

## البحث السابع :

" استخدام ملفات الإنجاز الإلكترونية وأثرها على تنمية التحصيل  
والإتجاهات لدى طلاب الدراسات العليا "المصريين" بكلية التربية  
جامعة المنيا"

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## ***Research:7***

***Using Electronic Portfolios With Egyptian  
Postgraduates & The Effects on Their  
Achievement & Attitudes.***

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**" استخدام ملفات الإنجاز الإلكترونية وأثرها على تنمية التحصيل والإتجاهات  
لدى طلاب الدراسات العليا "المصريين" بكلية التربية جامعة المنيا**

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**• مستخلص :**

تتسم طرائق التدريس واستراتيجياته بالتغير المستمرة كى تساير التغيرات فى المجالات البحثية والتكنولوجية والأمر الذى يستدعى " بالقياس" أن تتغير معه أساليب وأدوات قياس أداء الطلاب .. لذا جاء هذا البحث ليلقى الضوء على أحد الإتجاهات الحديثة فى مجال تقويم الطلاب باستخدام " الملف الإلكتروني" أو "الواجبات الإلكترونية". ويعتمد البحث الحالى على تدريب عينة من الطلاب المصريين بكلية التربية بالمنيا والمتحقين ببرنامج الدراسات العليا على برنامجا تدريبيا فى "الملفات الإلكترونية" وذلك من خلال دراستهم لمقرر فى اللغة الإنجليزية بهدف قياس التحسن فى التحصيل لهذا المقرر اتجاهاتهم معا. وأخيرا .. يسهم البحث الحالى فى التغلب على العديد من المشكلات الخاصة بالواجبات /الحقبيية التقليدية والتي غالبا تحتاج أماكن لحفظ الملفات "الواجبات" الورقية وخلافه، بل أيضا قد تسهم نتائج البحث الحالى فى التيسير على المعلمين وأولياء الأمور والطلاب والمعنيين لمتابعة دقيقة لكل طالب ومدى تقدمه بطريقة الكترونية. وتقدم الدراسة أيضا مجموعة من التوصيات والدراسات المستقبلية تفيد المهتمين فى المجال.

***Using Electronic Portfolios With Egyptian Postgraduates &  
The Effects on Their Achievement & Attitudes.***

**By: Eid A. Ali, Ph. D**

Teaching methods and strategies are changing and will continue to change as long as research and technologies make advances. The means to assess students must similarly keep pace. Thus, the present study aims at introducing the electronic portfolio as an authentic performance and technology based assessment tool used for evaluating Minia postgraduate students' writing performance in an English language course .

Compared to the traditional portfolios ,these electronic portfolios will definitely help both teachers and students get rid of these bulky stuff that may take up a lot of room and to overcome other problems including the organization of some work samples that are of various sizes and often too large to be kept in a folder or binder .Finally, using e-portfolios will help teachers, students, parents, and stakeholders to easily keep a closer and a more accurate eye on student progress. Recommendations and suggestions for further research are included.

## Introduction

Generally speaking, a portfolio is a collection of work that a learner has collected, selected, organized, reflected upon, and presented to show understanding and growth over time.

**Electronic** portfolios are increasingly being used, in many developed countries, especially, in professional fields such as teacher education, and in classrooms as a means of **alternative assessment**. More specific use of **electronic portfolios** to demonstrate proficiency in the use of computers for instruction seems particularly appropriate. An electronic portfolio is essentially the same as traditional text-based portfolio using the tools and presentation systems available on a computer. Their use represents a genuine integration of theory and practice. This is clearly identified by Antock & McCormic(1997) who stressed that by creating an electronic portfolio, a learner can demonstrate his\ her ability to use the technology in a professional context. As a result, a Power Point presentation on the "planets in the Solar System," demonstrates not only his\ her ability to create and design curricular content for the classroom, but his\ her ability to use computer-based technology to facilitate that process.

Moreover, portfolios are used in teacher education programs to provide evidence of pre-service teachers' professional growth and development. As programs are better able to integrate technology into the teacher preparation curriculum, many educational institutions are implementing electronic versions of portfolios (e-portfolios) on a widespread basis. Anderson & DeMeull(1998) confirmed that uses and types of electronic portfolios continue to grow and evolve. Similarly, in her article, Helen Barrett (1999) when she describes the process of implementing e-portfolios in colleges of education at three different universities across the United States (Arizona State University, West Campus; Drake, she assured that many of these efforts have moved beyond the pilot phase, with some high stakes, such as institutional accreditation, riding on the outcome of the implementation.

### **Electronic portfolios Vs.Traditional Paper portfolios:**

It is well- known that electronic portfolios have a number of advantages over more traditional hardcopy or "paper" portfolio formats. An electronic portfolio can include **multimedia** elements such as sound, animation and even video. It can also include more traditional text, graphic and photograph formats typically included in a text-based portfolio.

ASP(2000) stated that another's unique advantage of electronic portfolios over text-based portfolios is that they can include internal and external hyperlinks. An internal hyperlink might take the reader to another slide in a presentation. For example, a teacher at a school or a professor at the university might present a lesson plan on growing plants, and s\he could provide buttons or links to other slides that have additional lesson plans, or actual examples of work done by students as a result of the lesson plan. An external link might be to a website on the internet or to another file resident on his\ her computer. These files could include scientific information, or an encyclopedia entry, or a lesson plan or activity done by another student or teacher.

Thus, while developing the electronic portfolio, one should keep in mind that a key concept at any level, whether text based or electronic, is ownership of what is being created. A portfolio also needs to be organized around specific standards and content appropriate for the area of expertise that it is being demonstrated.

In higher education context ,both Berett (1998) and Edwards(2002) described Electronic Portfolios as the computing text that requires a matrix to guide learners through the process of creating this electronic portfolio. They added that based on their professional experience, many colleges and universities have spent almost two or more years establishing electronic portfolios systems using a " check " sheet matrix for completing each activity.

