

Improving the quality of student learning

Prof. Dr. Abd El-Rahman Kamel Abd El-Rahman Mahmoud

Department of Curricula & Methodology (Arabic Major)
Faculty of Education Fayoum University, Egypt

Copyright © 2014 ISSR Journals. This is an open access article distributed under the ***Creative Commons Attribution License***, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

INTRODUCTION

Student learning is a complex multivariate phenomenon. There are many sources of variation, some of them unobserved and uncontrollable, that contribute to manifestations of learning behaviour and of learning outcome. Practitioners are often confused by the layered complexity found in competing conceptual models of student learning; they generally fail to appreciate the penalties that are incurred as the genuine complexity of student learning is approximated for modelling purposes.

The present study deals with a training program in using computers in teaching by Arabic teachers. The program is constructed in order to be suitable for a developing country. It includes training teachers to use general computer applications, personal and pedagogical uses. Two types of generic software (Arabic version) were used in addition to Windows 3.1 (Arabic release). The first type was wordprocessing (Microsoft Word 6.0) and the second was (Microsoft Power Point) . The program was constructed and applied according to the findings of two successful courses in America (Roseman and Brearton, 1989), and the UK (Sutherland et al., 1991).

15 secondary Arabic teachers without any computer experience participated in a 10-days-period course two hours a day. The course was concluded by workshop test in word processing and spreadsheet. The test showed that 12 out of 15 teachers (80%) were able to complete the word processing test successfully, 11 out of 15 teachers (73%) were able to complete the spreadsheet test successfully. The findings demonstrated that all participants were able to run computers effectively, deal with Windows applications, use computers as personal tool, and use computers as pedagogical tool in the classroom.

RESEARCH PROBLEM:

The following study attempts to answer the following question:

How can the efficiency of the student-teacher be improved through the use of computer in teaching Arabic to the students of the first year of the secondary stage?

RESEARCH OBJECTIVE:

The major objective of the following study is to improve the ability of the student-teacher through the use of computer in three perspectives: first, the ability to use computers (computer applications) for personal purposes, third, using computer in teaching Arabic language.

The program aims also at identifying the satisfaction of the participants with the program as an indicator of the interests and desires of the participants.

PREVIOUS STUDIES:

1- Qualities of Effective Writing Programs. (Holbrook, Hilary Taylor, 1984)

Teachers and administrators in Neill's survey cited the importance of voluntary and ongoing inservice training programs taught by trainers from both inside and outside the school or the district. Neill observes that trainers who are also teachers have more credibility as inservice instructors than do "nonteaching experts." Enthusiasm, knowledge of current theory on the writing process, and a focus on practical application of techniques are also essential qualities for inservice trainers.

In addition, Neill's respondents suggested modeling writing programs on those that have already proven successful. In the National Writing Project, which appears to be the most far-reaching program model, teachers attend workshops to improve their own writing skills and their teaching of writing. Participants may then act as consultants for school or district inservice sessions, so reinforcement occurs naturally.

Other qualities for successful inservice programs include the following:

- attention to specific skills in which teachers may be weak
- time and opportunity for teachers to gain confidence in their ability to teach composition, allowing for structured feedback about their use of new skills
- opportunities for observation in other classrooms
- attention to issues that concern teachers, such as paperwork, evaluation, diagnosis, remediation, and explaining the writing program to parents
- administrator involvement in both program and session activities .

2 - Technology as a Tool for Urban Classrooms. : (Burnett, Gary , 1994)

By 1992, according to a study by the Council of Chief State School Officers, more than 3.5 million computers were in U.S. elementary and secondary schools--a ratio of one computer for every 13 students. In addition, 99 percent of all schools across the country reported that they provide their students with some access to computers (cited in west, 1993).

The technological transformation of education in the United States has not been as extensive as these numbers might suggest, however. The same study found that, despite the substantial presence of technology in the schools, many students have yet to gain more than minimal access to it, often using computers no more than once a year.

Moreover, the methods and purposes of computer use often differ radically from school to school and from district to district: sometimes computer use enhances learning for all students and sometimes it simply confers a new technological sheen on the low-level programs that have long been a staple of education in the United States. In some cases, they are present in the schools but are not being used for any clear purpose at all. If, as many have claimed, computer literacy has become as indispensable for success as literacy itself, then students have a great deal to gain schools implement educational technology programs.

