of using the experienced system for digital
- 4- exploring skills linked in the internet against the traditional method ?

The research's aims :

- 1- To know rules and descriptions of the setting program by the experienced system for developing the digital exploring skills helping with the computer .
- 2- To know the effect of using the experienced system on gaining knowledge of the digital exporting skills linked in the internet again the traditional methods .
- 3- To know the effect of using the experiences system for digital exploring helping with the computer against the traditional methods .

The importance of the research :

The current research has been hoped to be useful for the following :

- 1- helping individuals responsible for producing education tech . curriculums and observing the new technologies to be effective through the educational process .
- 2- uncovering the effect of the educational environments that are solen electronically by through the technology of experienced systems linked in the internet may be used to achieve the educational purposes .
- 3- to encourage learners to do new tasks within information technology and the learning environment based on the experienced systems .
- 4- the research may be useful in using the experienced system linked in the internet for training students on different subjects .

The research's example :

The researcher has chosen a sample from the students of the fourth grade (period) of the education technology section at the faculty of the quality education at Fayoum university including 50 students divided into two groups : the clinical group of 25 students and control group of 25 students :

The researcher's limits :

This research confones the education technology curriculums related to the digital exploring through the internet and some problems related to the digital exploring through the internet .

The research's tools :

- 1- A query of the students views about the skills of digital exploring linked in the internet .
- 2- A query of the responsibles' views about teaching the amplicable side .

- 3- An observing card to set the common skills on the digital exploring linked in the internet for the students of education technology at the faculties of the quality education .
- 4- An observing card of views of the responsibles on teaching the amplicable side .
- 5- The two evaluation tools : before / after test measure the learners teachers of the knowledgeable side .
- 6- An observing card of the skills doing before / after of the students teachers

The research's approach and the experimental design :

- 1- the researcher will use the descriptive approach to set the digital exploring skills and the norms and descriptions of the education program .
- 2- also she will use the clinical approach to clinical the program and compare with the two groups and the research involves the experimental design .

The research's changes :

The research includes alone change program based on the experienced systems linked in the internet to develop the digital exploring skills , there are two following changes :

A – the rate of the practical doing the skills :

It is measured through an observation card of the most important mistakes that are committed by the students :

B- The levels of gaining subjects :

They are measured by a test including a group of individual tests divided according to skill levels mention above .

The research's steps :

- 1- studying the previous researches and studies relating the research's changes and what are involved of the following :
- 2- The artificial intelligence (its concept and relation with the other science)
- 3- The experienced systems (their concept , components and related with other science)
- 4- Designing the education program
- 5- Applying the education program .
- 6- The results, recommends ant the solo researches.

The research's results :

- 1- there are statics differenties between the average of the clinical group and the control group according to the before / after applying of the gaining test .
- 2- there are statics differences between the average of the clinical group's doing and the control group's according to the results of the observation card of all digital exploring skills (PD, 48) of the students after the experience at on favour of the clinical group.

The research's recommendations :

according to the current research's results , the researcher has recommended with the following :

- 1- using the program based on the experienced systems linked in the internet designing by training the education tech . studies on the digital exploring skills .
- 2- applying rules followed in producing this program besed on the experienced system linked in the internet within designing other education programs .
- 3- designing and developing programs based on the experienced systems linked in the internet of the educational curriculums at the general and university education .
- 4- making more studies and searches about studying changes of designing and developing the program based on the experienced systems linked in the internet .
- 5- saving new laboratories , suitable programming and showing the program based on the experienced systems linked in the internet and saving equipments tools , and devices required to universities .
- 6- saving the physical and thinking supports of professors and teachers for using the experienced systems linked to the internet .
- 7- trying professors and teacher on developing and using the program based on the experienced systems linked in the internet at education .
- 8- transmitting missions to abroad to develop the education process at those universities .