

## **Research:7**

***" The Changing Perspective of Online Technology  
in the Experiences of Pre-Service EFL Teachers  
upon the Use of Online Portfolios"***

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**Abstract**

*This paper describes the way in which a course on "teaching English as a foreign language" (TEFL) methodologies, which was presented to King ABDULAZIZ students of Diploma of English Language Teaching in Elementary School. The course has been transformed into a blended learning experience by the use of an online portfolio that was hosted by Mahara.org. This e-portfolio allowed the course teacher to introduce new educational aspects of information and communications technology (ICT) to the participants and, at the same time, provided the opportunity to evaluate their experience during their usage of the Web site according to Salmon's model of blended learning. Based on the experiences from the course, this paper will discuss the students teachers' opinions that relate to their experiences upon the use of Mahara's e-portfolio and the development of their language and communication skills by the end of the course. The paper will try to attest that online tools, such as wikis, have actually been an inexpensive means of success. Since these portfolios are never limited by either time or any other factor, comments from teachers to students are highly enhanced. This paper concludes with the overall merits of electronic collections that are presented in the regular portfolios.*

**Keywords:** *e-portfolio, EFL, pre-service, Mahara, evaluation, e-activities, accessible, socialize, reflective thinking.*

**Introduction**

TEFL and online technologies have been consolidated in many research and educational projects for many years (i.e., since the evolution of Web 2.0 tools). With the increased use of online learning channels, teachers and students can learn and teach from the leisure and ease of their homes and engage in discussion at any time. As a matter of fact, online learning tools, such as blogs, wikis, and other e-portfolio and social network platforms, are inexpensive and require basic IT knowledge. With all of these introductory features, online learning tools are as effective as traditional education and typical classroom activities.

Although people might think that having more "high-tech" equipment and tools would help to facilitate more effective distance learning, research suggests that it is not

the technology itself but, rather, its proper use that would make or break a distance-learning program. Sometimes, very simple technologies, combined with well-designed instruction, are as - and sometimes more - effective than more complex and expensive technologies (Batson, 2002). The teacher's responsibilities, such as choosing the proper online tool, designing the online content with clear objectives and assessment rubrics, motivating students, and monitoring all activities, critically impact the effectiveness and success of the online experience. Since the teacher employs his/her best knowledge of technology and clarifies and organizes the expected goals, the teaching/learning processes will go smoothly and effectively.

With the advent of technology, electronic portfolios are introduced. Electronic portfolios (e-portfolios) refer to the online virtual spaces in which students upload artifacts to document and showcase their learning processes (Huang & Hung, 2010).

In his book, Barrett asserts that an e-portfolio incorporates the use of online technologies which permit the portfolio initiators to amass and systemize artifacts in different formats (Barrett, 2000). Heath (2002) proposes that, electronically speaking, it is easier to maintain, edit, and update such Web-based documents than their paper counterparts. Electronic portfolios allow students' work to be collected, stored, and managed electronically and require very little or no physical space.

Furthermore, since internet - based electronic portfolios are not constrained by time, they also enhance- peer and teacher feedback, the two major components of portfolio assessment. So electronic portfolios offer all of the advantages of regular portfolios, such as the opportunity to self assess the writing process, as well as other advantages that regular portfolios lack (Pullman, 2002).

### **Research Questions**

The research questions that guided the investigation in this study are as follows:

- What is the students' opinion of using the online portfolio as an easily accessible and motivating learning environment?
- What is the students' opinion of using the online portfolio as a socializing learning environment?
- What is the students' opinion of using the online portfolio as a source of information and knowledge exchange?
- What is the students' opinion of using the online portfolio as a knowledge development tool?
- What is the students' opinion of using the online portfolio as a tool that fosters students' reflective thinking and assessment?

### **Aim and Significance of the Research**

This research paper supplements and perpetuates the pool of current literature by presenting a theoretical model that can be adopted to examine the student teachers' (pre-service teachers) opinions about the use of Mahara e-portfolios. The results from this study will be used to compare the traditional teaching and learning experiences and outcomes to those of blended learning efforts that incorporate online tools (e.g., e-portfolios), present the changing perspectives of students and teachers' regarding the use of online learning tools as a means to enhance their educational awareness of teaching methodologies, and activate the need for more online learning consolidation for both teachers and students.

The research also provides insights for the course developers and serves as background material for all educators in the growing e-portfolio community and beyond. Therefore, the research:

- Describes the opinions and experiences of the pre-service teachers which identify their needs for specific online

learning support. The outcome is an overview of success factors for implementing this new instrument in daily educational practice, whether as pre- or full-time teachers.

- Introduces the concept, purposes, and functions of an e-portfolio in general and online versions in specific, while describing its potential to improve learners' educational engagement and vocational planning as EFL teachers.
- Provides an overview of some open source initiatives and projects around the world, especially for those whom are new to the e-portfolio concept.
- Proposes the recommendations and qualifications that are needed by students and teachers for using online portfolios.

### **Literature Review**

According to an invention that emerged in 1990, electronic portfolios come about at the junction of three observations. The first observation is that the work of the scholar is presently in electronic form. The second is that the Web sites are offered in all parts of the globe, which allows scholars to control their substantial work. The third is that the lively Web, which is driven by databases, has turned out to be a rule for online developers: "We have reached a critical mass along with electronic saturation on campus; leading to the emergence of new norms. Arising out of this critical mass is a vision of how higher education can benefit, which is with the e-Portfolio" (Heath, 2002).

Today's college students have grown up in the age of the Information Superhighway. Incoming college freshmen are now expected to have at least a basic understanding of computer technology, including word processing and data entry, the use of e-mail, and PowerPoint presentation skills. The pace of technological change is ever increasing and new technologies are constantly appearing in the academic environment - online discussion forums, distance education,

video-conferencing, WebCT, and, now, e-portfolios (Campbell & Schmidt, 2005).