Electronic Portfolio skills.
Using Online Visual Resources
Finding visual sources using an online search engine
Creating a Newsletter Describing Resources at a Museum
Evaluating Educational Software
Using Teacher Resources Websites
Finding Hardware And Software to Meet the Needs of Children with Disabilities
Creating a Multimedia Project
Creating a Web Quest
Developing Acceptable Use Policies
Assembling and Reflection on Your Electronic Portfolio
Demonstrating Knowledge of the Basic Elements of a Computer.

### **What are the types" names" of portfolios?**

Kamen (1996), Kyle(2002), and Smith(2003) stated that there are two common types of portfolios( i.e. traditional & electronic).They agreed that one primary difference between traditional and electronic portfolios is that electronic portfolios use technologies such as CDs, DVDs, and the Web. This allows students to collect and organize portfolios artifacts in many media types (audio, video, graphics, and text). They added that students can also use hypertext links to organize the material and connect evidence to appropriate outcomes, goals or standards. Briefly, it helps teachers to make formative evaluation possible in the classroom. This formative assessment is an essential component of classroom work and that its development can raise standards of achievement "more effectively than any other strategy.

### **Formative vs. summative Portfolios:**

The primary audience for a formative portfolio is the student and often his\her parents in student-led conferences. The focus is on formative assessment. What are the learning needs in

the future? How has the learner improved over previous work? When used for formative assessment, these types of portfolios have the potential to improve student self-assessment.

The summative portfolios is structured around a set of outcomes, goals or standards and is sometimes used to make high stakes decisions. Research shows that summative assessment actually reduces student motivation to learn .

To sum up, the researcher views the difference between these two stories in the purpose of the portfolios. The first example was an institution, centered, summative portfolios, where the student had little choice and ownership over the contents of their portfolio. The second example was a student-centered, formative portfolio, where the student reflected on her growth over time.

### **Electronic Portfolio and Digital Portfolio:**

Often, the terms Electronic Portfolio and Digital Portfolio are used interchangeably; however there is a distinction: an Electronic Portfolio contains artifacts that may be in analog form, such as a video tape, or may be in computer-readable form; in a Digital Portfolio, all artifacts have been transformed into computer-readable form. (Barrett, 2000) confirmed this by stating that an electronic portfolio is not a haphazard collection of artifacts (i.e., a digital scrapbook or a multimedia presentation) but rather a reflective tool that demonstrates growth over time.

Briefly, the researcher can conclude that most of these definitions include the word collection; collections of work can be folders, or scrapbooks or portfolios. What differentiates an electronic portfolio from a digital scrapbook or an online resume is the organization of the portfolio around a set of standards or learning goals, plus the learner's reflections, both on their achievement of the standards, and the rationale for selecting specific artifacts, as well as an overall reflection on the portfolio as a whole.

### **Why portfolios?...Purposes for developing E- portfolios:**

Hartnell & Morriss(1999), and Young(2002) have stated that there are three general purposes for developing portfolios. Each type serves a specific purpose (i.e . to learn, to assess and to market). For them, "Formative" portfolios, usually occurs on an ongoing basis to support professional development. "Summative" portfolios, occurs within the context of a formal evaluation process; whereas (Marketing) portfolios, are used for seeking employment .

Thus, as noted above, the researcher can view portfolios as a form of alternative assessment. The terms alternative assessment, authentic assessment, or performance-based assessment are often used synonymously "to mean variants of performance assessments that require students to generate rather than choose a response" .The characteristics of this type of assessment are: the student is involved in meaningful performance tasks; there are clear standards and criteria for excellence; there is an emphasis on meta-cognition and self-evaluation; the student produces quality products and ; there is a positive interaction between assessor and assessee. Gibson & Barrett(2003))supported this view when they confirmed that there are two central features to alternative assessments: "First, all are viewed as alternatives to traditional multiple-choice, standardized achievement tests; second, all refer to direct examination of student performance on significant tasks that are relevant to life outside of school" .Similarly, Henson(1999)&Thomas(2001) advocated a balanced approach to assessment, with a focus on three components:

- Traditional Assessment, with a focus on grades and rankings, knowledge, curriculum, and skills, implemented through classroom assessments (tests, quizzes, homework assignments),and standardized tests(either norm-referenced or criterion-referenced)
- Performance Assessment, with a focus on observable results and standards, application and transfer, implemented through standards, tasks, criteria and scoring rubrics.

- Portfolio Assessment, with a focus on growth and development over time, implemented through selection, reflection and inspection of class work , along with goal-setting and self-evaluation

"Performance assessment focuses on the direct observation of a student's performance" Students create projects or perform tasks based on predetermined standards, criteria, and indicators, which are evaluated by scoring rubrics. Teachers have always observed student learning in the classroom. However, until recently documenting these observations has been difficult and time-consuming. In the early 1990s, several tools were developed to collect and organize these observational data; the Greater Victoria (B. C., Canada) School District developed a system using bar codes to record student classroom activities. Subsequently, the software was published by Sunburst as Learner Profile, and moved from using bar code readers, to using Apple's Newton and now Palm hand-held devices to collect data in the classroom. The most promising application of the Palm involves linking data collection to generic database applications, such as FileMaker Pro, to allow more flexible use of observational data.

Thus, there are significant differences between Performance Assessments and Portfolios. A portfolio is a container that holds examples of student or teacher work (the "artifacts") and reflections on that work that transforms the artifacts into "evidence" of achievement. Many of those artifacts could be the results of performance assessments with associated evaluations and reflections. A standards-based portfolio creates linkages between student tasks and performance assessments, with their associated scoring guides, and the standards they are designed to demonstrate.

### **The advantages of electronic portfolios :**

Discussing the advantages of developing electronic portfolios for either students or professors Barrett & Hartnell &Young, (2000),stated the following as advantages :

- minimal storage space

- easy to create back-up files
- portability
- long shelf life
- learner-centered
- increases technology skills
- through hypertext links it is easier to make argument that certain standards are met
- accessibility (especially web portfolio).