Educational technology comes in many forms, from pre-packaged games to word processing and graphics packages, complex multimedia systems, and telecommunications networks such as the Internet. Students and teachers may be introduced to technology via stand-alone computers in the classroom, or via vast systems that can connect them to users both across the country and around the world.

Faced with this wide range of possibilities in educational technology, educators wishing to bring computers into their schools must decide not only what kind of program to implement, but also the place that technology will occupy within their schools. They must:

- * clarify the role of computers as a pedagogical tool;
- * define its relationship to existing curricula; and
- * establish the level of human and financial investment they are willing to make.

The people involved in making these decisions for urban schools can be quite diverse--administrators, teachers, and/or parents, among others. This digest provides an overview of computer use, and presents a few general guidelines for these decision-makers to use when implementing a technology program.

3 - Computer Skills for Information Problem-Solving: Learning and Teaching Technology in Context. ERIC (Eisenberg, Michael B. - Johnson, Doug, 1996)

The curriculum outlined below, "Computer Skills for Information Problem-Solving," demonstrates how computer literacy skills can fit within an information literacy skills context (American Association of School Librarians, 1995). The baseline information literacy context is the Big Six Skills process (see below and Eisenberg & Berkowitz cites). The various computer skills are adapted from curricula developed by the state of Minnesota (Minnesota Department of Education, 1989) and the Mankato Area Public Schools (Mankato Schools Information Literacy Curriculum Guideline). These basic computer skills are those which all students might reasonably be expected to authentically demonstrate before graduation. Since Internet-related skills are increasingly important for information problem-solving, they are included in this curriculum, and are noted by an asterisk.

Some computer literacy "skills" competencies which do not seem to fit into this information processing model, and which may or may not be important to have stated include:

- knowing the basic operation, terminology, and maintenance of equipment
- knowing how to use computer-assisted instructional programs
- having knowledge of the impact of technology on careers, society, and culture
- computer programming
- specialized computer applications like music composition software, computer assisted drawing and drafting programs, mathematics modeling software, etc.

Listing computer skills is only a first step in assuring all our children become proficient information and technology users. A teacher supported scope and sequence of skills, well designed projects, and effective assessments are also critical. Many library media specialists will need to hone their own technology skills in order to remain effective information skills teachers. But such a curriculum holds tremendous opportunities for library media specialists to become vital, indispensable staff members, and for all children to master the skills they will need to thrive in an information rich future.

4 - Improving Rural School Facilities for Teaching and Learning :(Deweese, Sarah ,1999)

Education reforms require schools to accommodate new teaching and learning styles, which includes providing laboratory classrooms; flexible instruction areas that can facilitate small-group, large-group, and multiage instruction; and multimedia centers that offer a variety of technological resources. Rural schools, however, face a broad array of facility upgrades: 37 percent have inadequate science laboratory facilities, 40 percent have inadequate space for large-group instruction, and 13 percent report an inadequate library/media center. Some school reform efforts suggest schools should make more of an effort to include parents, provide health and social services for children, and provide day care. Again, many rural schools lack adequate space to accommodate parent support (23 percent), social and health services (28 percent), day care (82 percent), and before- and after-school care (66 percent) Technology is another driving force behind building modification. Many schools lack conduits for computer-related cables; electrical wiring for computers and other communications technology; and adequate electrical features, such as proper outlets. Technology could help many rural schools overcome barriers associated with isolation by linking educators to professional development and curriculum resources. Without the necessary infrastructure, however, schools cannot realize the true potential of technology.

Rural school facilities are also challenged by demands to meet federal mandates. The Americans with Disabilities Act of 1990 requires schools to accommodate those with special needs by installing features such as access ramps, automatic doors, and elevators. In addition, some schools are struggling to remove hazardous building materials, including asbestos, lead paint, and radon gas. Although federal programs provide some financial assistance, many rural schools lack adequate resources to comply with federal mandates.

Many aging rural schools experience problems with energy efficiency and other environmental conditions that threaten student safety and that interfere with classroom activities. Fifty-four percent of rural schools report at least one unsatisfactory environmental condition. Leading problems include energy efficiency (39 percent), indoor air quality (18 percent), and ventilation (24 percent) .