### **E-Portfolios around the World**

Around the world and throughout the history of e-portfolios, many leading projects and initiatives have played a fundamental role in the way that education is organized and in the operation of teaching and learning. Many of these academic e-portfolios are driving forces of educational, personal, and social change. Heath (2002) presents a number of leading consortiums, such as ePortconsortium. The Electronic Portfolio Consortium (ePort Consortium) is a collaboration of higher education and information technology institutions that seek to define, design, and develop software for electronic portfolio environments and systems (Heath, 2002).

From the social shaping of technology perspective, the ePortConsortium represents collaboration at the highest level. As new interoperability and transportability standards are established, the implementation of e-portfolios by universities will be much easier. One of the goals of the ePortConsortium is to develop standards that will allow e-portfolio systems that are created by commercial software companies and those built by educational institutions to be compatible.

The Open Source Portfolio Initiative (OSPI) illustrated by Dickinson is a society of individuals and corporations that are working together to enhance the chief non-proprietary, OSPI program obtainable (Dickinson, 1987). It was formed in January 2003 by the University of Minnesota, University of Delaware, and the r-smart group in order to open the University of Minnesota's e-portfolio program to diverse input, rapid development, and widespread use (2004).

The National Learning Infrastructure Initiative (NLII) was formed in 1994 under the umbrella of EDUCAUSE, a

non-profit organization whose mission is “to advance higher education by promoting the intelligent use of information technology” (Weigel, 2002). Recognizing the growing trend of electronic portfolio development, e-portfolios were featured as a key theme of the NLII’s annual meeting in 2003.

As a part of the e-Learning Collaboration Development Fund, Massey University, the Auckland University of Technology, the Open Polytechnic of New Zealand, and Victoria University of Wellington, the Mahara e-portfolio application for the New Zealand tertiary sector has been developed. The aim was to develop a new open source e-portfolio application and to provide guidelines for its effective use, based on the experience of a number of implementation case studies (Sherry & Bartlett, 2005). Mahara can be described as an example of a well known e-portfolio. It can also be said that, as a weblog, it aims to facilitate social interaction among scholars.

Mahara, therefore, helps in the development of an online students’ community. Mahara was meant for the provision of tools that will enable its clients to create an individualized and specialized learning development. Ellsworth (2002) stated, “The name Mahara reflects the intention to create a user centered lifelong learning and development application, as well as the belief that ICT must be used to promote more collaborative, interactive, media rich and personalized learning” (p. 56). What makes Mahara different from other e-portfolios is that learners control which items and what information other users are able to see.

For the purpose of facilitating the access control, the artifacts that one wishes to depict to other clients ought to be packaged and consigned in a specific place. ‘View’ is the term that is used to refer to the assemblage of preferred

artifacts in Mahara. In Mahara, an individual is allowed to have his/her desired number of views. The clients who are allowed to access one's views may be added as either an individual or a community (McIsaac & Gunawardena, 1996).

Since the e-portfolio is very much an evolution of the traditional portfolio, many of the benefits, such as students' motivation, socialization, knowledge exchange and construction, and students' self assessment, can be attributed to the electronic version.

### **E-Portfolios as an Easily Accessible and Motivating Learning Environment**

It is argued that we all have different styles of learning and approach such a process in different ways. Notwithstanding the problems of the theoretical debate on learning styles, it would appear likely that learners will have preferences for different pedagogical approaches and strategies in particular learning contexts. E-portfolios can allow learners to configure and develop the learning environment to suit and enable their own approach to learning. This ability can have a relevant effect on student motivation (Chen, 2005).

“Students who have the freedom to choose different strategies and approaches may become more engaged in the learning process, and these students will be more likely to approach other problems with an open mind. In addition, students who are involved in creating the project assignment or the project checklist gain valuable experience in setting their own goals and standards of excellence. This gives students a sense of ownership and control over their own learning” (Sherry & Bartlett, 2005).

It is very important for learners to recognize the good instances of e-portfolios, acknowledge their gains, and recognize the methods they will use to enable other students

to grow as learners and eventually gain employment. The learners are urged to focus on portfolios the moment they recognize what they will gain from the experience. It is significant to acknowledge the ways through which the e-portfolio will be appraised, in spite of the fact that most people see this as a normal task. It is also important for scholars to concentrate on convening the appraisal criteria, as well as the demerit of thinking decisively regarding their educational journey. As O'Malley and Valdes argue, "clear rubrics and scaffolding for students on how to reflect so that they internalize the benefits of reflective practice are clearly needed if this approach to learning is going to be embraced by most learners" (O'Malley & Valdes, 1996, p. 13).

In terms of adaptability and accessibility, it is relatively easy for material to be added, deleted, adapted, or rearranged within an e-portfolio in comparison to a traditional portfolio. Therefore, it is much more likely that such Web-based compendiums will be kept more up to date than their paper counterparts. The material does not have to be arranged or read in a linear or hierarchical structure (Chamot & O'Malley, 1994). If the e-portfolio is hosted on a Web site, prospective viewers can be granted access by being given the site address and any necessary access permissions. If necessary, an e-portfolio can also be copied relatively easily onto a CD or DVD for distribution. This feature also opens the way for more immediate feedback from a wider range of sources (Avraamidou & Zembal-Saul, 2004). The e-portfolio tool may also allow different arrangements of the material to be seen, depending on the 'access' that is given to the audience (Dickinson, 1987).

