

Evaluation of Computer Usage in Teaching Arabic Language

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Abstract:

This study used two survey instruments to investigate the status of computer usage in public and secondary schools in the five cities of Fayoum government (Etsa ,Tamia, Senaores, Abshaway and Fayoum . The sample of the study consisted of 700 male and female students who were selected in a stratified random way, and all 48 male and female teachers. To find the reliability of the questionnaires, the Cronbach Alpha coefficient was computed and found to be 0.70 and 0.73 respectively.

The study pointed out that there was a list of linguistic advantages of computer usage in teaching Arabic Language. There were some negative and positive aspects that affect the use of computers in the schools. The major negative aspects found to be: weakness in the textbook used, unsuitability of software used, deficiency in teachers' educational competencies, shortages of computers, and software used not updated.

Based on the findings of this study, some recommendations were drawn for decision-makers at the Ministry of Education such as: providing schools with additional computers to cover the actual needs of the students; some modifications in the textbook and software used should take place; and in-service programs should be offered.

It is hoped that the findings of this study might provide comprehensive and initial database for computer usage in Egypt. This may enable decision- makers in the Ministry of Education to take accurate and effective decisions. Findings might reveal the deterrents affecting the use of computers in schools and serve as guidelines for further studies to evaluate the extent of the success of the Ministry of Education in implementing the recommendations of the Educational Development Conference relating to the integration of computers into public schools.

Previous studies:

There are various previous studies which pointed out the importance of evaluation of computer usage in teaching , such as :

1 -Criteria for appraising computer-based simulations for teaching Arabic as a foreign language : (Dabrowski , Richard, 2005)

This was an exploratory study aimed at defining more sharply the pedagogical and practical challenges entailed in designing and creating computer-based game-type simulations for learning Arabic as a foreign language. Because of the current state of affairs, this study focused on the special needs and interests of an American military audience and the unique linguistic challenges for young adult Americans learning Arabic. This mixed methodology study used expert opinion and observations, interviews, and document analysis with two research populations, US Air Force Academy cadets who attended an intensive summer immersion program and US Army soldiers who field tested a developmental prototype of a video game-based program for learning Arabic. The findings identified (a) the pedagogical features found in existing computer-based games for Arabic and how those features compared with the pedagogical features considered critical to success by experts

and actual learners, and (b) the engagement and realism features that are required in computer-based simulations for learning Arabic as a foreign language. The study concludes that computer-based simulations are a promising possibility for this purpose. Improvements are needed in voice-recognition technology, in providing tailored feedback on linguistic and pronunciation errors, in allowing for learner differences, and in selecting the highest priority linguistic content and to incorporate that language into a scenario that is appealing to the military audience.

2 - The personal experiences of language teachers using computers as an instructional tool :(Santos , Mario , 2005)

The recent introduction of the computer as an instructional tool in the language classroom has challenged teachers in the way they teach language and it is considered an innovation worthy of study. Considering the potential of this tool to maximize student exposure and practice of communication in the target language, a detailed analysis of how this innovation gets diffused in language classrooms is a primary focus of this research. The research was conducted in a large Northern New Jersey school district, and consisted of interviews predominantly with language teachers, who are using computers as an instructional tool. Open-ended interviews were conducted during the initial stages of data collection. However, as categories emerged from analyzing the data, interview questions became more focused. Borrowing from the work on grounded theory, this research employs the use of open and axial coding procedures to analyze data. As categories emerged in this study, it became apparent that using the Diffusion of Innovations theory presented by Rogers (2002) and learning theories would have practical applications for interpreting the data. Findings in this study suggest that at the knowledge stage, teachers can point to factors that influenced them to begin using computers in the classroom. At the persuasion stage, teachers describe the positive and negative results that they have seen when using computers as a learning tool. At the decision stage, technology becomes thoroughly integrated into traditional teaching practices. At the implementation stage, teachers change their personal attitude towards technology and use technology effortlessly as a teaching tool in the language classroom. Finally, in the confirmation stage, teachers describe how computers have impacted or changed their methods of instruction. On going support from administrators and other staff members is vital in helping language teachers use computers in the classroom. All classroom teachers need access to computers and time to explore new instructional strategies. Ideally, future staff development should include language teachers' observing and learning from each other. Language teachers must be made aware and encouraged to participate in staff development opportunities that focus on constructivist teaching and infusion of technology in the language classroom.