Fixing these problems will be costly. A 1990 survey estimated that rural schools needed \$2.6 billion in capital to catch up with deferred maintenance on existing buildings; the cost to replace rural schools approached \$18 billion . Most state legislatures traditionally do not support local school districts' capital outlays and debt services; therefore, districts bear the brunt of

financing facilities. Lacking the resources to fund new facilities, many rural districts allow their school buildings to continue deteriorating.

Despite increased school construction nationwide, rural districts have not kept up with urban areas. According to a recent study, from January 1994 to June 1998, about 21 percent of urban districts constructed at least one new school, compared to 9 percent of nonurban districts. This may be because it is easier to raise funds in metropolitan districts. Continuing disparities and inequities suggest the need for new funding formulas or increased state aid in equalizing funding, not just across rural and urban districts but across resource-poor and resource-rich districts in each state.

5-Teaching Educators about Language: Principles, Structures, and Challenges. (Clair, Nancy, 2000)

What kinds of professional development experiences can help practicing teachers learn more about language and apply that knowledge to improving classroom practice? Clearly, short-term professional development experiences are inadequate: Teaching and learning are complex, and teachers need time to learn and experiment with new concepts in the classroom, just as their students do. Principles of effective teaching and learning for students extend to effective professional development for teachers. To be successful, professional development must be long term, and it must incorporate opportunities for learning that center on teachers and students. This study suggest eight principles of effective professional development: It should be driven by an analysis of teachers' goals and student performance; it should involve teachers in the identification of what they need to learn; it should be school based; it should be organized around collaborative problem solving; it should be continuous and adequately supported; it should be information rich; it should include opportunities for the development of theoretical understanding; and it should be part of a comprehensive change process. Because in-service teacher education on language in teaching and learning must address teachers' attitudes toward language and toward students who speak languages other than English and dialects other than Standard English, it calls for extensive commitments of time. Teachers need time to reflect on the meaning of education in a pluralistic society, on the relationships between teachers and learners, and on social attitudes about language and culture that affect students .

There are a number of professional development structures that can incorporate these principles, including teacher networks and collaborative. University-school partnerships, action research groups, and teacher study groups. What these structures have in common are opportunities for teachers to learn together in coherent and sustained ways.

6 - Closing the Achievement Gap: Principles for Improving the Educational Success of All Students: (Schwartz, Wendy , 2001)

School efforts to close the gap in academic achievement between ethnic and racial minority students and white students have been largely unsuccessful to date; differences in educational performance persist at all achievement levels, with the gap greatest between students of color and immigrants and their white and Asian American peers at high achievement levels. The need for a solution to this problem has new urgency now--here in the increasingly diverse United States--as the relationship between educational success and social and economic opportunity steadily strengthens and the relationship between educational differences and social conflict becomes more manifest.

Fortunately, there is now also greater potential for closing the achievement gap as a new resolve to do so takes hold. An upsurge in concrete steps to improve minority achievement in schools across the nation is encouraging, since the efforts are knowledge based--informed by the existence of proven and promising strategies and by new research pointing to additional innovative measures. Moreover, it is now widely recognized that schools, communities, and families must be committed to the achievement of all children, must begin educating them when they are very young, and must make a long-term commitment to educational improvement. Creating a overall atmosphere for children that reflects these principles is becoming a priority nationally, and a wide range of supportive resources are being deployed.

This digest briefly reviews the educational policies and practices whose effectiveness in closing the achievement gap has been shown, and provides a list of resources offering detailed information about them. One resource is the Internet pathway, Closing the Achievement Gap, developed by the ERIC Clearinghouse on Urban Education, on which the digest is based. Previously published Clearinghouse digests also cover some of the specific principles in more depth, and future digests will explore additional principles.

BASICS OF THE PROGRAM:

The basics of the program of training the student-teacher upon using computer as follows:

- 1- The application of computer skills.

- 2- Linking computer to the school curriculum.
- 3- Management and evaluation of using computer.

Thus, the program can be divided into three stages: the stage of primary training, the stage of using computer for individual purposes; and the stage of using computer for pedagogic purposes.

