# **TOJNED**

The Online Journal of New Horizons in Education

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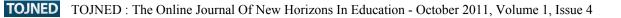
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# Message from the Editor-in-Chief

I am pleased to announce fourth issue of Online Journal of New Horizons in Education (TOJNED) in 2011. Fourth issue of Online Journal of New Horizons in Education (TOJNED) encapsulates different valuable researches from different fields. In this respect, contemporary education researches with concrete subjects from different practices and different contexts were shared in this issue to enlighten the academic platform.

As promoting knowledge sharing through valuable researches in the journal is the main mission, papers in the journal were selected through reviewing process. Therefore, I would like to thank to editorial board, reviewers and the researchers for their valuable contributions to the journal and this issue.

October 01, 2011

Prof. Dr. Aytekin İŞMAN

Editor-in-Chief of TOJNED

# Message from the Editor

As being editor of Turkish Online Journal of New Horizons in Education (TOJNED), I am happy to publish fourth issue in 2011. It is a great success of completing this issue by valuable researches from different practices. In this way, researchers, academicians and people from education platform from different contexts with their valuable researches provided insights to have broader perspectives in academic research and gain in-depth knowledge and experiences from these researches.

I would like to thank to all authors and associate editors for their contributions to the fourth issue of TOJNED.

Fourth issue covers different research scopes and research approaches of the researchers which are "Investigating The Effects of Project-Based Learning on Students' Academic Achievement and Attitudes Towards English Lesson" by Gokhan Bas, "A Definition of Literary: A Content Analysis of Literature Syllabuses and Interviews with Portuguese Lecturers of Literature" by Rita Baleiro, Digital Portfolio as Tool in Distributed Education" by Hallstein Hegerholm, An Investigation to Improve Entrepreneurship Module in Vocational and Technical High Schools in Northern Cyprus' by Beste Sakalli, "E-Portfolio Applications in Education" by Nilgun Tosun and Fatih Baris.

As a team of Turkish Online Journal of New Horizons in Education (TOJNED), we will be pleased to share work of researchers with you. All authors can submit their manuscripts to tojnedjournal@gmail.com for the following issues.

October 01, 2011

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# INVESTIGATING THE EFFECTS OF PROJECT-BASED LEARNING ON STUDENTS' ACADEMIC ACHIEVEMENT AND ATTITUDES TOWARDS ENGLISH LESSON

# Gökhan Baş

Selcuk University Ahmet Kelesoglu Education Faculty Educational Sciences/Curriculum and Instruction Department Meram, Konya, Turkey gokhanbas51@gmail.com

**Abstract** The purpose of the study was to investigate the effects of project-based learning on students' academic achievement and attitudes towards English lesson of 9th grade students. The research was carried out in 2010-2011 education-instruction year in a high school in Nigde, Turkey. Totally 60 students in two different classes in the 9th grade of this school participated in the study. The pre- and post-test control group research model was used in this study. The data obtained in the study were analysed by the computer programme SPSS 17.0. The arithmetic means and standard deviations were calculated for each group. In order to test the significance between the groups, the independent samples t-test was used. The significance level was taken as .05 in the research. The results of the research showed a significant difference between the attitude scores of the experiment group and the control group. On the other hand, it was also found out that project-based learning was more effective in the positive development of the students' academic achievement levels. At the end of the research, it was revealed that the students who were educated by project-based learning was more successful and had higher attitude levels towards the lesson than the students who were educated by the instruction based on student textbooks.

Keywords: project-based learning, academic achievement, attitudes towards lesson, English lesson

# Introduction

Project work is a term done individually or cooperatively that combines the investigating the topic and presenting it in written form illustrated with photos, pictures, diagrams, etc. (Blumenfeld et al., 1991; Demirhan, 2002; Yurtluk, 2003; Gültekin, 2005). Project work is student-centred and driven by the need to create an endproduct (Bell, 2010). However, it is the route to achieving this end product that makes project work so worthwhile. The route to the end-product brings opportunities for students to develop their confidence and independence and to work together in a real- world environment by collaborating on a task which have they defined for themselves and which has not been externally imposed (Blumenfeld et al., 1991).