### **Purposes of electronic portfolios in teacher education:**

Electronic portfolios were a natural fit with the standards-based reform in teacher education. As standards were defined and refined, using an electronic means to show growth became more appealing. As technology improved and became ubiquitous, students found it easier to archive projects, assignments and evidence of work in classroom , to reflect on these artifacts and to repurpose them from specific audiences and specific purposes. E-portfolios used in student-centered manner serve three purposes: as learning systems for professional development, for formative and summative assessment and as employment portfolios (Hartnell-Young & Morriss , 1999).

Although paper-based portfolios had been used for many years, the move toward an electronic version was piloted in 2003 by Project Impact (a federal PT3 grant) and a number of technology users from various programs. Using the Generic Tools (GT) approach , a standards-based portfolio was developed in-house using PowerPoint as the platform. This system , the Virtual Anthology System (VAS) , allowed students to store and reflect on assignments , relate them to standards and develop customized portfolios to showcase their best work to faculty as well as potential employers.

Moreover, Provenzo, Brett & McCloskey (2005) concluded that e-portfolios serve dual purposes: student value and institutional accountability. Students begin the development of a

working e-portfolio by archiving assignments, instructor feedback and reflections during early methods courses.

Most CS systems offer tools that students find useful, such as customizable lesson plan builders , rubric builders and databases with K-12 subject area standards and teaching standards (Wilhelm , 2005). This "student value" purpose was verified through student surveys conducted during implementation phases ; these surveys indicated widespread satisfaction with the e-portfolio system in terms of benefit for cost and effort. The second purpose of e-portfolios was to have a convenient method of archiving and retrieving evidence of student achievement of standards, thus documenting institutional accountability. This second purpose was a major impetus for selecting and for purchasing an e-portfolio system.

Thus, it became clear that one portfolio style could not satisfy all of the students and program needs. So, additional adjustments are needed based on the involved factors.

- *Steps & Tips for professors who use electronic portfolios for the first time: Basic Equipments Needed To Create An Electronic Portfolio:*

To create an electronic portfolio, the first step is to learn how to use the equipment and software. This definitely requires time and training . Users do need time to play and plan. Benedict(1992) stated that instructors need to decide upon what students should include and , sometimes, how it is going to look. In other words, will the user be able to access the information in order (linear) or will they access the information in any order they choose (non-linear). Also, professors need to decide upon the type of background, sound and other features. Bennett & Hawkins(1993) added that some professors may need to create a model template at first.. A template is a group or stack of cards that is the outline or content of the portfolio. Then they ask their students to Add graphics, borders, art, etc. They, also, may need to add text boxes for the various sections and buttons to link the cards. Save the stack to create a template. Winzer(2002)

supported the same view when he clarified that besides the time and planning that are needed in creating an electronic portfolio, users need to have some basic equipments. Some of these basics are: Computer, Scanner, Digital Camera, Multimedia Software Program, Web Authoring Program, and a few multimedia programs that are available out there such as; HyperStudio, COMPEL, Powerpoint, Persuasion, Storyboard Live, and Adobe. If you do not have access or do not wish to include sound video , there are programs such as Claris Home Page that allow for the creation of an electronic portfolio without the need to add such features.

Similarly, Edwards et al(2002) stresses the fact that creating an electronic portfolio can develop professors' as well as students' multimedia technology skills. They identified the multimedia development process usually covers the following stages:

- **Assess/Decide.** The focus is on needs assessment of the audience, the presentation goals, and the appropriate tools for the final portfolio presentation.
- **Design/Plan.** In the second stage, focus on organizing or designing the presentation. Determine audience-appropriate content, software, storage medium, and presentation sequence. Construct flow charts and write storyboards.
- **Develop.** Gather materials to include in the presentation and organize them into a sequence (or use hyperlinks) for the best presentation of the material, using an appropriate multimedia authoring program.
- **Implement.** The developer presents the portfolio to the intended audience.
- **Evaluate.** In this final stage of multimedia development, the focus is on evaluating the presentations effectiveness in light of its purpose and the assessment context.

Each stage of the portfolio development process contributes to professors' professional development and students'

lifelong learning. Based on the researcher's reading in this targeted area, the process for developing a portfolio as suggested by many researchers lay out as follows:

- Collection - professors and students learn to save artifacts that represent the successes in their day-to-day teaching and learning
- Selection - professors and students review and evaluate the artifacts they have saved, and identify those ones which demonstrate achievement of specific standards
- Reflection - professors and students become reflective practitioners, evaluating their own growth over time and their achievement of the standards, as well as the gaps in their development
- Projection (or Direction) - professors and students compare their reflections to the standards and performance indicators, and set learning goals for the future. This is the stage that turns portfolio development into professional development and supports lifelong learning.
- Presentation - professors and students share their portfolios with their peers. This is the stage where appropriate "public" commitments can be made to encourage collaboration and commitment to professional development and lifelong learning.

### **What should postgraduate students Include in E-portfolios ?**

Many researchers such as Stone (1998), Thomas(2001), and Tarnowski( 1998) agreed that each student needs to include a title card in the electronic portfolio. The information in the title card should contain the student's name, age, grade level, and professor's name. A table of contents card is also required. This card will display the contents of the portfolio. The user will then have the option of choosing the card or section they wish to view. Information cards are the cards that include the different sections or information. It is important that curricular standards be used to align the use of the portfolio in content areas and not just

create a little technology project isolated from the rest of the curriculum. portfolios should also include writing samples with a graphic of particular reports. There is an endless variety of information that can be included in the electronic portfolio. Thus, in electronic portfolio each professor can focus on and design what s/he wishes to measure .

### **Approaches to meet portfolio-related goals.:**

Gibson and Barrett (2003) defined two basic approaches that can be taken to meet portfolio-related goals. One approach involves a customized system (CS) that uses a web accessed database for the storage and retrieval of student artifacts and faculty evaluation data. In CS systems , a company or an educational institution provides a framework or structure for students to display their artifacts and link the content to student learning , reflections , program goals and evaluations. The CS vendor provides server space for storage and data retrieval , and automates the process , requiring minimal user skill in uploading and linking information. The second approach involves students using generic tools (GT) such as word processing , multimedia authoring tools , portable document format (PDF) and web logs to compile artifacts. GT systems use whatever digital storage is available such as CDs , disk drives and on-line space provided by the institution.