3 - Computer lab usage by rural elementary classroom teachers :(Honey , Wanda L. , 2005)

The purpose of this study is to determine the current use and utilization of computer labs and to examine variables that affect lab usage, specifically instructional (i.e., time-on-task and student diversity) and technological competence, training, and institutional support were also examined. Public school teachers from rural Illinois elementary schools were surveyed to collect data regarding computer lab usage. The rate of return was 60%. Results indicated that there was a significant relationship between instructional competency and computer applications competency and the number of minutes spent in the computer lab. The more confident a teacher felt about his/her computer instruction and application skills the more minutes he/she spent in the computer lab. Training and institutional support was not related to the number of minutes a teacher spent in the lab. Teachers who had the support of a technology teacher spent significantly more time in the lab. In addition, there were significant differences between teachers who went to the lab and those who did not go at all in their levels of perceived competence in instruction and computer application skills. Those who did not go to the lab felt less competent, instructionally and technologically, and less well-trained. Open-ended responses revealed some of the same concerns in terms of technological competency along with time/availability of lab, training, and institutional support issues that were mentioned. Training issues included a need for more training (hardware and software troubleshooting, and teaching computer dependent lessons), competency (managing a diverse group of students, maintaining a lab classroom, providing individual instruction in a lab situation, whole class instruction in a lab, and managing hardware and software problems), and institutional support (training opportunities, help in lab, functioning hardware

and software, and money for updated hardware and software). The 21 respondents that gave positive responses to computer lab usage mentioned that they were well trained/very comfortable in the lab, had a computer assistant in the lab, had a good experience in the lab, felt the lab was of high importance, or used classroom or other computers.

4 - The evaluation of a technology-aided lecture accompanied by a set of macroeconomics computer interactive exercises in macroeconomics for the undergraduate business major in Taiwan (China) : (Hung,Ya-Men, 2005)

With the increased interest in the use of computer technology in education, more and more educators are in need of integrating computers into their curricula. So far, there is a lack of studies to measure the impact of using the Technology-Aided Lecture (TAL) which is developed with the use of Microsoft PowerPoint and accompanied interactive student exercises, created by HyperStudio, in Taiwan. Therefore, the researcher is intent on investigating the feasibility of incorporating a Technology-Aided Lecture (TAL) into the teaching of macroeconomics courses. The study examined the effects of a TAL accompanied by a set of macroeconomics computer interactive exercises and a traditional instruction supported by using transparencies on students' learning achievement. Since a significant difference in knowledge of macroeconomics existed between the experimental group and the control group, analysis of covariance (ANCOVA) of the posttest, using pretest as the covariate, was used to analyze the research data. As comparing the effectiveness of the two different instructional methods, it is concluded offering the courses for the unit on unemployment and inflation through the Technology-Aided Lecture (TAL), accompanied by a set of macroeconomics computer interactive exercises, or the standard instruction produced a non-significant difference, to the extent measured by the researcher developed test .

5 - The use of the Internet among EFL teachers at the colleges of technology in Saudi Arabia : (Al-Asmari , Ali M. , 2005)