### **The E-portfolio as a Socializing Learning Environment**

As discussed by Barrett, e-portfolios offer an opportunity that allows learners to use computers as they do in their social lives to create, share, and network. They potentially

represent a move to overcome the somewhat alarming gap between educational software and the applications that are used every day both by young people and in the workplace. Why only ‘potentially?’ The ability to create, share, and network depends on the design of e-portfolio applications and the approaches to the pedagogic use of the e-portfolio, as well as the integration of the e-portfolio in the wider context of curriculum provision.

There is an issue as to how much learning occurs through participation and engagement in social networking sites. However, the failure of education providers to engage with this activity risks schools and other educational institutions becoming irrelevant to the way in which young people interact and exchange ideas (2000). A study of the use of ICT for learning in small and medium enterprises found that, whilst there was little evidence of formal e-learning, computers were being widely used for informal learning through, amongst other things, participation in networks and the distribution of practice communities.

Furthermore, there was some evidence that older workers were more likely to participate in such activities, probably because they enjoy greater autonomy in how they undertook their work. It was also noteworthy that, in addition to being motivated by the need to solve work-based problems, much of the participation was driven by personal interest. E-portfolios offer an opportunity for allowing learners to use computers as they do in their social lives (i.e., to create, share, and network). They potentially represent a move to overcome the somewhat alarming gap between educational software and the applications that are used every day both by young people and in the workplace.

### **The E-Portfolio as a Source of Information and Knowledge Exchange**

An e-portfolio allows a relatively large amount of material to be stored and shared in a cost-effective way,

either physically on a CD or DVD, or online (Harnell-Young & Morriss, 2007). Since they are electronic, e-portfolios can contain text data as well as material such as audio and video files and slide presentations. Much of this data is in an electronic format to start with, which makes it more convenient to keep it this way rather than to convert it into paper format (Heath, 2002).

### **The E-Portfolio as a Knowledge Development Tool**

There is some evidence that more focused pedagogic development is possible through an e-portfolio that is related to particular curriculum areas, such as the innovative use of blogs within English language and creative writing courses. E-portfolios have been used as tools for motivation with socially disadvantaged learners whom undertake vocational project work (O'Malley & Valdes, 1996). When discussing knowledge development, there is a strong relation between the constructing knowledge and content of the e-portfolio. Further, there is the issue – which has already been discussed in this paper – of whether or not e-portfolio content should be restricted to that which relates to formal course objectives and outcomes. Further, should learners be encouraged to include wider content that is drawn from both formal and informal learning - or indeed the fuzzy interface between the two – and from wider contexts for learning, including personal, professional, and social activities?

Of course, if an e-portfolio provision is extended to those whom are not enrolled in formal education programs or is used for continuing professional development curriculum, it is likely that work and personal learning will comprise the bulk of an e-portfolio. The issue of selecting what to show in an e-portfolio can be largely overcome if the system provides tools to select material for specific presentation.

### **The E-Portfolio as a Tool for Self-Assessment**

It has been argued that self assessment serves as an effective language learning strategy to promote autonom-

ous language education because it encourages language students to assess their learning progress and, in turn, helps them to stay focused on their own learning (Chamot & O'Malley, 1994; Chen, 2005). The proponents of self assessment strategies maintain that participation in self assessment can help learners to become skilled judges of their own strengths and weaknesses and establish realistic and attainable goals for themselves, thus developing their selfdirected language learning ability(Chamot & O'Malley, 1994; Dickinson, 1987).

A widely used instrument for self assessment is the portfolio. Portfolios provide an opportunity for English as a Foreign /Second language (EFL/ESL) learners to monitor their own writing progress and take responsibility for meeting their goals. By documenting growth over time through a systematic collection of their work, portfolios enable learners to see possibilities for reflection, redirection, and confirmation of their own learning efforts (O'Malley & Pierce, 1996).

Simply put, when a student reviews a written piece and decides to revise and improve it, the student engages in self assessment. A widely used instrument for practicing self assessment strategies is the portfolio. Portfolios provide an opportunity for learners to monitor their own progress and take responsibility for meeting goals. Weigel (2002) points out that, through the portfolio approach, "second language learners are acknowledged as contributors and the multicultural resources that the students bring to assessment situations serve as rich data sources." She further delineates the perspective that portfolios designed by second-language learners can help to capture the full range of the students' competencies in one or more languages.

Developmental portfolios also enable learners to demonstrate their growth in language proficiency, including oral

language and literacy development; academic achievement; attitudinal variation, in terms of acculturation and learning; and the acquisition of learning strategies (Weigel, 2002). Hence, at the heart of portfolio pedagogy is a place for self assessment guided by learners (Wade & Yarbrough, 1996). E-portfolio assessment may offer other benefits, such as increasing student reflection (Ellsworth, 2002), thereby revealing information that is not elucidated by other assessment methods (Pullman, 2002) and encouraging students to become more active and taking a greater role in assessment and their learning as a whole (Campbell & Schmidt, 2005). Such an approach also gives students more ways to demonstrate their knowledge and makes longitudinal studies possible (Heath, 2002).

In projects and at conferences about e-portfolios, at some point the discussion seems to consistently turn to the issue of how to facilitate meaningful reflection. In this regard, a study conducted by Chen (2005) identifies a structure of students' reflection that includes skills such as forming, expressing, articulating, justifying, and defending an opinion, as well as supporting, challenging, questioning, seeking clarification upon, representing, and building upon others' opinions and sorting fact from opinion. Each of these processes can be structured and supported within the e-portfolio development process. However, they also require skills on the part of the teacher or facilitator. These might include skills that pertain to facilitation, active listening, feedback, intervention, and evaluation.

### **Methodology**

A qualitative case study approach was used for this research effort. According to Wade and Sclater (2005), a case study is a particularly suitable design if the researcher is interested in process.