Literature review:

There are two successful programs applied in England and Britain upon a sample of student teachers which are: "the smaller world" organized by a team of researchers from the university of London (Sutherland, et al. 1991) and the other is "computer for teaching science" organized by the university of John Hopkins in collaboration with the organization of Open school in the state of Baltimore (Rose man, and Breaton, 1989). The following reasons:

- The two programs employed the general computer applications (encyclopedia application) of training, the same subject of the following study.
- The British program continued for 30 days, while the American one for 12 days. This period is suitable for the level of the encyclopedic applications and the large number of classes given to the student-teacher of Egypt (the setting of the study).
- The success of the two programs. 80% of the participants of the British program continued to use computers in their instruction, and 90% in the American program.
- The big resemblance between the subjects of the following study and the two studies. The British program was designed to the teachers of mathematics at secondary stage, while the American program designed for the teachers of science at the secondary stage. The following study is designed for teachers of Arabic.

THE APPLICATION OF THE PROGRAM:

The program has been applied on the first semester in 2002 in the laboratory of the Faculty of Education, Egypt. This location has been selected as a result of the availability of modern computers (486 processor). The lab also has the total number of 17 computer sets: 16 for the trainees and 1 for the trainer All computers are compatible with IBM. The lab also includes 4 laser printers joined with a local network.

SAMPLE :

The following study has been applied on all senior student-teachers of the Arabic language at the secondary stage of the Arabic department. Faculty of Education of Fayoum. Who meet the following criteria:

- 1- Not having any previous experience in computer. This program is designed for students with no computer experience.
- 2- Subject who are committed to attend the entire course.
- 3- Participation is optional and it includes no financial professional incentives.
- 4- The total number of student-teacher of teachers of Arabic on 9 secondary stage schools.

The following section will include a brief introduction to the goals of the program, system, schedule and the number of classes given.

The program has been divided into four sections:

Section I (training on Arabic windows (two days))

→ **Day one:** Basics of windows, at includes:

Windows: access, codes, file manager, printer, control panel. Other icons: right-click, file manager, main interface. Application manager (inside the windows) minimizing / maximizing, resize, task bars: options list selection, windows setup, exit (of each window) or of the application manager) saving, undo, view, help, organizing files, properties, creating a sub-directory, search and save.

→ **Day two:** windows applications including:

Using the various applications of windows through using windows accessories clock, calculator, notepad, paint brush, word pad. The trainees were given a training session on the use of keyboard including all letters and symbols and saving files to the hard disk.

Section II (Microsoft Word) (three days)

→ **Day three:** Basics of Microsoft word and word processor.

Access to the program, taskbar, shortcuts, data bar, option

→ **Day four:** training on writing text. It includes:

Changing fonts, font type / size, table, inserting pictures, clipart, changing language. The text included 180 Arabic word and 17 English words, a picture, table and 12 fonts and auto saving every 3 minutes.

→ **Day five:** writing teaching memos:

Students were free to choose the plan their lesson. Planning notebook and were directed to do the following: starting with the name of Allah (Islamic font), selecting a suitable picture, writing distinctive had lines, creativity in commenting the plan and inserting some effects, such as tables, changing color Etc.

Section III: (Microsoft power point) four days

→ **Day six:** Basics, including

Entering, dealing with slides, animation, adding text, colors function inserting picture or clipart, adding animation, sorting slides, statistical data, slides show.

→ **Day seven:** organization the data of the student; including preparing name lists, entering data, sorting names, marks statistical representation of percentage and marks, creating and organizing tables.

→ **Day Eight / Nine:** Training on using the program in teaching different topics.

Topic selection. Primary steps of construction, simplifying the topic, adding some problems (problem – solving principle) exercises of developing learners: logical, critical thinking and appropriate method.

Section IV: program Evaluation. (one day)

Day ten a test in Microsoft word, power point and answering a questionnaire.

TOOLS OF THE STUDY

The program focused on simplifying the basics of computer and giving the student-teacher the biggest possible chance in front of the computer to deal with problems without the direct guiding of the trainer to gain experience. Ten work sheets were prepared for the study distribution everyday so that the training would follow and the pace of work is to be determined by the individual trances.