Because of its far reaching impact on many aspects and functions of educational institutions and its potential benefits for educators, the Internet has been the topic of much interest within the educational community. Ways of using the Internet as a medium to deliver instructional materials and to access digital libraries are reshaping how college campuses function, including the creation of virtual campuses. The purpose of this study was to investigate the use of the Internet by teachers of English as a foreign language (EFL) in Saudi Arabian colleges of technology. A secondary purpose was to explore the relationship of teachers' use of the Internet with a selected set of variables. These variables included EFL teachers' personal characteristics, their level of access to the Internet, their perceived computer and Internet expertise, and their perceptions of the Internet as a tool for instruction. This study derived its theoretical framework from Rogers' (1995) model of diffusion of innovations. Both quantitative and qualitative methods were employed to collect data on the population. A questionnaire was developed and distributed to all EFL teachers (N = 203) in the four main colleges of technology in Saudi Arabia (located in Riyadh, Abha, Jeddah, and Dammam) during the 2004–005 academic year. Validity and reliability were established for the survey instrument. The return rate of the survey was 81%. The survey stage was followed by phone interviews with a random sample of 15 teachers. Results from both the quantitative and qualitative domains of the study indicated that the participants had rarely used the Internet, particularly for instructional purposes. Indeed, they reported more use of the Internet for personal than for instructional purposes. Participants had high levels of Internet use in mainstream Internet services such as e-mail and the World Wide Web. While they had positive perceptions of the use of the Internet as a pedagogical tool, they had relatively limited levels of access to and expertise with computers and the Internet. Positive correlations existed between teachers' level of use of the Internet and five independent variables, including computer and Internet expertise, place of access to the Internet, perceptions of the Internet, computer experience, and Internet experience. Multiple regression analysis indicated that only expertise, place of access, and Internet experience had a significant predictive value of teachers' use of the Internet. The results indicated that approximately 39% of the variance in Internet use was explained by the independent variables included in this study. A major conclusion of the study was that to increase Internet use, EFL teachers need to be given more Internet training. In-service training needs to be a top priority, with a primary focus on using the Internet as a tool for teaching and learning. Also, based on the study's findings, it was recommended that policy-makers maintain EFL teachers' positive perceptions of the

pedagogical use of the Internet by spending more money on increasing the computer infrastructure in the colleges of technology in Saudi Arabia, on improving Internet access and services, and on educating both teachers and students with respect to issues concerning the cultural appropriateness of materials available on the Web.

6 - Evaluating the middle school mathematics teacher preparation program at Riyadh Teachers' College (Saudi Arabia) : (Alghanem , Maher M. , 2005)

Continuous evaluation and feedback are essential to improving the quality of teacher preparation programs. The purpose of this study was to evaluate the perceptions of various aspects of the preparation of preservice middle school mathematics teachers at Riyadh Teachers' College, Saudi Arabia, from the perspective of both preservice middle school mathematics teachers and mathematics department faculty members. The focus of this study was on the mathematics department's theoretical framework , its governance and resources faculty qualifications and performance , courses and field experiences , *approaches of teaching* , and assessment forms . Two research questionnaires were developed for the purpose of collecting research data: one for the preservice middle mathematics teachers, and another for the teaching staff of the mathematics department who train these preservice teachers. The distribution and collection of questionnaires took an average of three weeks. The final number collected was one hundred sixty-nine, representing 63% of the total number of questionnaires distributed. The Statistical Package for the Social Sciences (SPSS) was used for various computational procedures employed. The result emphasized the need to explore reducing the number of mathematics specialization courses and/or connecting the content of these courses more to the school curricula. The findings in the current study indicate that the participants believe that the most critical aspects of the courses that need to be improved are knowledge of mathematics pedagogy and knowledge of technology. The results show that the program suffers from a lack of adequate teaching materials and equipment, such as computers and computer software, calculators, and electronic information resources. Further, the findings of the current study revealed that there might be a need to increase the number and type of early field experiences. The current study recommended the program to employ faculty members who have middle school level experience and expertise. The study suggested the faculty members in the mathematics department to explore alternative teaching styles. In addition to studying the needs and opinions of faculty members with regard to the program, the study encourages more research on the problems they face in such colleges.

Many view the computer as a source of hope to make the inevitable change that has long been waited for in the programmes of preparing the teacher in general and the teacher of Arabic in particular. Our success in this depends, primarily, on how successful we are in preparing flexibly the technical means of the requirements of teaching Arabic language.