### **Participants**

The researcher wants to discover, understand, and gain insight; therefore, he or she must select participants from

whom the most can be learned. Hence, data for the current study were collected through the researcher's connection with 18 college - level EFL pre - service teachers, who required students use a portfolio designed especially for the course they were enrolled in. the course title was "Special methods of teaching English as a foreign language". Students' collaboration through the electronic portfolio was set as an assignment for the class. Activities promoted through the course e-portfolio includes group discussions on a specific topic, raising questions and providing answers, uploading useful educational materials of multiple formats, uploading their course assignments and projects, and most importantly reflecting on their learning as college students and reflecting on their teaching performance as pre-service teachers. Then, the researcher who is the designer of the e-portfolio and the instructor of the course constructed a 5-Likert scale questionnaire that was later uploaded in the e-portfolio for the participants to respond to. The questionnaire included 23 questions thematically organized into five categories displayed below in the summary table. Completed surveys were returned to the instructor via email to guarantee the confidentiality of responses. All participants were college EFL learners who were enrolled in a TEFL course as a requirement toward the completion of the Diploma of TEFL in Elementary Schools offered by the.

### **Implementation**

The portfolio project was implemented in an EFL classroom for a semester of 18 weeks. At the beginning of the semester, students learned how to create their own electronic portfolios at a free electronic portfolio web site, a ready-made Web page that calls for only minimal computer skills.

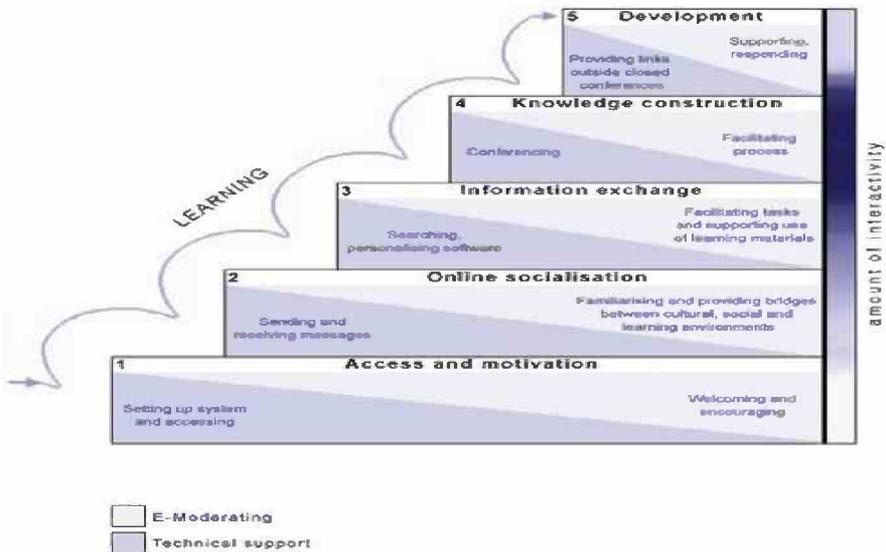
During the semester, the students worked on and uploaded two required 300-word essays with drafts, gave peer feedback, and revised their essays according to teachers' and peers' comments. In addition, they were encouraged

to upload self selected entries, such as diary musings and anecdotes. At the end of the semester, students' portfolios were evaluated and accounted for twenty percent of students' final grade.

### **Data Collection**

The data for the current study were collected through the following tools:

- Questionnaire : Based on Salmon's five-step model (2000), a questionnaire was administered in which participants express their opinions-depending on a 5-scale rating-relating to the effectiveness of their experience in the Mahara e-portfolio throughout the course. Based on three major research questions, the researcher crafted the questionnaire and then forwarded it to a qualified colleague for peer debriefing. Then, the researcher revised the questionnaire in accordance with the comments that the colleague provided. Models of on-line learning are still being developed and one model presented by Gilly Salmon (2000) and describing an individual learners experience is presented here:



**(Salmon, 2000) The following table explains the diagram above:**

	<b>STUDENT ACTIVITIES</b>	<b>TUTOR ACTIVITIES</b>
<b>Stage 1 Access and motivation</b>	- Setting up system and accessing	- Welcome and encouragement - Guidance on where to find technical support
<b>Stage 2 On-line socialization</b>	- Sending and receiving messages	- Introductions - Ice-breakers - Ground rules - Netiquette
<b>Stage 3 Information exchange</b>	- Carrying out activities - Reporting and discussing findings	- Facilitate structured activities - Assign roles and responsibilities - Support use of learning materials - Encourage discussions - Summarize findings and/or outcomes
<b>Stage 4 Knowledge construction</b>	- Conferencing - Course-related discussions - Critical thinking applied to subject material - Making connections between models and work-based learning experiences	- Facilitate open activities - Facilitate the process - Asking questions - Encourage reflection. - Tutor is very active at this stage.
<b>Stage 5 Development.</b>	-Use of conferencing in a strategic way - Integration of CMC into other forms of learning - Reflection on learning processes - Students become critical of the medium	- Support - Respond only when required - Encourage reflection - Tutor is less active and hands over to the students

- Students' participation in the course forum in Mahara.

As students share personal stories and ideas and exchange information, students are successfully processing information and become more proactive in their learning, transmission of knowledge, and then create and generalize innovative ideas. The collected data were analyzed qualitatively and coded into the five categories (i.e., the five stages in the survey).