To evaluate the program, an achievement test was designed to measure the skill of the trainee to use computers in teaching. A questionnaire was distributed to the participants after the test and were asked to answer the question without writing their names.

1) Achievement test:

It includes two section: the first a test of performance in Microsoft word 6 consisting of a lesson plan of the topic of "tourist attraction of Egypt" of secondary one book with the number of 287 word, 6 fonts and two picture. Participants were asked to type the text without change in the type, size of font and were ordered to follow the text layout of the test. The time allotted for this test was two hours. (see: Appendix I) section two was using the power point in instruction to test the effectiveness of using the program undesigning data after analyzing, sorting data and making a statistical representation. Time allotted was 1 hour (see Hp.2) participants were asked to submit their worksheets the end of the day. The researcher observed without intervention to give instruction. He recorded the time framework of the test.

2) The Questionnaire:

To evaluate the program form the view point of the trainees, a questionnaire was prepared, including: section one. Twenty close items to measure the opinion of the trainee in the item. Excellent, average, weak – section two – 10 semi – opened questions (see:Ap.3) which aims at:

- Evaluation of the program goals time personal benefits.
- Evaluation of the application, and sets used is the study.
- Evaluation of the trainer.

Identifying the skill of using computers of the trainees and their future plans.

RESEARCH RESULTS AND DISCUSSION

In order to evaluate the amount of achievement of the research goals (see objectives of the study) the results were divided into two major sections: the first an achievement test where is the time of every trainee was recorded, and the number of words written per minute for all participants who tests of word and power point was also counted. The second, the result of the questionnaire. The repetition of every expression was counted, statistically analyzed the open ended items were also used to determine points of strength and weakness in the program.

First: Result of the performance tests:

The table No. (1) shows the time for finishing the Microsoft word / power point .

Table No. (1)
The time required for finishing the Microsoft word / power point

Rate	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	No. Teacher- student
81.3	70	90	?	105	105	90	85	45	100	45	75	?	?	90	76	Word The time
39.3	29	25	?	30	?	60	45	30	60	48	60	?	?	25	20	Power point The time
114.8	99	115	?	135	?	150	130	75	160	93	135	?	?	115	96	Total

Table (1) reveals that 12 participant (80%) were able to finish the Microsoft Word within the assigned time (2 hours), 3 participants (20%) failed to accomplish the task in time despite the fact that they all managed to use the program to write parts of the plan and had no technical problem but were slow is typing and needed further work on this area.

The table also shows that the time needed for finishing the test successfully was 81.3 minutes (3.5 wpm) in addition to font size, color, layout and (clipart / picture) inserting. The shortest time was 45 minutes and the longest was 105 minutes.

The major reason for increasing time was the slowness of participants in dealing with the keyboard the font type or size didn't have a big role in this, since the participants look first at the text and then to the monitor to verify what was written. This indicated that the worksheet given to participants on day two was not enough and participants needed more time for training on the keyboard on the basis that increasing the speed of the participant in dealing with the keyboard provides a bigger chance to think about the questions and instructions skills. A skill that can be improved through practicing.

Table (1) shown that 11 participant (73.3%) managed to finish the power point test in a much shorter time than the word test. With the average time of 39.3 minutes including creating a teacher method of the topic, selecting slide format and adding suitable animation the shortest time score was 25 minutes and the longest was 60 mins. (see table I) this difference is due to the lesser amount of dealing with the keyboard. Dealing with power point entails a bigger amount of using slides and figures with very few words written by the keyboard. Although four participants failed to finish that test this is not due to their slowness, but is slowness of selecting the proper a way of showing data included is the test those, need to increase their experience of data show and organization.

[?] doesn't end in the limited time

Second: Result of the Questionnaire:

To analyze the answer of participants, kolmogorov-simrov test or ordinal ranking was used with a small sample. (see: table (2)).