### **How to evaluate an electronic portfolio?**

Barrett(2000) mentioned that there are many criteria that could be used to evaluate electronic portfolios. Most of them should be created by the portfolio developers. She ,also, confirmed that many electronic portfolios users develop rubrics to assess the quality of their work. A rubric is a criteria-rating scale, which provides professors with a tool that allows them to track their students' performance. They also empower students with the knowledge of what is expected of them. They believe that the portfolio should be an ongoing and not just a project to be completed by a certain deadline, a quality portfolio should include work samples over a long period of time. A selection of work for

each month would be one way to chart progress. Book reports can be a tangible example of that. Depending on the level of education, each student can be encouraged to select a story or a book to read and then create a weekly electronic report . The reports would probably become more elaborate with more and more value-added as the students become more proficient both in writing and in adding graphics, pictures, and sound, and so. Similarly, Niguidule(1993a) and Milone (1995) assured that electronic portfolios can be a very practical assessment tool depending on the knowledge level of the teacher and the amount of time they can or are willing to invest. It is much easier with students who are used to technology and have little problem manipulating the computers and other contraptions. (Barrett & Wilkerson , 2004)confirmed that the higher the grade level the easier e-portfolio can be achieved.

### **Background of the problem:**

While "paper portfolio" has received a considerable attention in Egypt in the last decade. very rare or no attention has been paid to "electronic portfolio" in most Egyptian colleges of education. Research on electronic portfolio especially with regard to the effects of these electronic portfolios on developing the achievement & attitudes of Egyptian postgraduate students in colleges of education is rare.

The issues of improving the achievement of college students and developing their attitudes towards learning have always been of concern among Egyptian professors, educationists, researchers and ministry of higher education stakeholders as they are essential not only for quality assurance but also for preparing postgraduates for the world of globalization and for international competitions .

Most postgraduates at Minia faculty of education, as stated by many graduates and professors in informal interviews by the researcher, are not familiar with this type of electronic portfolios in which each student is required to submit his/her assigned homework/projects in an electronic way.

Currently, neither professors nor postgraduate students of the faculty of education care for trying to adopt this type of electronic portfolios in spite of the fact that it may make their learning more interesting, exciting and enjoyable through the sense of ownership and uniqueness that each postgraduate student can get upon submitting his/her own portfolio using various electronic skills such as music images...etc but following the same required instructional guidelines. If adopted and utilized, this recent trend of "electronic portfolio" may definitely lead to positively develop their attitudes towards learning in general especially compared to the traditional paper portfolio.

Based on the analysis of the pilot study, the researcher found that, initially, the majority of postgraduate students and professors at Minia, faculty of education did not seem to be motivated to adopt and utilize the electronic portfolios in their teaching/learning situations. The researcher attributed this attitude to:

- 1-Lack of computer skills of both students & many professors.
- 2- Internal desire of many professors and postgraduate students of "no change is much better to survive "especially if it is not required by stakeholders.
- 3- Although" paper portfolio" requires more space, more time, and more efforts, professors , still, prefer its use as being easier and familiar.
- 4- Unfamiliar things are ,somewhat, difficult to be changed rapidly in the Egyptian culture. For this reason, many professors do not encourage their postgraduate students to use e-portfolio as they are themselves were brought upon that " paper-one" and they do not want change.

Therefore, the present study aimed at investigating the effects of using electronic portfolios with Egyptian postgraduates of Minia faculty of Education on developing their achievement (in the target language course for English majors ) and their attitudes towards learning EFL.

### Significance of The Study:

Part of the significance of the present study lies in the fact that e- portfolios can be initiated in many program areas , with departmental committees coordinating subsequent implementation as part of on going program evaluations. Adoption has been pushed forward by accreditation requirements ; however , there has not been a general "buy-in" from all faculty members. Colleges of Education will be more eager in the near future to adopt electronic portfolios with the same enthusiasm as their counterparts in higher education in international western universities Perhaps due to the testing mandates of *No Child Left Behind*, especially all colleges are seeking international accreditation and quality assurance.

Moreover, based on the researcher's modest readings in this area, portfolios seeks to help both learners and staff members to include clear set standards or expectations, quick access, easy storage and increased technology skills if there is a better understanding of how electronic portfolios can be used for assessment to improve student learning.. Finally, the present study is one of the rare studies that have been conducted in Egypt, up to the present date, that sheds the lights upon one of the most recent advances in assessing students' performance at the college level through the use of electronic portfolios.

Compared to traditional -paper portfolio-, there are many benefits for encouraging both Faculty members and postgraduate students to start using an electronic portfolio. First, it helps them avoid many problems that may be routinely encountered in traditional or paper portfolios. For example, electronic portfolios will definitely help in overcoming the problems related to the unavailability of physical space in the Egyptian classroom context . Files, boxes and or binders holding papers, cassettes, pictures, and drawings would take up lots of space. With an electronic portfolio, information can be easily stored in a computer hard drive, floppy disc, CD or other. This would take up very little physical space and would be accessed with minimal effort. As a researcher, I think that electronic portfolios can hold a great deal of information. Pictures, art work and writing samples can be all be scanned in and saved.

Similarly reading samples could be recorded. Moreover, work samples from the previous college years could also be included. Another important addition, would be collaborative postgraduate students' work that otherwise would not be able to be included in each participating postgraduate student's portfolio. It is up to the postgraduate's own belief system, once his\ her work is organized, electronic portfolios can be enhanced by the addition of sound, music, pictures, graphics and even video. Thus making it easier , motivating and more appealing to himself\ herself, peer-students, and even for professors. Electronic portfolios also serve to enhance computer and technology skills. Both staff members and postgraduate students would gain rich experience by creating, selecting, organizing, editing and evaluating such portfolios. Students would feel a sense of accomplishment and empowerment by displaying, sharing and presenting their electronic portfolios to staff members and fellow classmates.