**Findings and Discussion Estimating the Reliability and Validity of Data:**

To insure the reliability (or internal consistency) and the validity of our data, Cronbach's alpha was applied to the entire survey instrument (i.e., all subscales combined) and, on each individual subscale, as follows:

*Reliability statistics for the overall survey instrument*

*Reliability Statistics*

No. of Items	Cronbach's Alpha
23	.843

*Reliability statistics for the items of access and motivation*

*Reliability Statistics*

No. of Items	Cronbach's Alpha
6	.238

*Reliability statistics for the items of online socialization*

*Reliability Statistics*

No. of Items	Cronbach's Alpha
4	.536

*Reliability statistics for the items of information exchange*

*Reliability Statistics*

No. of Items	Cronbach's Alpha
3	.302

**Reliability statistics for the items of knowledge construction**

**Reliability Statistics**

No. of Items	Cronbach's Alpha
<b>5</b>	<b>.444</b>

**Reliability statistics for the items of development**

**Reliability Statistics**

No. of Items	Cronbach's Alpha
<b>5</b>	<b>.819</b>

**Summary of Reliability and Validity Statistics**

No.	Statements	No. of items	Reliability	Validity*
1	Students' opinion of using the online portfolio as an easily accessible and motivating learning environment	6	0.238	0.487
2	Students' opinion of using the online portfolio as a socializing learning environment	4	0.536	0.732
3	Students' opinion of using the online portfolio as a source of information and knowledge exchange	3	0.302	0.549
4	Students' opinion of using the online portfolio as a knowledge development tool	5	0.444	0.666
5	Students' opinion of using the online portfolio as a tool that fosters students' reflective thinking and assessment	5	0.819	0.918
<b>OVERALL</b>		<b>23</b>	<b>0.843</b>	<b>0.918</b>

\*Validity is calculated by taking the square root of reliability.

From the summary in the table above, we find the following:

- The reliability of the first group of items (questions) - relating to the students' opinion of using the online portfolio as an easily accessible and motivating learning environment - is 0.238 or (23.8%)
- The reliability of the first group of items (questions) - relating to the students' opinion of using the online portfolio as a socializing learning environment - is 0.536 or (53.6%)
- The reliability of the first group of items (questions) - relating to the students' opinion of using the online portfolio as a source of information and knowledge exchange - is 0.302 or (30.2%)
- The reliability of the first group of items (questions) - relating to the students' opinion of using the online portfolio as a knowledge development tool - is 0.444 or (44.4%)
- The reliability of the first group of items (questions) - relating to the students' opinion of using the online portfolio as a tool that fosters students' reflective thinking and assessment - is 0.819 or (81.9%)
- The overall reliability of the survey instrument is 0.843 or (84.3%)

Except for the first group, the results show a relatively high estimated reliability as it ranges from 0.30 to 0.81 for the other groups. Despite the low reliability of the first group (0.238), the overall estimated reliability of the survey (0.843) seems to be sufficient to conclude that the consistency of the measures is generally reliable, and we can conduct further analysis. This is also confirmed by the high validity that is estimated, which ranges from 0.41 to 0.91 for the subgroups and 0.91 as an overall validity of the study survey.

After collecting the data, the findings attest that the EFL students' online teaching portfolio is the best method with which to impart knowledge. In comparison to the conventional methods of EFL teaching in various institutions, the contemporary online portfolio method strives to show that online portfolio learning is equally, if not more, productive in comparison to the traditional methods (Avraamidou & Zembal-Saul, 2004). From the findings in the first table, it is evident that the online teaching portfolio presents a highly motivating environment for learning.

The motivational aspect that the online portfolio of teaching brings forth is very important since the learners it is something that the students are able to embrace/. They may find it easier to grasp the concepts, due to the fact that they are familiar with the use of computers and their various applications.

The social learning environment that is created through the use of an online portfolio enhances the relation between the individuals in the learning institution. The contemporary method of learning allows the learners to maximally exchange the information and knowledge they have in an emancipated environment. In such a case, the learners are most likely to grasp the concepts that they are being tutored. There is also total emancipation between the EFL teachers and their learners. Consequently, individuals have an opportunity to inquire about any concept that they have not yet understood.

The online portfolio for EFL education is also acknowledged as a tool for knowledge sharing. The tutor's work is, at times, reduced due to the fact that the learners indeed depend upon their colleagues in order to master various concepts. The effective knowledge sharing in the online portfolio allows the learners to fully benefit from the various sessions (Foote & Vermette, 2001). The online method

of learning is preferred by most students since it enhances reflective thinking and assessment.

According to the findings of this research, the online teaching portfolio is highly reliable. Most of the respondents have found the online teaching portfolio to have a positive impact on their learning experience in their respective educational institutions. The following data provides calculations of the frequencies of respondents' scores:

- The use of Mahara has provided me with a gentle introduction to new online learning technologies.

acc1

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Rarely	1	5.6	5.6	5.6
Sometimes	2	11.1	11.1	16.7
Often	4	22.2	22.2	38.9
Most of the	11	61.1	61.1	100.0
Total	18	100.0	100.0	

- My participation in Mahara gives me a professional online presence as an EFL learner.

acc2

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Sometimes	9	50.0	50.0	50.0
Often	6	33.3	33.3	83.3
Most of the	3	16.7	16.7	100.0
Total	18	100.0	100.0	

- My participation in the Mahara forum allows me to focus my attention on the type of EFL skill that I mos want to pursue and teach in the future.

**acc3**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Rarely	1	5.6	5.6	5.6
Sometimes	5	27.8	27.8	33.3
Often	7	38.9	38.9	72.2
Most of the tim	5	27.8	27.8	100.0
Total	18	100.0	100.0	

- The Web site included a course syllabus, a sample projects plan, sample course evaluation questions, and a listing of teaching resources.

**acc4**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Often	3	16.7	16.7	16.7
Most of the ti	15	83.3	83.3	100.0
Total	18	100.0	100.0	

- The course site in Mahara resolved many assessment problems, such as class participation.