The basis of project-based approaches is hardly new. Early in the 1920s, William Heard Kilpatrick advocated project-based instruction (Sünbül, 2010). His notion was that such instruction should include four components: purposing, planning, executing, and judging (Foshay, 1999). Thomas (2000) stated that the idea of assigning projects to students is not a new one and the benefits of learning by practice have long been touted; the roots of the idea go back to John Dewey (Blumenfeld et al., 1991; Krajcik et al., 1994; Foshay, 1999). For over 100 years, educators such as John Dewey have reported on the benefits of experiential, hands-on, studentdirected learning. Most teachers, knowing the value of engaging, challenging projects for students, have planned



field trips, laboratory investigations, and interdisciplinary activities that enrich and extend the curriculum. Doing/creating projects is a long-standing tradition in education history (Merkham et al., 2003).

Project-based learning is an authentic learning model or strategy in which students plan, implement, and evaluate projects that have real-world applications beyond the classroom (Blank, 1997; Harwell, 1997; Dickinson et al., 1998; Westwood, 2008). Project-based learning has been defined in many ways. For this reason there exists no single definition. In the given definitions, project-based learning has been referred to as a "model", "approach" or a "technique", or as "learning" or "teaching". It appears that no common agreement has been reached yet. In this study, project-based learning has been considered as an "approach" (Gültekin, 2007).

Project-based learning is an instructional method centred on the learner. Students develop a question and are guided through research under the teacher's supervision (Bell, 2010). Instead of using a rigid lesson plan that directs a learner down a specific path of learning outcomes or objectives, project-based learning allows indepth investigation of a topic worth learning more about (Korkmaz and Kaptan, 2000; Erdem, 2002; Harris and Katz, 2001). Thomas, Mergendoller and Michaelson (1999) described projects within project-based learning as based on challenging questions and making students having central role in design, problem-solving, decision making processes so giving students the opportunity to work relatively autonomously. In project-based learning, students plan, implement, and evaluate projects that have real-world applications beyond the classroom (Blank, 1997). Project-based learning is a comprehensive approach to classroom teaching and learning that is designed to engage students in investigation of complex, authentic problems and carefully designed products and tasks (Blumenfeld et al., 1991). The use of project-based learning in class is possible after providing the information that is needed for the project. The classroom activities should be student-centred, cooperative, and interactive (Moursund, 1999).

Project-based learning engages students in gaining knowledge and skills through an extended inquiry process structured around complex, authentic questions and carefully designed products and tasks (Moursund, 1999; Thomas, Michealson and Mergendoller, 2002). Project-based learning enhances the quality of learning and leads to higher-level cognitive development through the students' engagement with complex and novel problems (Blank, 1997; Bottoms and Webb, 1998). Students are exposed to a wide range of skills and competencies such as collaboration, project planning, decision making, and time management through projectbased learning (Blank, 1997; Dickinson et al., 1998). Project-based learning increases the motivation of students. Teachers often note improvement in attendance, higher class participation, and greater willingness to do homework (Bottoms and Webb, 1998). When teachers successfully implement project-based learning, students can be highly motivated, feel actively involved in their own learning, and produce complex, high-quality work (Blumenfeld et al., 1991).

Project-based learning is still in the developmental stage. There is not sufficient research or empirical data to be able to state with certainty that project-based learning is a proven alternative to other forms of learning. Based on evidence gathered over the past years, project-based learning appears to be effective model for producing gains in academic achievement (Meyer, 1997; Bağcı et al., 2005; Aladağ, 2005; Gültekin, 2005; Chen, 2006; Çırak, 2006; Çiftçi, 2006; Özdemir, 2006; Sylvester, 2007; Kemaloğlu, 2006; Yalçın, Turgut and Büyükkasap, 2009; Baş and Beyhan, 2010) and attitudes (Meyer, 1997; Erdem and Akkoyunlu, 2002; Korkmaz,