### **Statement of the problem:**

The problem of the present study can be stated in the following major question:

- 1- What is the effect of using electronic portfolios on developing The achievement of Minia postgraduates of college of Education (in the English language course for majors) and attitudes towards learning EFL? To answer this question, the researcher sets the following sub-questions to be answered in the present study:

### **Sub-questions of the study:**

- a- What is the effect of using electronic portfolios on developing the achievement of postgraduate students at Minia College of Education in the course of "English language for Majors"?
- b- What is the effect of using the electronic portfolio on developing attitudes towards EFL of postgraduates at Minia, college of Education?

### **Hypotheses of the study:**

The following hypotheses are tested:

- 1-There is no statistically significant differences between means of scores obtained by subjects of the non-treatment and treatment groups on the post test of achievement in the "English Language Course for Majors"(as measured by the "English Language Achievement Test For English Majors" developed by the researcher).
- 2-There is a statistically significant differences (favoring the treatment group) between means of scores obtained by subjects of the treatment and non- treatment groups as measured by the attitude scale towards learning EFL.

### **Limitations of the study:**

- 1- Using "electronic portfolio" as an assessment tool at the present study was limited to the training of college of education postgraduate level in Minia, enrolled in the first-term of the academic year 2007-2008 who registered for "the English language course for majors". This Educational level was chosen as many studies assured that such age may have a strong tendency to benefit more from computer skills.
- 2- The present study was also limited to the training on the basic-skills need of electronic portfolios. Extra skills such as sounds, images...etc are left to individual uniqueness.
- 3- Finally, the present study will be limited to the study the effects of E-portfolios on postgraduates' attitudes towards "learning" only but not towards "teaching", as it is beyond the limits of the present study.

### **Operational Definition of Terms:-**

#### **A Portfolio:**

The term " portfolio" in general means a purposeful collection of student work that exhibits the student's efforts, progress and achievements in one or more areas. The collection must include student participation in selecting contents, the criteria for selection; the criteria for judging merit, and evidence of student self-reflection.

- **Paper portfolios:**

The traditional storage format for portfolios in education is paper-based, usually in folders, three-ring notebooks or larger containers. Most often, the artifacts are comprised of text and images on paper, although the use of video or audio tape has been emerging.

- **Electronic portfolios.**

Electronic portfolios are a technology based form of authentic student based assessment. They are a collection of student work over a period of time. Portfolios are both practical and effective because of the rubrics used. The benefits include clear set standards or expectations, quick access, easy storage and increased technology skills. A multi-media computer, a scanner and a software package are the basic technologies needed to create an electronic portfolio. The templates are a way to organize the contents of the portfolio.

**Design of the experiment:-**

The present study utilized a pre-post control group design. Both the treatment and the non-treatment group were exposed to pre-post means of getting data. The subjects were randomly "alphabetically" divided into two groups. The treatment group that utilized the electronic portfolio trend and the non-treatment group utilized the "paper-portfolio" or the traditional one.

**Variables:-**

1-The independent variable is:-

A program in how to use "electronic portfolio" with Egyptian postgraduate students in Minia.

2- The dependent variables are:-

a- Achievement in the "English language course for majors".

B- Attitudes towards learning the " English language course for Majors ".

C- The control variables:-

- a- The socio-economic levels.
- b- Age
- c- English language proficiency.

**Subjects:**

A number of sixty post graduate English majors were randomly assigned and divided into a treatment and non-treatment group(s). Thirty male and female postgraduates in each group. They were all enrolled in second-year , Special Diploma in the course of "English language course for majors " taught during the first-term of the academic year 2007-2008. The instructor of the two assigned groups was the researcher himself who met once a week with each group. Each group received 12 sessions. Each session/ class meeting lasts for two hours a week. A total number of 36 teaching hours were attained by each group.

**Tools of the study:**

**( Available with the researcher).**

- 1- A questionnaire to determine the basic skills of electronic portfolios that postgraduate students need to master to submit their work electronically. ( developed by the researcher).
- 2-A program in electronic portfolio .
- 3-An English Language Achievement Test ( developed by the researcher).
- 4-An Attitude Scale Towards Learning English Language ( adopted from Cora,1995).

**Pre-testing**

**Validity of the tools:**

A Jury of four college professors examined the tools of the present study and approved their face-validity and suitability to the level of subjects and to the set adjectives.

**Reliability:**

A pilot testing for the first tool was performed on second year, special diploma students. English majors, enrolled in college of Education. The reliability coefficient of the achievement test in the

language course was done using test-retest. Correlation between means of score of the two tests (0.80).

For the second tool the altitude scale, the same sample and method of test-retest with three weeks intervals on 30 students of the 2nd year, special diploma was used to calculate reliability coefficient of the tool. It was (0.82).

### **Findings, Discussion and Recommendations.**

#### **A- Findings and Discussions:**

##### **Testing hypothesis (1)**

Hypothesis one predicted no statistically significant differences between means of scores obtained by subjects of the treatments and of the non-treatment groups in the post-performance of the English Language Achievement Test. The same procedures for scoring the pre-achievement test was followed. Analysis revealed a significance difference between the two groups favoring the treatment group. Thus, the first hypothesis was rejected.