The purpose of this study is twofold: First, to examine the inequities in access and utilization of technology among students in prep schools in Fayoum government and, second, to examine school contextual, classroom, and teacher characteristics that may be related to the disparities in student access and usage of technology. Specifically, the following research questions were addressed in the study:

Research Questions:

The purpose of the present study was to investigate the status quo and the deterrents of computer usage in the public schools of the Southern governorates in Egypt. In particular, the study tried to answer the following questions:

1. What are the linguistic advantages of computer usage in teaching Arabic Language?
2. What are the educational backgrounds of computer teachers in Fayoum government?
3. What is the suitability of the computer textbook from the point of view of both teachers and students?

4. What is the right determined number of periods to study a computer course and the suitability of their timetable in the school program from the point of view of both teachers and students?
5. Do teachers have and apply the appropriate teaching skills to teach a computer course?
6. What is the extent of mastering the skills of teaching a computer course from the point of view of both teachers and students?
7. Are computer laboratories in schools sufficiently equipped for teaching from the point of view of both teachers and students?
8. How do teachers view the adequacy of the availability of resources in the schools?
9. How do computer teachers evaluate the courses and workshops that they have attended?
10. What are the major deterrents to the use of computers in the schools as perceived by both teachers and students?

Population and Sampling:

The randomly stratified selected sample of the study comprised of 700 students (342 males and 358 females), that is, 10% of the whole student population in the first year of the secondary schools in the five cities of Fayoum government (Etsa ,Tamia, Senaors, Abshaway and Fayoum . The teachers' sample comprised of all 48 male and female teachers.

Instrumentation:

The researchers reviewed the instruments and scales that have been developed in the area of computer studies and educational technology order to construct the items of both students and teachers questionnaires used in the study. The questionnaires were pilot- tested to disclose any inaccuracies or ambiguities and to enable the necessary refinements. Data received from the pilot- tests were reviewed and required changes were made.

To compute the reliability coefficient, Cronbach Alpha was used. It was found to be (0.70) and (0.73) for both students and teachers questionnaires using (61) male and female students and (14) male and female teachers respectively.

To handle the results of this research the researcher use the two following tests:

1. CHI² test: this is to identify the linguistic advantages of computer usage in Teaching Arabic Language.

The following equation was used(17:228)

$$CHI^2 = [(K - K')^2] / (K')$$

Where K = Empirical observed repetition

K' = Theoretical repetition according to the hypothesis

- 2 . Test of calculating the relative weight of each phrase in each questionnaire. This is to arrange phrases according to the degree of approvals concerned with each phrase. Likert Equation was used .(26:483)

$$\text{Relative Weight} = (R_1 .3 + R_2 .2 + R_3 .1) / (N * 3)$$

Where R¹ = repetition of approval

Where R²=repetition of "I am not sure"

Where R³ = repetition of refusal

Where N = number of respondents to the questionnaire

Findings and Discussions:

In answering the first question, concerning linguistic advantages of computer usage in teaching Arabic Language Table (1) below present the findings.

Table (1)
Responses of research sample about linguistic advantages of computer usage in
teaching Arabic Language.