**acc5**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Sometimes	2	11.1	11.1	11.1
Often	4	22.2	22.2	33.3
Most of the t	12	66.7	66.7	100.0
Total	18	100.0	100.0	

- The course site in Mahara was easy to navigate and has a consistent look and feel.

**acc6**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Rarely	1	5.6	5.6	5.6
Sometimes	4	22.2	22.2	27.8
Often	3	16.7	16.7	44.4
Most of the time	10	55.6	55.6	100.0
Total	18	100.0	100.0	

- Participating in the course forum through Mahara socially motivates me to please my colleagues and my instructor.

**on7**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Sometimes	2	11.1	11.1	11.1
Often	4	22.2	22.2	33.3
Most of the time	12	66.7	66.7	100.0
Total	18	100.0	100.0	

- The social participation in the course forum through Mahara motivates me to use my English language skills proficiently.

**on8**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Almost never	1	5.6	5.6	5.6
Rarely	2	11.1	11.1	16.7
Sometimes	2	11.1	11.1	27.8
Often	6	33.3	33.3	61.1
Most of the time	7	38.9	38.9	100.0
Total	18	100.0	100.0	

- I will continue to use my EFL teaching portfolio long after our course has been completed!

**on9**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Rarely	2	11.1	11.1	11.1
	Sometimes	5	27.8	27.8	38.9
	Often	3	16.7	16.7	55.6
	Most of the time	8	44.4	44.4	100.0
	Total	18	100.0	100.0	

- My active contribution and involvement allows other students on the network to acknowledge my resources, contributions, and ideas - creating reciprocal relationships and shared understandings.

**on10**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Rarely	3	16.7	16.7	16.7
	Sometimes	6	33.3	33.3	50.0
	Often	6	33.3	33.3	83.3
	Most of the time	3	16.7	16.7	100.0
	Total	18	100.0	100.0	

- Using the course portfolio provides a durable, portable, navigable alternative to hard-copy samples

**in11**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Sometimes	4	22.2	22.2	22.2
	Often	4	22.2	22.2	44.4
	Most of the time	10	55.6	55.6	100.0
	Total	18	100.0	100.0	

- The course Web site is ideal for showing help systems, interactive content, and multimedia that enhance my English language skills

**in12**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Rarely	1	5.6	5.6	5.6
Sometimes	3	16.7	16.7	22.2
Often	8	44.4	44.4	66.7
Most of the tim	6	33.3	33.3	100.0
Total	18	100.0	100.0	

- The additional feedback that peers provide is a valuable means for enriching and informing the assessment process of my English language skills.

**in13**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Almost never	1	5.6	5.6	5.6
Rarely	3	16.7	16.7	22.2
Sometimes	5	27.8	27.8	50.0
Often	6	33.3	33.3	83.3
Most of the tim	3	16.7	16.7	100.0
Total	18	100.0	100.0	

- The course Web site enables any number of people to simultaneously review one's work that is pertinent to TEFL.

**kn14**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Sometimes	4	22.2	22.2	22.2
Often	3	16.7	16.7	38.9
Most of the time	11	61.1	61.1	100.0
Total	18	100.0	100.0	

- The course Web site is a helpful way to see other work that can help to generate ideas for one's own work and construct knowledge of TEFL.

**kn15**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Sometimes	3	16.7	16.7	16.7
	Often	5	27.8	27.8	44.4
	Most of the time	10	55.6	55.6	100.0
	Total	18	100.0	100.0	

- Participating in the Mahara forum fosters a shift from traditional EFL teaching to online language pedagogy and course design.

**kn16**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Almost never	1	5.6	5.6	5.6
	Sometimes	2	11.1	11.1	16.7
	Often	3	16.7	16.7	33.3
	Most of the time	12	66.7	66.7	100.0
	Total	18	100.0	100.0	

- Combining data from different sources through the course Web site leads to the creation of new EFL teaching methodologies and techniques.

**kn17**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Sometimes	2	11.1	11.1	11.1
	Often	8	44.4	44.4	55.6
	Most of the time	8	44.4	44.4	100.0
	Total	18	100.0	100.0	

- The use of the course Web site increased the number of active participations in an architectural way.

**kn18**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Sometimes	3	16.7	16.7	16.7
Often	9	50.0	50.0	66.7
Most of the t	6	33.3	33.3	100.0
Total	18	100.0	100.0	

- The course portfolio provides a “richer picture” of students, their learning, and EFL their competencies.

**de19**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Sometimes	7	38.9	38.9	38.9
Often	4	22.2	22.2	61.1
Most of the ti	7	38.9	38.9	100.0
Total	18	100.0	100.0	

- I was actively involved in my processes of learning the language.

**de20**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Rarely	1	5.6	5.6	5.6
Sometimes	6	33.3	33.3	38.9
Often	6	33.3	33.3	72.2
Most of the t	5	27.8	27.8	100.0
Total	18	100.0	100.0	

- The course portfolio provides a means for me to learn to manage my English language development.

**de21**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Almost never	2	11.1	11.1	11.1
Rarely	1	5.6	5.6	16.7
Sometimes	6	33.3	33.3	50.0
Often	3	16.7	16.7	66.7
Most of the time	6	33.3	33.3	100.0
Total	18	100.0	100.0	

- The course portfolio provides a means for me to learn to manage my professional development as an EFL instructor.

**de22**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Rarely	2	11.1	11.1	11.1
Sometimes	4	22.2	22.2	33.3
Often	6	33.3	33.3	66.7
Most of the time	6	33.3	33.3	100.0
Total	18	100.0	100.0	

- The online portfolio assessment system of the course helped us to demonstrate our English language skills more completely, thus achieving more successful outcomes.