2002; Aladağ, 2005; Gültekin, 2005; Ciftci, 2006; Özdemir, 2006; Yalcın, Turgut and Büyükkasap, 2009; Bas and Beyhan, 2010). There are research studies that explain the advantages of using project-based learning in educational settings (Meyer, 1997; Demirel et al., 2000; Korkmaz, 2002; Balkı-Girgin, 2003; Yurtluk, 2003; Gültekin, 2005). However, only a few of them have focused on project-based learning in English language teaching (Çırak, 2006; Baş and Beyhan, 2010). These studies which were on the investigation of project-based learning were carried out in elementary level by comparing project-based learning with traditional methods. However, this study focuses on the effects of project-based learning with comparison to the student textbooks based-instruction, which were created on the basis of the new Secondary School 9th Grade English Curriculum (MEB, 2007). From this perspective, this research can be stated to have a significant value. In this sense, previous literature does not reveal and study which focus on the comparison of the effects of project-based learning and instruction based on student textbooks (Bayral et al., 2010) approved by the Ministry of National Education, known as MEB. It is hoped that this empirical study can provide a close link between project-based learning and language learning and, at the same time, propose guidelines for English language teachers who wish to implement project-based learning to enhance their students' language learning as well as development of attitude towards learning English as a foreign language. On the other hand, by carrying out this study, the researcher hopes that project-based learning can receive more attention and enjoy more popularity amongst English language teachers at all grade levels.

This study was designed to assess the effects of project-based learning on ninth grade students' academic achievement and attitudes towards English lesson. The questions addressed in this study were as follows:

- 1. Is there a significant difference between the achievement levels of the students in the experimental group and the students in the control group in terms of the usage of project-based learning?
- 2. Is there a significant difference between the attitude levels of the students in the experimental group and the students in the control group towards the lesson in terms of the usage of project-based learning?

# Method

A pre- and post-test experiment with random assignment of classes to experimental and control groups was employed (Dugard and Toldman, 1995) to examine the effects of the treatment process in the study. In this design, which uses two groups, one group is given the treatment and the results are gathered at the end. The control group receives no treatment, over the same period of time, but undergoes exactly the same tests (Karasar, 2005). Both groups were employed a pre-test and pre-attitude test prior to the experimental process. The subjects were given an academic achievement test and an attitude scale towards English lesson as a pre-test. Meanwhile, both the academic achievement test and attitude scale were employed to both groups after the experimental process as a post-test. A small number of homogenous subjects provided us with information over a period of four weeks.

# Sample

The subjects of the study consisted of 60 ninth grade high school students [33 boys (55%) and 27 girls (45%)] with a mean age of 14.5 years in two classes selected from a high school in an urban area in Nigde, Turkey. The classes were selected randomly (Fraenkel and Wallen, 1996) from the school. One group (9-B class) was randomly assigned to the experimental group ( $\eta$ = 30), while the other (9-C class) formed the control group  $(\eta=30)$  of the study. All the students in the groups took the Level Defining Examination, known as SBS (Seviye Belirleme Sinavi) in the previous year in order to enter in this high school. The academic achievement levels of these students were understood to be similar in relation with their SBS scores in the previous year. Meanwhile, the SBS scores of the students were taken from the school administration.

#### **Instruments**

#### Academic Achievement Test

In order to collect data related to academic achievement of the students an academic achievement test was developed in relation with the Secondary School 9th Grade English Curriculum (MEB, 2007) by the researcher. This test was used to measure the students' academic achievement in the "past activities" unit. There were 45 questions (each item scored 2 points; total score was 90 points) in the test. The item and test statistics of the achievement test were computed for reliability and validity. The reliability of the academic achievement test was done by the KR<sub>20</sub> reliability analysis method (Cohen, Manion and Morrison, 2000; Kubiszyn and Borich, 2003). The reliability value of the test was found as .83, the test difficulty value (P<sub>i</sub>) was found to be .59 and the test discrimination value (rix) was found to be .47. Also, the Spearman-Brown result of the test was found as .88 and the split-half result of the test was found as .78. Hence, it was revealed that the test was reliable (Tan, 2008). It was used with students in both the experiment and the control groups. The academic achievement test had a reliability of .83, an average level of test discrimination (.47) and an average level of test difficulty (.59). In the light of the data gathered for the academic achievement test, it can possibly be said that the test had a high level of reliability, a medium level of difficulty and a high level of test discrimination.