No. O*	Students			CHI2	Teachers			CHI2	Students & Teachers			CHI2	Relative Weight	Arrange
	Agree	Not sure	Disagree		Agree	Not sure	Disagree		Agree	Not sure	Disagree			
1	321	159	220	57.38	22	11	15	3.88	343	170	235	61.25	0.715	6
2	233	222	245	1.134	16	15	17	0.125	249	237	262	1.25	0.661	13
3	158	198	344	82.16	11	14	23	4.88	169	212	367	87.0	0.578	17
4	338	146	216	80.93	23	10	15	5.38	361	156	231	86.30	0.725	4
5	303	193	204	31.46	21	13	14	2.38	324	206	218	33.83	0.714	9
6	367	123	210	131.08	25	9	14	8.38	392	132	224	139.42	0.742	1
7	356	140	204	105.51	24	10	14	6.5	380	150	218	111.99	0.739	2
8	193	344	163	80.66	13	24	11	6.13	206	368	174	86.77	0.681	15
9	315	152	233	56.93	22	10	16	4.5	337	162	249	61.41	0.706	7
10	338	129	233	93.60	23	9	16	6.13	361	138	249	99.72	0.717	5
11	350	134	216	101.91	24	9	15	7.13	374	143	231	109.03	0.730	3
12	193	181	326	55.51	14	12	22	3.5	207	193	348	58.96	0.604	16
13	303	210	187	32.33	21	14	13	2.38	324	224	200	34.70	0.722	10
14	204	356	140	105.51	14	24	10	6.5	218	380	150	111.99	0.697	14
15	251	216	233	2.63	17	15	16	0.125	268	231	249	2.75	0.675	12
16	309	187	204	37.43	21	13	14	2.38	330	200	218	39.80	0.717	8
17	303	175	222	35.93	21	12	15	2.63	324	187	237	38.55	0.705	11

If we refer to table χ^2 when the degree of freedom equals two marks at the rate of 0.05, χ^2 then must reach 5.991 so as to be statistically significant. At the rate of 0.01 it must reach 9.210 so as to be statistically significant.

(reference no. (17) P. (370) in the end of research).

Therefore, it is evident from table no. (1) that:

χ^2 has a statistical significance for each number of the following phrases: (6), (7), (11), (4), (10), (1), (9), (16), (5), (13), (17)

This means the following :

- A. linguistic advantages of computer usage in teaching Arabic Language seen by the respondents (in the sample of research) are: (6), (7), (11), (4), (10), (1), (9), (16), (5), (13), (17) .
- B. It is also shown from table no.1 that χ^2 has a statistical significance disagree in what concerns the following phrases:(12), (3)
This means that the respondents do not agree that phrases (12), (3) from the linguistic advantages of computer usage in teaching Arabic Language seen by the respondents.
- C. The respondents have an attitude of being not sure of the linguistic advantages of computer usage in teaching Arabic Language in what concerns the following phrases.(14), (8)
- D. There is no statistical significance differences between the individuals of the

According to subjects order in the appendix at the end of this research (*)

sample in the following phrases : (15), (2)

As for the teaching experience, the findings revealed that 77.1% of the teachers have had from 1-3 years of teaching experience and 22.9% have had from 4 - 12 years. None of the teachers have teaching experience more than 12 years .This indicates that there is a decrease in the percentages of teachers with more teaching experience. This result may be attributable to the fact that specialized teachers in computer science replaced teachers with more experience in various subjects. It is worth noting that only 11.48% of the teachers were educationally qualified. This shows that teachers have a lack of training in the teaching methods of computer science.

In answering the third question, concerning the suitability of the computer textbook from the point of view of both teachers and students, the findings indicated that the teachers were satisfied with the language and the rational sequence of the various subjects of the textbook, and the suitability of the concepts to the level of the students. On the other hand they were less satisfied with the drawings and the illustrations in the textbook. In addition teachers and students alike pointed out that the illustrative examples were not enough and the topics covered in the textbook were not updated.

In general, the findings also showed that both students and teachers were not satisfied with the textbook. However, the students expressed more satisfaction than their teachers especially in the suitability of the information presented in the textbook and their sequence. This indicates that there is a need to review, modify, and introduce new topics in the textbook. It is a necessity to modify the textbook used.

Concerning the fourth question to determine the right number of periods to study a computer course from the point of view of both teachers and students, the findings revealed that the students expressed their dissatisfaction with the number of periods given. They pointed out that the number of such periods were not enough, while the teachers indicated the opposite. This indicates that the students need longer time to practice computer skills and teachers must provide them with such experience. A part of this result maybe attributed to the fact that the majority of the teachers lack training in the teaching methods of computer science, thus they are unable to pinpoint students' needs of time for studying or they may have the desire to teach less periods weekly. By looking at the scheduling of such periods, the other part of the question, it is noticed from the data that the teachers were not satisfied with the time schedule (the average responses was 2.96), whereas the students showed their satisfaction (the average responses was 3.12). These maybe due to the fact that some of the periods were taken place at the end of the school day, or they were dispersed throughout the school day, making the teachers feel less motivated. On the other hand, the students felt that the used schedule made them play an active and effective role that cannot be found easily outside the classrooms.