**de23**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Sometimes	6	33.3	33.3	33.3
Often	5	27.8	27.8	61.1
Most of the time	7	38.9	38.9	100.0
Total	18	100.0	100.0	

A calculation of the weighted averages of scores to show the opinion of respondents on each concept indicates:

***The students' opinion of using the online portfolio as an easily accessible and motivating learning environment***

Statements	Alm ost neve r	Rar ely	som etim es	Ofte n	Mos t of the time	Weight ed average	Stand ard Dev iatio n	Opinion
	No	No	No	No	No			
	%	%	%	%	%			
1- The use of Mahara has given me a gentle introduction to new online learning technologies.		1	2	4	11	4.39	.916	Most of the time
		5.6	11.1	22.2	61.1			
2- My participation in Mahara gives me a professional online presence as an EFL learner.			9	6	3	3.67	.767	Often
			50	33.3	16.7			
3- My participation in the Mahara forum allows me to focus my attention on the type of EFL skill that I most want to pursue and teach in the future.		1	5	7	5	3.89	.900	Often
		5.6	27.8	38.9	27.8			
4-The Web site included a course syllabus, a sample of projects plan, sample course evaluation questions, and a listing of teaching resources.				3	15	4.83	.383	Most of the time
				16.7	83.3			
5- The course site in Mahara resolved many assessment problems, such as class participation.			2	4	12	4.56	.705	Most of the time
			11.1	22.2	66.7			
6- The course site in Mahara was easy to navigate and has a consistent look and feel.		1	4	3	10	4.22	1.003	Often
		5.6	22.2	16.7	55.6			
Overall opinion on statements		3	40	27	56	4.2593	.36703	Most of the time
		2.38	31.74	21.42	44.44			

***The students' opinions of using the online portfolio as a socializing learning environment***

Statements	Almost never	Rarely	someti mes	Often	Most of the time	Weighted average	Standard. Deviation	pinion
	No	No	No	No	No			
	%	%	%	%	%			
7- Participating in the course forum through Mahara socially motivates me to please my colleagues and my instructor.			2	4	12	4.56	.705	Most of the time
			11.1	22.2	66.7			
8- The social participation in the course forum through Mahara motivates me to use my English language skills proficiently.	1	2	2	6	7	3.89	1.231	Often
	5.6	11.1	11.1	33.3	38.9			
9-I will continue to use my EFL teaching portfolio long after our course has been completed!		2	5	3	8	3.94	1.110	Often
		11.1	27.8	16.7	44.4			
10-My active contribution and involvement allows other students on the network to acknowledge my resources, contributions, and ideas — creating reciprocal relationships and shared understandings.		3	6	6	3	3.50	.985	Often
		16.7	33.3	33.3	16.7			
Overall opinion on statements	1	7	15	19	30	3.9722	.66360	Often
	1.38	9.7	20.8	26.3	41.6			

***The students' opinion of the use of the online portfolio as a source of information and knowledge exchange***

Statements	Almost never	Rarely	sometime s	Often	Most of the time	Weighted average	Standard Deviation	Opinion
	No	No	No	No	No			
	%	%	%	%	%			
11-Using the course portfolio provides a durable, portable, navigable alternative to hard-copy samples.			4	4	10	4.33	.840	Most of the time
			22.2	22.2	55.6			
12-The course Web site is ideal for showing help systems, interactive content, and multimedia that enhance my English language skills.		1	3	8	6	4.06	.873	Often
		5.6	16.7	44.4	33.3			
13-The additional feedback that peers provide is a valuable means for enriching and informing the assessment process of my English language skills.	1	3	5	6	3	3.39	1.145	Often
	5.6	16.7	27.8	33.3	16.7			
Overall opinion on statements	1	4	12	18	19	3.9259	.62157	Often
	1.8	7.4	22.2	33.3	35.1			

***Students' opinion of the use of the online portfolio as a knowledge developing tool.***

Statements	Almost never	Rarely	someti mes	Often	Most of the time	Weighted average	Standard Deviation	Opinion
	No	No	No	No	No			
	%	%	%	%	%			
14-The course Web site enables any number of people to simultaneously review one's work pertinent to TEFL.			4	3	11	4.39	.850	Most of the time
			22.2	16.7	61.1			
15-The course Web site is a helpful way to see other works that can help to generate ideas for one's own work and construct knowledge of TEFL.			3	5	10	4.39	.778	Most of the time
			16.7	27.8	55.6			
16-Participating in the Mahara forum enables us to shift from traditional EFL teaching to online language pedagogy and course design.	1		2	3	12	4.39	1.092	Most of the time
	5.6		11.1	16.7	66.7			
17-Combining data from different sources through the course Web site leads to the creation of new EFL teaching methodologies and techniques.			2	8	8	4.33	.686	Most of the time
			11.1	44.4	44.4			
18- Use of the course Web site increased the number of active participations in an architectural way.			3	9	6	4.17	.707	Often
			16.7	50	33.3			
Overall opinion on statements	1		14	28	47	4.3333	.46526	Most of the time
	1.1		15.5	31.1	52.2			

***Students' opinion on the use of the online portfolio as a tool that fosters students' reflective thinking and assessment***

Statements	Almost never	Rarely	someti mes	Often	Most of the time	Weighted average	Standard. Deviation	Opinion
	No	No	No	No	No			
	%	%	%	%	%			
19- The course portfolio provides a "richer picture" of students, their learning, and their competencies of EFL.			7	4	7	4.00	.907	Often
			38.9	22.2	38.9			
20-I was actively involved in my processes of learning the language.		1	6	6	5	3.83	.924	Often
		5.6	33.3	33.3	27.8			
21-The course portfolio provides a means for me to learn to manage my English language development.	2	1	6	3	6	3.56	1.338	Often
	11.1	5.6	33.3	16.7	33.3			
22-The course portfolio provides a means for me to learn to manage my professional development as an EFL teacher.		2	4	6	6	3.89	1.023	Often
		11.1	22.2	33.3	33.3			
23-The online portfolio assessment system of the course helped us to demonstrate our English language skills more completely, thus achieving a more successful outcome.			6	5	7	4.06	.873	Often
			33.3	27.8	38.9			
Overall opinion on statements	2	4	29	24	31	3.8667	.78215	Often
	2.2	4.4	32.2	26.6	34.4			