*Table (1)*

*“t”- value, Standard Deviations and Means of scores obtained by students of the treatment and non-treatment group, on the Eng. language achievement test (post-testing).*

Groups	Means	Standard Deviation	t-value	Statistical significance
Treatment	57.467	8.365	2.852	*Significant
Non-treatment	49.5	6.045		

*“t” value is significant at (.01) level where table “t” equals (2.47)*

**Table (2)**

**Pre-port Means, Means of Differences, Sum of Squares of Differences Deviations from Means of Differences and “t” -values of the treatment and non-treatment groups in the English language Achievement test (pre-testing)**

Group	Means		Means of Differences	Sum of sq. of Differences	“t”- value	Statistical Significance
	Pre.	Post				
Treatment	35.267	57.467	22.2	2804.4	6.076	*Significant
Non-treatment	33.333	49.6	16.067	2094.933	5.087	*Significant

**\*“t”- value was significant at (0.01) where table “t” equals (2.98).** Pre post comparisons indicated that both groups improved significantly but the treatment group surpassed the non-treatment one. This was clear from the post comparison of both groups as Shown in table (1). Thus, the first hypothesis is rejected .

**Testing Hypothesis (2):**

Hypothesis 2 predicted significant difference between means of scores of the non-treatment and treatment groups in the post performance on the attitude scale towards Learning EFL. The same scale was used as in pre-testing. The scores of the control group ranged from 40 to 145 with a means of (57.433) and a standard deviation of (22.758). Analysis revealed a significant difference between the two group’s favoring the treatment group. Thus, the second hypothesis is affirmed. A summary of the data is presented in table (3), and (4).

**Table (3)**

**“t”- value, Standard Deviation and Means of Scores obtained by post graduates of the treatment and non-treatment groups on the Attitude scale. (Post-testing)**

Group	No. of subjects	Means	Standard Deviation	“t”- value	Statistical significance
Non-treatment	30	57.433	22.758	5.099	*Significance
Treatment	30	89.833	25.552		

**\*“t”- value is significant at (0.01) level where table “t” equals (2.39).**

**Table (4)**

**Pre-post Means, Means of Differences, Sum of Squares of Differences Deviations from Means of differences and “t”- value of the treatment and Non-treatment groups in the Attitude scale towards Learning sEFL.**

Group	Means		Means of Differences	Sum of sq. f Difference	“t” value	Statistical Significance
	Pre	Post				
Treatment	88.733	57.433	30.6	57233.2	3.772	*Significant
Non-treatment	89.8	89.833	0.3	31878.3	0.0495	

**“t”- value is significant at (0.01) where table “t” equals (2.46).**

Pre-post comparisons indicated that the attitude of the postgraduates of treatment group has changed positively if compared to those of the non-treatment group.

**B-Discussion:**

The present study helped in comparing two different alternatives of post graduate assessment tools i-e traditional paper portfolios vs-the electronic one. Each has its own supporters.

By testing hypotheses one, the electronic portfolio was more useful in producing significant results on the treatment group's achievement in the English language course for majors. The researcher faced difficulties at the beginning since some students were not familiar with the needed computer skills but they were, still, willing to participate in the treatment group.

Their previous experiences have concentrated almost exclusively on paper portfolio. They needed some time to avoid copying the same portfolio from one another over and over again.

The second hypothesis predicting that postgraduates of the treatment group would change positively in their attitudes toward learning EFL. This was affirmed as well. The relationship between using electronic portfolios and attitudes was quite clear. When postgraduates of the treatment group's level of perform-

ance increased as a result of being trained on electronic portfolio, their attitudes have been positively influenced significantly.

This shows the strong relationship between using electronic portfolio and positive change of postgraduates' attitudes towards EFL .Thus, electronic portfolios should be included as tool of alternative assessment in a EFL courses.

To sum up, traditionally , portfolios have been used as a visual arts tool showcasing an artist's accomplishments and personally favored works . Today, maintaining a portfolio in the classroom has been found to have many uses both to the teacher and the student . And the contents are just as diverse as the students who create them. A folder – paper or electronic – containing a student's work from start to finish allows the teacher and the student to evaluate the strengths and weaknesses of various works . whatever medium or method is used , the value of developing a student portfolio is priceless. A well – kept portfolio mirrors the comprehension and performance of a student. New instructional approaches emphasizing the student's role in understanding what, why and how they are doing have increased the value of portfolios and the appreciation of portfolios as an assessment tool for classroom – based performance. Many educators and researchers fell that a portfolio assessment is a superior and more accurate indicator of student progress than the more conventional types of assessment. And, unlike separate testing that takes away from instructional time, student portfolios supplement the learning process. Students can develop a better understanding of the criteria used in the grading process by having a visual reference such as the portfolio . Motivation to meet the criteria increases, and the results are better understanding of process and materials. Students, teachers and parents are able to view the process made over the course of a semester , a school year and beyond . There is no single correct way to develop a student portfolio. However portfolios are not meant to include everything a student produces. By having clear guidelines and examples of what is required to assemble a portfolio, the student will being to generate criteria for good work students are expected

to " collect , select and reflect . Students become active learners when they assume ownership of their learning. assume ownership of their learning. Suddenly, the classroom becomes student-centered student centered instead of teacher- centered . Students take an active role in .Also they would like to include in their portfolios . They become the authors of their own academic success .

On other side of the counselors, teachers, administrators and parents can counsel, evaluate and measure the student's accountability through the portfolio process.

One of the best lessons I personally learnt, as a researcher, is that teachers\ professors must first set the example for their students . They should take pride in their work by keeping an up-to – date port – folios.

Along with individual progress charts, the portfolio can add motivation to students in the classroom , " with so many hands – on activities in the classroom , instructors can use the progress chart to help students keep a record of completed assignments and the grade received. As the student continues to add to a portfolio, a sense of pride emanates from seeing his\ her work and the progress made . As the student sees this progress , It motivates him\ her to continue to develop and produce . As further proof to one's students in illustrating how an individual can progress, an instructor should keep his\her own portfolio available to his\her students to review at any time. Instructor's portfolio should contain his\her very first item s\he created up to the most current.

This definitely, allows students to see instructor's development as a designer. Moreover, It shows students that instructors, too, started simple and expanded their horizons. By witnessing this transformation, the students begin to realize that electronic portfolio designing is not a simple but a lifelong learning process.