In answering the fifth question concerning the appropriate teaching skills, the data showed that the teachers have enough knowledge and information about the teaching methods of computers (M= 3.85) and they do apply these methods appropriately (M=3.81).. The findings also showed that cooperative learning was the most common method used by Egyptian teachers due to the shortages of computers.

As for the extent of mastering the skills of teaching a computer course, the findings indicated that the teachers were very capable of training the students on the usage of computers (M=4.23). At the same time, the data pointed out that the majority of the teachers lack the proper training in the teaching methods as mentioned earlier. This

maybe related to the fact that the topics taught were simple and easy to teach to the students resulting in the teachers' self confidence in teaching. At the same time, the students indicated that their teachers were capable of clarifying the theoretical material and able to train them practically on the use of computers.

In answering the seventh question, teachers and students were asked to indicate if the computer laboratories in schools were adequately and sufficiently equipped for teaching. Table (2) and Table (3) below present the findings.

Table (2)
Means and Standard Deviations of Teachers' Responses
About Computer Labs. Adequacy in schools

Statement	M	SD
-Area of computer lab. is adequate	3.19	1.39
-Suitability of ventilation and lighting	2.78	1.39
-Computer capabilities meet the course requirement	2.21	1.23
-Number of computers is proportional to students' number	1.60	0.92

Table (3)
Means and Standard Deviations of Students' Responses

About Computer Labs. Adequacy in schools

Statement	M	SD
-Suitability of ventilation and lighting	3.18	1.47
-I sit comfortably in the computer lab.	2.97	1.44
-# of computers available are enough to # of students	1.78	1.17

As shown in Table (2) and Table (3), both teachers and students indicated that the number of computers available in the laboratories is not proportional to the number of students. This maybe attributed to the high cost of computers and the increasing number of schools available, which may increase the burden, set on the Ministry of Education the number of computers in Egyptian public schools is not enough to cover the increasing number of students. The data also indicated that the available computers are enough to cover the course requirement from the point of view of the teachers knowing that they are old. This maybe explained by the fact that the software used for the first grade students of secondary school are outdated and needed simple computer capabilities.

As for the location of the computer laboratories in the schools, the teachers indicated that they were adequate (M= 3.19), however, the students indicated that they do not sit comfortably (M=2.97). The reason attributed to this result was evident by the fact that there is a lack of computers available, and the locations of most computer laboratories were not adequate. The teachers also indicated that the lighting and the ventilation in the laboratories were inadequate (M=2.78), while the students indicated that they were adequate (M=3.18). It seems that the teachers have more experience in determining the basic conditions that must be provided in the computer laboratories than the students.

An attempt was made to determine how teachers viewed the availability of software and materials that serve the computer course. Table (4) presents the means and standard deviations of teachers' responses.

Table (4)

Means and Standard Deviations of Teachers' Responses

Related to the Availability of Software and Materials

<u>Item</u>	<u>Mean</u>	<u>SD</u>
-Books and materials are available in schools	1.89	0.95
-Sufficient budget is available to buy software and materials	1.89	0.90
-Schools are keen to subscribe to one of the computer journals	1.83	0.87

From the data presented in Table 4, it is evident that the books and the materials were not available in schools to support teaching the computer course in the right way (M=1.89). It is also evident that the financial support is not available to either neither by updated software and materials nor to subscribe to computer journals (M=1.89, 1.83 respectively). This maybe attributed to the fact that most of the software available in public schools were written in the English Language which is not consistent with the curriculum and require the students to have a certain level of English which the majority of them do not have.