***Estimating the relationships between the five statements:Correlations***

		Access and Motivation	Online Socialization	Information Exchange	Knowledge Construction
Access and Motivation	Pearson Correlation				
	Sig. (2-tailed)				
	N				
Online Socialization	Pearson Correlation	.384			
	Sig. (2-tailed)	.116			
	N	18			
Information Exchange	Pearson Correlation	.175	.565(*)		
	Sig. (2-tailed)	.487	.015		
	N	18	18		
Knowledge Construction	Pearson Correlation	.429	.803(**)	.701(**)	
	Sig. (2-tailed)	.076	.000	.001	
	N	18	18	18	
Development	Pearson Correlation	.189	.593(**)	.398	.666(**)
	Sig. (2-tailed)	.453	.009	.102	.003
	N	18	18	18	18

\* Correlation is significant at the 0.05 level (2-tailed).

\*\* Correlation is significant at the 0.01 level (2-tailed).

From the correlation matrix above, it is evident that:-

- Online socialization is correlated with information exchange (56.5%), knowledge construction (80.3%), and development (59.3%)
- Information exchange is correlated with knowledge construction (70.1%)
- Knowledge construction is correlated with development (66.6%)

Emancipated online socialization among EFL learners through e-portfolio learning usually boosts the opportunities of information exchange. The moment individuals share the concepts that they have been utilizing in class, their knowledge of certain concepts of which they were unaware highly improves. Whenever students engage in an online academic interaction, the ability of the learner to develop new ideas highly improves. The construction of new ideas also highly improves the development of the learners' knowledge.

### **Recommendations**

The electronic portfolio of learning in educational institutions should be highly encouraged in diverse countries because the use of online technologies allows for the easy collection and organization of data in diverse formats. This method also allows for effortless maintenance and revision of the learning materials. The Internet-based portfolios are also not restricted by either time or space.

There is a need to implement the e-portfolio method of learning in various countries around the globe in order to create an easily accessible and motivating learning environment that facilitates an effective learning activity for all students. This method should also be encouraged for the purpose of creating an emancipated socializing learning environment to facilitate an effortless mastery of the tutored concepts (Ellsworth, 2002). Due to the fact that the electronic method of learning is a source of both knowledge and

information exchange, implementing this method will aid in enhancing an effective learning activity.

The implementation of this method will help to boost the level of knowledge among the EFL learners since the e-portfolio is attested as a basic tool for developing knowledge among those whom are interested in the topic at hand. The electronic method of learning ought to be encouraged to facilitate the assessment of the learners. The EFL learners will be able to gauge themselves whether or not they have understood the tutored concepts.

Due to its positive outcomes, the e-portfolio program merits implementation in various learning institutions. The program usually aims to raise an independent attitude among the students toward learning a language. This program is also relevant since it helps in the incorporation of multimedia technology as an underpinning of the activities conducted within the classroom.

It is of great importance to note that, in many EFL situations, most institutions cannot afford multimedia technology resources. In addition, these institutions lack adequate space for the installation and maintenance of multimedia centers; for instance, ELC. This poses a challenge to most of the language tutors. They should devise ways to improve the state of their classrooms so that their students can maximally benefit from the e-portfolio learning program.

The government should subsidize the initiation of the required multimedia centers since most governmental policies emphasize equal learning opportunities among EFL learners. The provision of funds to develop ELCs will give all learners an opportunity to benefit from the learning e-portfolio.

### **Conclusion**

In colleges of education, e-portfolios are being used as tools for assessment. Others choose to create a personal e-

portfolio as a collection of their college work and reflection of their experiences. An e-portfolio can also be used in support of career planning and resume building, advising and academic planning, academic evaluation and assessment, and as a tool for self-reflection. Indeed, there are many valid reasons and practical applications for the creation of an e-portfolio - and as multimedia technology continue to evolve and more students gain access to e-portfolio software, the adoption of e-portfolios in higher education will continue to increase.

The idea behind the e-portfolio is that students should be able to use their own tools for learning. According to Weigel (2002), “The e-portfolio tools that students will use will be those that are easy for them to use and that will let them use the media and communications methods that they are using in their everyday lives. The tool must motivate the student. The tool must have an interface and features that motivates the students; it must have something that makes them want to use the tool for their own enjoyment” (p. 88).

The suggestion is simple: Implement a program that seeks to foster within the student an autonomous attitude toward learning a language and the integration of multimedia technology as a reinforcement of in-classroom activities.

It is important to recognize the fact that, in many EFL situations, not all schools have the resources and space to install and maintain a multimedia center such as the ELC. Nevertheless, it is a challenge for language teachers to seek ways to improve our classes.

It is also important for governments to provide subsidies in order to enhance effectual EFL learning methods. Since this is a global issue, government in all countries should help by providing funds for the creation of space and initiation of multimedia centers. Through this approach, all

EFL learners will be able to achieve the utmost benefit from the electronic-based method of learning.

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### **Dedication**

This work is dedicated to my father and mother who wanted me to be a brain artist. I exceeded their expectations and became a scholar. It is also for the memory of my niece Nisreen who passed away though my soul mate, in the past, now, and in the future.