### **Guidelines, Implications, and conclusions on E-Portfolio :**

Based on the experiences and best practices of these e-portfolio adopters , the researcher could come up with the following recommendations to be offered to stakeholders of

Higher Education in Egypt generally , and to educators of colleges of Education in particular:

- At college level, E-portfolios is a useful assessment tool in the process of accreditation and quality assurance that all Egyptian institutions should seek to accomplish these days. So, it must be a required matter in all colleges of Education. Stakeholders should allow initial implementation. They should begin with departments that hold an interest in the process , gradually inviting others to join.
- At the department level, do not expect the e-portfolio process to be embraced by all departments initially.
- Each college of Education should choose a vendor ,an appropriate fit with the university infrastructure , faculty goals and the college pricing structure. Most vendors do an adequate job of archiving data.
- As e- portfolios are implemented, stakeholders should carve out some time for faculty to revisit program matrices and refine the data collection process.
- Be aware that one person (faculty , staff or other) may need to be assigned a faculty training and ongoing development.
- Finally, beyond program accreditation, realize that implementing e-portfolios must be enhanced to develop a "culture of evidence" for ongoing program improvement in all colleges of Education in Egypt.

### **Recommendations:**

- Further studies to investigate the effects of using e-portfolio on the achievement of TEFL courses at the level of undergraduate students' .
- A further study to investigate the effects of using e-portfolio on the teacher- student interaction.
- A further study to investigate the effects of using e-portfolio on the student \ student interaction.

## References .

- 1- Abrenica, Y & Ramirez Sweeney J. (1996). Assessment Tools for the Writing Section of the Chula Vista Second Grade Progress Assessment, 6-13.
- 2- Anderson, R. & DeMeull. L., (1998): "Portfolio Use in Twenty- Four Teacher Education Program", Teacher Education Quarterly, No
- 3- Antock, J. & McCormick, D. (1997): "The Student Teacher Portfolios as Autobiography: Developing a Professional Identity", The Modern Language Journal, No 81. 4-Assessment Reform Group (2002a)"assessment for Learning"[Retrieved June 23, 2006 from: <http://www.qca.org.uk/7659.html>]
- 4- Asp, E. (2000): "Where Have we Been" Where we Headed?", Brand, R.(ed): Education in New Era, USA, ASCD.
- 5- Assessment Reform Group (2002b) "Testing, Motivation and Learning"[Retrieved June 23,2006 from <http://k1.ioe.ac.uk/tlrp/arg/TML%20BOOKLET%20complete.pdf>]
- 6- Barrett, H.C.(2004).Differentiating electronic portfolios and online assessment management systems. In C.Crawford et al (Eds.), Proceedings of Society for Information Technology and Teacher Education International Conference 2004 (pp.46-50).Chesapeake, VA: Association for the advancement of Computing in Education.Retrieved February 15, 2005, from <http://electronicportfolios.com/portfolios/SITE2004paper.pdf>
- 7- Barrett,H. and Wilkerson, J.(2004) "Conflicting Paradigms in Electronic portfolios Approaches"[Retrieved January 21,2005 from:<http://electronicportfolios.org/systems/paradigms.html>
- 8- Baret, H. (2007) "The Research on Portfolios in Education", <http://electonicportfolios.org/ALI/research.html>.
- 9- Baret H. (1998a). Strategic questions: What to consider when planning for electronic portfolios. Learning & Leading with Technology, October, 1998. available online at: [http:// transition.alaska.edu/www/portfolios/LLTOct98.html](http://transition.alaska.edu/www/portfolios/LLTOct98.html).
- 10- Baret H. (1998b). "Electronic portfolios, schools reform and standards," Tel-Ed 1998 Conference Proceeding. Available online at: <http://transition.alaska.edu/www/portfolios/PBS2.html>.

- 11- Barrett H. (1999). "Electronic teaching portfolios," SITE99 AACE Conference Proceeding. Available online at: <http://transition.alaska.edu/www/portfolios/site99/html>.
- 12- Barrett, H.C., & Wilkerson, J.(2004). Conflicting paradigms in electronic portfolios approaches. Retrieved April 3, 2005, from <http://electronicportfolios.com/systems/paradigms.html>
- 13- Benedict, M. (Ed) (1992). Cyberspace: First steps, Cambridge, MA: MIT Press.
- 14- Bennett, D. & Hawkins, J. (1993), "Alternative assessment and technology." ERIC Digest. Available online at: <http://www.ed.gov/databases/ERICDigests/ed365312>.
- 15- Black, p., and Wiliam, D.(1998). "Inside the Black Box: Raising Standards Through Classroom Assessment. "Phi Delta kappan, October 1998. [Retrieved June 10,2004 from : <http://www.pdkintl.org/kappan/kbla9810.htm>]
- 16- Cora,K.(1995):The influence of gender and motivation on language learning strategy use of successful and unsuccessful English Learner in Jordan. Unpublished Ph.D. dissertation .University of Pittsburgh, PA.,U.S.A.
- 17- Edwards, et al. (2002): "EAST: Developing an Electronic Assessment and Storage Tool", Assessment & Evaluation in Higher Education, Vol. 2, No 27,pp 95-104.
- 18- Eugene F. Provenzo (2005): Computers, Curriculum and Cultural Change :An Introduction for Teachers, Second Edition. Mahwah, New Jersey, London
- 19- Gatlin, L., & Jacob,S.(2002) Standards-based digital portfolios: A component of authentic assessment for pre-service teachers. Action in Teacher Education, 23(4), 35-42.
- 20- Gibson, D. & Barrett, H.(2003).Directions in electronic portfolio development. Contemporary Issues in technology and Teacher Education, 2(4), 559-576.
- 21- Hartnell-Young, E., & Morriss, M. (1999). Digital professional portfolios for change. Arlington Heights, IL: Skylight Professional Development.
- 22- Herner, L., Karayan, S., & Mckean, G. (2003).special education teacher preparation and the electronic portfolio. Journal of Special Education Technology, 18(1), 44-49.