In order to find out how teachers evaluated the courses and the workshops that they had attended (Question # 9), the data indicated that (29) male and female teachers (61.70%) had participated in the training workshops conducted by the Ministry of Education. The rest of the teachers (38.30%) who did not participate in the workshops expressed their willingness to do so in the future. Table (5) presents the means and the standard deviations of teachers' responses in evaluating the training workshops attended.

Table (5)

Means and Standard Deviations of Teachers' Responses

Evaluating the Training Workshops

<u>Item</u>	<u>Mean</u>	<u>SD</u>
-I need specialized training workshops in computer	3.22	0.91
-The training workshops contained enough information and exercises about teaching methods in computer	2.78	0.97
-I benefited from the workshops in improving my achievement	2.75	0.95
-Trainers were highly competent	2.72	1.02
-Content presented in the workshops were appropriate	2.25	1.05
-Timing when the workshops conducted were appropriate	2.19	1.00

Table (5) shows that computer teachers are in need for specialized training workshops (M=3.22), but they disagree with the time when these workshops were conducted (M= 2.19). Generally speaking, there was a negative evaluation concerning the training workshops. This negative evaluation maybe related to the fact that these workshops were conducted on Thursdays (teacher's weekly day off), thus the feeling of dissatisfaction. It maybe related to the fact that these training workshops did not meet the actual needs of the teachers. This requires that some changes should be done

in the design of such workshops in order to meet teachers needs and their scientific backgrounds. Thus, it is suggested that such training workshops should be conducted in schools through the use of instructional videotapes or other instructional software.

Concerning the major deterrents to the use of computers in the schools as perceived by both students and teachers question (10), it was noticed that both students and teachers agreed to a large extent on the major deterrents facing them when using computers. But they disagreed on the way they ranked such deterrents. Table (6) and Table (7) below present the findings.

Table (6)

Major Deterrents to the Use of Computers from the Point of View of the Students

<u>Deterrents</u>	<u>%</u>
-Lack of available computers in schools	75.3
-Computers are slow and outdated	26.5
-A large number of students using the same computer	14.0
-Computer labs. are too small and not adequate	10.6
-Lack of computer accessories such as printers, mice, etc...	6.8
-Focusing on the theoretical part than the practical	4.3
-Outdated software	3.5
-Turn over of teachers , (teachers are not staying in school for the whole year) .	3.5

Table (7)

Major Deterrents to the Use of Computers from the Point of View of the Students

<u>Deterrents</u>	<u>%</u>
-Lack of available computers in schools	46.8
-Computers are slow and outdated	48.9
-Outdated software	29.8
-Computer laboratories are too small and not adequate	17.0
-Most of the time, the computer are broken	29.8
-Teachers working in different schools and have administrative work	12.7

Tables (6) and (7) above show that lack of available computers in schools was seen to be a serious deterrent considering that it got the highest percentage by both the students and the teachers (75.3%, 46.8% respectively). If this deterrent is accepted and dealt with as is, students and teachers alike were faced with the second major deterrent "computers are slow and outdated" (26.5% and 48.9% respectively). It was noticed that most computers did not have hard disks, and the disk drives used were 5.25" that break easily and not are used anymore. In addition, the memory used in such computers was with low capacity (640 KB) and takes a long time to operate. As for the software used, they are available in schools only and they are outdated (3.5 and 29.8 respectively). The findings showed that a large number of students used the same computer at the same time (14.0%). This made the students feel uncomfortable and dissatisfied with the lesson, having one student use the computer while other

students take the role of just watching. This of course decreases the effectiveness of the teachers and minimizes the students' achievement and motivation to use the computer. It is worth noting that these deterrents have been consistent in many studies as barriers to the use of computers .