Table No. (2): Result of the questionnaire

Significance	Value of Cronbach	weakness repetition	Medium repetition	Excellent repetition	No. of statement
*	*	0	0	15	1
*	*	0	0	15	2
0.001	1.99	0	2	13	3
0.002	1.88	0	3	12	4
*	*	0	0	15	5
0.002	1.88	0	3	12	6
0.002	1.88	0	3	12	7
0.050	1.36	0	7	8	8
0.024	1.49	0	6	9	9
*	*	0	0	15	10
0.083	1.26	2	5	8	11
0.001	1.99		2	13	12
0.001	1.99	0	2	13	13
0.001	1.99	0	2	13	14
0.000	2.07	0	1	14	15
0.002	1.88	0	3	12	16
*	*	0	0	15	17
0.006	1.70	2	2	11	18
0.083	1.26	2	5	8	19
*	*	0	0	15	20

Table (2) shows that the values of the KS test are statistically meaningful for all the items on the level 0.01, except for items 8 , 9 , 11 , 19. these items are (in order): the contribution of this course is your professional qualification, the contribution of this course is your instructional qualification, number of trainer in the course, course schedules this mean that participants don't fully think that the program help in their instructional and professional development, and that the number of instructor is insufficient and times inappropriate.

* no value was given to the unanimous agreement of all participants

A statistically meaning of the respond "Excellent" which was used for 16 items of 20 items. Indicates a wide satisfaction of the trainees of the program. Items of disagreement do not influence the success of the program on the basis that the. Contribution of the course in the instructional and professional qualification of the participates is due to the fact that computers are not used in teaching Arabic due to the general atmosphere. This is revealed by the fact that the participants rated the course as "Excellent" (Item 20). The number of trainers was not sufficient as the trainees usually need a bigger a mount of help and there was a necessity of having an assistant since the trainer of the course was the researcher himself who sometimes had spend a big time with some trainees to solve or show some complex skills. However, not using assistants was delivery to see the sufficiency of using one trainer with 15 trainees with the purpose of generalizing the program to secondary school where the teacher of computer could transfer the experience of dealing with the program to his or her fellow teacher with the aid of one of the trainee teacher-student at the course who could help in solving the simple technical problem and suggesting suitable teaching practice.

The improper time of the course comes from the fact that the participants wish the program to be part of their daily work they were a motivated to participate is the program only due to the desire to learn computer, particularly with the lack of any financial, professional advantages.

Results of the open-ended questions showed many advantages of the course of which: shortness of time the effective of employed application, easiness of dealing with them, breaking the ice between the participants and the computer, deriving instructional sample s from the curricula of the Arabic language opening new unlimited hansoms for using computers both in instruction and for individual purposes. The weak point was reflected in the inappropriateness of time of the classes and limited number of trainers.

Most subjects prefer to have training inside the school where they are having the teaching practice and the need to have financial incentives. This was similarly reported in the American and British programs.

The ninth questions were related to the ability of the teacher to use computer alone. All participants confirmed that they can use the computer alone an they are planning to use it is the future.

RECOMMENDATIONS OF THE STUDY

After conducting the study. The researcher recommends:

- To select the suitable time for training the student teachers some of the participants wished the training to be part of their daily work, where the load could be distributed upon the teacher of the school until the training is over. The intervals among the final exams or shortly after could be a suitable time for training
- The participation of the subjects should be optional. This could be seen in the punctuality of attendance by the participant without having any advantage but the personal benefit certificates of attending the course were distributed but this was not know until the course ended the researcher also recommendation the lack of financial incentives so that attendance would be limited to those who have a real desire to learn.
- Laying more attention to the skill of using the keyboard and the mouse since many people lacked the skill of dealing with the keyboard an important element of the training course.
- The result show the necessity of shortening the amount of training time on the contrary the shortness of course frame was the major motivation for participations.
- The trainer (teacher of computer) should have the zeal to work with computers and instruct others, which would be transferred to the trainees lack the enthusiasm of training their colleagues. This type should be excluded from the program. This was stressed by Robertson (1996) when he said that "the success of any program designed for student teacher depends on the enthusiasm of the trainer" (P.5)