- 23- Henson, K. & Eller, B. (1999): "Educational Psychology for Effective Teaching, London, USA, Wodsworth Publishing Company.
- 24- Hunter, Barbara, Bagley, Carole, and Bagley, Richard. Technology in the Classroom: Preparing Students for the Information Age. Schools in the Middle, Summer 1993
- 25- International Society for Technology in Education (ISTE). (2000). National standard for technology in teacher preparation: ISTE accreditation and standards committee. Available online at <http://www.iste.org/Resources/Projects/TechStandards/intro.html>
- 26- Kamen, M. (1996): 'A Teacher's Implementation of Authentic Assessment in Elementary Science Classroom', Journal of Research in Science Teaching, Vol. 33, No. 8, pp 859-877.
- 27- Kyle, H. (2002): "Evaluation Education Software for Special Education", School & Clinic, Vol. 30, No. 1.
- 28- Mahoney, J.(2002) power and portfolios: Best Practices for High School Classrooms. portsmouth: Heinemann Paulson, F.L. Paulson, P.R. & Meyer, C.A. (1991) " What Makes a Portfolio a Portfolio?" Educational Leadership, 58:5, pp.60-63
- 29- McKinney, M. (Winter, 1998). Pre-service teachers' electronic portfolios: Integrating technology, self-assessment, and reflection. Teacher Education Quarterly, 25(1), 85-103.
- 30- Milone, M.N. (October, 1995). Electronic portfolios: Who's doing them and how? Technology and Learning. 16(2), 28-33.
- 31- National Council for Accreditation of Teacher Education. 2000. NCATE Standards. Available online at: [http://www.ncate.org/2000/unit\\_stands\\_2002\\_pdf](http://www.ncate.org/2000/unit_stands_2002_pdf).
- 32- National Council for Accreditation of Teacher Education (NCATE). (1997). Technology and the new professional teacher: Preparing for the 21st century classroom. Available online at: <http://www.ncate.org/accred/projects/tech/tech-21.html>.
- 33- National Education Association (NEA) (1996). Technology and portfolio assessment. NEA: Technology Brief No 4- 1996. available online at: <http://nea.org/cet/BRIEFS/brief4.html>.
- 34- Niguidula, D. (October, 1993a). The digital portfolio: A richer picture of student performance Coalition of Essential Schools. Available online at: <http://ces.brown.edu/publications/subjects/research/exhibit/dp.html>.

- 35- Office of Technology Assessment (OTA). (1995). Teachers and Technology: Making the Connection. Available online at:  
[http://www.wws.princeton.edu/-ota/ns20/alpha\\_f.html](http://www.wws.princeton.edu/-ota/ns20/alpha_f.html).
- 36- Painter, S., & Wetzel, K. (2005). School administrators' perceptions of the use of electronic portfolios in K-8 teaching hiring. *Journal of Computing in Teacher Education*, 22(1), 23-29.
- 37- Paulson, F.L, Paulson, P. (1994)" Assessing Portfolios Using the Constructivist Paradigm" in Fogarty,R.(ed.) (1996) *Student Portfolios*. Palatine: IRI Skylight Training & Publishing.
- 38- Piper, Carla Hagen, *Electronic Portfolios in Teacher Education Reading Methods Courses*. Ed. D. Dissertation, Chapman University. Available online at:<http://www.chapman.edu/soe/faculty/piper>
- 39- Richards, R.T. (April, 1998). Infusing technology and literacy into the undergraduate teacher education curriculum through the use of electronic portfolios. *T.H.E. Journal (Technological Horizons in Education)*. 25(9) 46-51.
- 40- Rogers,E.(1983). *Diffusion of Innovation*(3rd ed.), New York: The free press.
- 41- Smith, K. & Tilema, H. (2003): "Clarifying Different Types of Portfolios Use", *Assessment & Evaluation in Higher Education*, Vol. 28, No. 6.
- 42- Stiggins, R.J.(2002)."Assessment Crisis: The Absence of Assessment FOR Learning. "Phi Delta Kappan, June 2002. [Retrieved July 17, 2004 from: <http://www.pdkintl.org/kappan/k0206sti.htm>]
- 43-- TaskStream (2005) . *The REFLECT Initiative*, [Retrieved June23, 2006 from <http://www.reflectinitiative.org>] .
- 44- Stone, A. (1998): "Problems, Pitfalls, and Benefits of Portfolios". *Teacher Education Quarterly*, No. 25, pp 104-144.
- 45- Tarnowski, S. & Other (1998): " Building a Professional Portfolio", *Music Educators Journal*, Vol. 85, No 1, pp 17-20.
- 46- Thomas, W. & Others (2001): "Using Student Portfolio Effectively", *Intervention in School & Clinic*. Mar, Vol. 36, No. 4.
- 47- Weber, E. (2001): " Instructor and Student Reflection on Portfolios Use in the Reading Practicum", ERIC Document, No ED 456110.

- 48- Wilhelm,- Lance et al (2006): Lessons Learned from the Implementation of Electronic Portfolios at Three Universities. Tech Trends: Linking Research and Practice to Improve Learning v50 n4 p62-71 Aug 2006.
- 49- Wilhelm, L. (2005). Using data to improve an award-winning introductory technology course. In D.Willis & C. Crawford(Ed.), Technology and teacher education annual, 2005: proceedings of the sixteenth international conference of the society for Information Technology and Teacher Education (pp.1083-1088).Norfolk, VA: Association for the Advancement of Computing in Education
- 50- Winzer, W. (2002): "Portfolio Use in Undergraduate Special Education Introductory Offerings", International Journal of Special Education, Vol. 17, No. 1.
- 51- Wright, V.H., Stallworth, B.J., & Ray,B.(2002). Challenges of electronic portfolios: Student perceptions and experiences. Journal of Technology and Teacher Education, 10(1), 49-61.
- 52- Young, J. (2002, February 21)"Creating Online Portfolios Can Help Students See 'Big Picture,'Colleges Say" Chronicle of Higher Education.[ Retrieved June 23,2006 from <http://chronicle.com/free/2002/02/200202210lt.htm>]