Recommendations:

Based on the findings of this study, the following recommendations were presented:

(1) The study revealed that there are linguistic advantages of computer usage in teaching Arabic Language:

- A. The quantitative assessment of some quantitative features of linguistic expressions such as the frequent reputation of letters, words, morphological forms and types of grammatical types.
- B. Writing analysis: differentiating patterns of letter's automatically by maximizing and erasing them through the use of scanners.
- C. Showing typed texts automatically including automatic printing seeing letters on screens.
- D. Analyzing sentences grammatically and deriving the different grammatical transformations and applying them clearly.
- E. Automatic grammatical generation to form sentences, negating its original formation and carrying out different processes of grammatical transformation such as precedence and postponement.
- F. The objective identification of the extent of the previous novelists, playwrights and poets influence on the new ones.
- G. Comprehending the relations connecting concepts together through what we call conceptual schemes or meaning webs.
- H. Loading dictionaries on electronic shops or CDs to be used for educational purposes' discovering misspelling.
- I. The ability to get the required information from the great amount of saved entries.
- J. Building and processing information bases.
- K. Building and processing knowledge bases.

(2) The study revealed that students and teachers alike indicated that there is a shortage of computers for them to use. This implies that in many cases availability of computers has an important relationship to their utilization practices. Thus, to ensure ease of use the Ministry of Education should provide the Southern Governorate Schools with enough computers, which will make it possible for students and teachers to use them under the best possible conditions.

(3) The study revealed that students were unable to understand the computer textbook used on their own. Thus, it is recommended that the Ministry of Education ask specialists in the field to review, modify, and introduce new topics in the textbook as well as the software used.

(4) Since the majority of teachers lack the proper training in the teaching methods of computer courses, it is recommended that the Ministry of Education should provide in- service training programs by conducting various workshops that will assure teachers' competencies and the teaching methods in the use of new software.

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Appendix no.
A questionnaire
Of
linguistic advantages of computer usage in teaching Arabic
Language.

Dear Student / Teacher of the Arabic Language.

The researcher has prepared the present questionnaire about evaluation of computer usage in Teaching Arabic Language . Use of computers in Arabic language .

This questionnaire is made up of 17 items derived from the results of previous studies and research works carried out in the field.

You are kindly requires to put a tick (v) in one of the columns according to the degree of accordance of each item. Please, read the items carefully and try to be as specific as possible.

Dr. Abdelrahman Kamel
Assistant prof. At the curricula and

Methodology Dept. Faculty of Education.

Fayoum Cairo University

First: Preliminary data:

1. Name: (Optional)
2. Date of birth:
3. Sex (male- female)
4. University:
5. Faculty:
6. Year:
7. Section /specialization:

Second: Questionnaire items:

Tick (v) in one of the columns according to the degree of your accordance with the content of the item, for each of the items provided.:

Degree of accordance			The item	No
Disagree	Not sure	Agree		
			The quantitative assessment of some quantitative features of linguistic expressions such as the frequent reputation of letters, words, morphological forms and types of grammatical types.	1-
			Differentiating sounds and identifying the speakers' voice whose parterres have been previously saved.	2-
			Transforming texts typed or scanned to a naturally spoken text.	3-
			Writing analysis: differentiating patterns of latter's automatically by maximizing and erasing them through the use of scanners.	4-
			Showing typed texts automatically including automatic printing seeing letters on screens.	5-
			Analyzing sentences grammatically and deriving the different grammatical transformations and applying them clearly.	6-
			Automatic grammatical generation to form sentences, negating its original formation and carrying out different processes of grammatical transformation such as precedence and postponement.	7-
			Analyzing literature to specify date of its start and resource.	8-
			The objective identification of the extent of the previous novelists, playwrights and poets influence on the new ones.	9-
			Comprehending the relations connecting concepts together through what we call conceptual schemes or meaning webs.	10-

			Loading dictionaries on electronic shops or CDs to be used for educational purposes' discovering misspelling.	11-
			Electronic translation to be used for tests and linguistic experimentation.	12-
			The ability to get the required information from the great amount of saved enteries.	13-
			Carrying out electronic indexing.	14-
			Knowing the background of the topic discussed in aspects of its conceptual scheme, meaning of its terms and abbreviation.	15-
			Building and processing information bases.	16-
			Building and processing knowledge bases.	17-

- Other linguistic needs not mentioned in the questionnaire and should be added.

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