REFERENCES

1. Burnett, Gary, (1994): Technology as a Tool for Urban Classrooms. ERIC/CUE Digest, Number 95. Clearinghouse on Urban Education New York NY.
2. Dewees, Sarah, (1999): Improving Rural School Facilities for Teaching and Learning. ERIC Digest. Clearinghouse on Rural Education and Small Schools Charleston WV.
3. Eisenberg, Michael B. - Johnson, Doug, (1996): Computer Skills for Information Problem-Solving: Learning and Teaching Technology in Context. Clearinghouse on Information and Technology Syracuse NY.
4. Holbrook, Hilary Taylor, (1984): Qualities of Effective Writing Programs. Urbana IL.
5. Reed, Diane S. & McNergney, Robert F., (2000):Evaluating Technology-Based Curriculum Materials. Washington DC.
6. Robertson, J., (1996): Promoting IT Competences With Student Primary Teachers. Journal of Computer Assisted Learning .
7. Roseman, J. & Brearton, M. (1989): Computer to Enhance Science Education: An Inservice Designed to Faster Classroom Implementation. A paper presented in the annual meeting of the National Association for Research in Science Teaching at San Francisco, California.
8. Schwartz, Wendy.(2001): Closing the Achievement Gap: Principles for Improving the Educational Success of All Students. Urban Education New York NY
9. Sutherland, R., Hoyles, C. & Noss, R. (1991): The Microworlds Course: Rescription and Evaluation. London, Institute of Education, University of London.

APPENDIX (1)

The performance test of the program of training student-teacher in using computers in teaching

Evaluating worksheet 1

Write the following teaching plan without changing the text:

Name:

School:

Daily teacher plan

Topic: touristic Attraction of Egypt

* learners' previous experience:

An introduction to the touristic monuments and their places in Egypt.

* Learning Goal:

The realization of the learner of the concept of tourism in Egypt and its role in the Egyptian economy.

* Learning Objectives:

1- Moral objectives

- Giving a general concept of tourism.

Stressing the importance of the gift of sight for humans which is used to value the various attractions.

2- Cognitive Objectives:

- knowledge of the basic touristic attractions in Egypt, and distinguishing the function of one.

- directing the learner's attention to the skill of the ancient Egyptians.

3- Emotional Objectives

- How to protect the touristic attractions.

- Encouraging tourism and showing the beauty of every attraction in Egypt.

Objectives

- The ability to explain natural pictures or painted.
- Available teaching Aids.
 - i. A film of the touristic attractions in Egypt.
 - ii. A map of touristic places in Egypt.
- Setting of lesson
 - i. The computer laboratory
- Work plan
 - i. Warm up: An overview of the attractions found on Egypt.
 - ii. Points for discussion: Type for attractions in Egypt, their important, ways of protecting them
 - iii. Examples:
 - Examples of the benefits of touristic attractions to Egypt.
 - iv. Board synopsis:
 - Defining tourism
 - Types and places of tourism and its value.
 - Methods of protecting / promoting touristic attraction.

Evaluation

Questions about the touristic attractions places values way of protection / promotion

Homework

- a. Collect five photos for five touristic attractions in Fayoum.

Self-Evaluation:

- b. Are all objectives realized?
- c. Was the time suitable?
- d. How suitable are the aids?
- e. Can you employ computer on teaching this lesson?

APPENDIX (2)

The performance test of the program of training student-teacher in using computers in teaching

Evaluating worksheet 2

Do one of the following tasks:

- 1- Using (Power point) shown practically. How can you teach the topic:
touristic attractions of Egypt
- 2- Using (Power point) shown practically. How can you teach the topic:
(Gama'a Elmozaker Elsaleem) and its derivatives
- 3- Using (Power point) shown practically. How can you teach the topic:
Pollution is the illness of the age.

APPENDIX (3)

Questionnaire of course evaluation

Dear teacher-student

This sheet was designed to evaluate the course for reaching the best results.

Please answer without mentioning your name to contribute the true statue of this course.

Put the sign (√) in front of the suitable statement as you see:

Items of Evaluation	excellent	fair	weak
1- Goals of the course.			
2- Setting of the course.			
3- Type of training			
4- Method of training.			
5- Atmosphere of training.			
6- System of the course.			
7- The teaching method used.			
8- The impact of than course upon your professional development.			
9- The impact of that course upon your instructional development.			
10- The impact of that course upon your attitude to words computers.			
11- Number of trainers.			
12- Number of participants.			
12- Applications used in the course			
14- Services offered in the course.			
15- Computers used in the course.			
16- The extent with which you benefited from the course.			
17- Amount of corporation of fellow participants.			
18- Time of daily practice			
19- Date of the course in general			
20- What is you opinion of that course.			