# **English Lesson Attitude Scale**

In this research, the "English lesson attitude scale" was used in order to measure students' attitudes towards English lesson. The scale was arranged by having done the reliability and validity studies and used to evaluate the attitudes of students towards English lesson by the researcher. The attitude scale test is a three-point Likert type scale (which was used to differentiate orientations from 1 as low and 3 as high) reliability and validity of which have been made by Cronbach's Alpha analysis, including 27 items that measure students' attitudes towards English lesson. The Cronbach's Alpha value of the attitude scale was found as .92. The Kaiser-Meyer-Olkin (KMO) sampling adequacy result was found as .884 and the Bartlett test result was found as 10134,161 (p=.000). These results show that there is a strong correlation amongst the items. In light of the data, it can be said that the attitude scale test is both reliable and valid to be used in the current research.



#### **Procedures**

In the experimental group, cooperative learning method was applied. Whereas, in the control group instruction based student textbooks was used in the process of the study. The design of the study can be described as in the Table 1 given below:

**Table 1.** Experimental design used in the study

Groups	Pre-test	<b>Experimental Design</b>	Post-test
Experimental	T1 <sub>12</sub>	Project-based learning	T2 <sub>12</sub>
Control	T1 <sub>12</sub>	Instruction based on student textbooks	T2 <sub>12</sub>

Academic achievement test  $T1_1$ T1<sub>2</sub>English attitude scale

As can be seen in Table 1, one can see the scales applied on the subjects of the study. The academic achievement test and English attitude scale were applied on the subjects of the study for two times before and after the experimental process.

This instructional treatment was conducted over five weeks in the first term of 2010-2011 academic year at a high school in Nigde, Turkey. 9th grade students of two classes of this school were enrolled in the study. The classes were selected randomly from the other ninth classes of this high school. Firstly, the academic achievement test and English attitude scale were performed as a pre-test. In the next step, the "past activities" unit of the Secondary School 9th Grade English Curriculum (MEB, 2007) was taught to the control group by using the instruction based on the activities in student textbooks (Bayral et al., 2010) and to the experiment group by using project-based learning.

After the topics to be studied were selected, the researcher developed an instruction programme. It was crucial to develop appropriate techniques and provide necessary materials that reflect the principles of projectbased learning (Blumenfeld et al., 1991; Demirel et al., 2000; Demirhan, 2002; Erdem, 2002; Yurtluk, 2003; Demirel, 2005; Çırak, 2006; Özdemir, 2006; Baş and Beyhan, 2010; Sünbül, 2010). Drawing on relevant research, all the procedures were developed and prepared by the researcher himself. The instruction programme for the procedure was based on project-based learning on teaching for a deep learning. In this study, the experimental group studied "past activities" unit through project-based learning while the control group studied the same unit through activities given in student textbooks (Bayral et al., 2010).

In the control group, instruction based on student textbooks was used. The instruction in the control group was based on the activities in student textbook (Bayral et al., 2010) prepared in connection with the Secondary School 9th Grade English Curriculum (MEB, 2007). During the lesson, though occasionally, the teacher asked questions to the students based on activities (vocabulary, grammar and speaking) in order to encourage participation of the students in the learning process. The teacher also made presentations based on the reading, listening and grammar passages in the textbooks. At the end of the instruction, the teacher asked some questions about the related passages and let the students do the activities given in the textbooks. The teacher made the students do the activities in the student textbooks while standing at front of the class and received the answers and gave them feedback, recorded subject notes on the board, and gave daily homework to the students.



Most lessons passed as the students doing the activities in student textbooks, taking short notes and answering teacher questions. The teacher gave the students necessary time to do the activities in the textbooks. The teacher played the role of facilitator during the learning process in the classroom.

In the experimental group, the students were taught with project-based learning developed for "past activities" unit. So, the instruction programme for the experimental group was prepared according to the principles of project-based learning. Project-based learning is based on the idea that students study a specific subject in a deeper context (Demirhan, 2002). In this regard, the researcher explained the key concepts in the unit to the students. The researcher also presented the necessary principles, steps and procedures about projectbased learning to the students in the experimental group. After the key concepts, steps and procedures about project-based learning were presented and explained to the students, the researcher and the students created certain objectives for each group mutually and then they defined the work and the subjects in the learning process. In order to form the project groups, the students were made to count from one to seven, the eighth student stated to count from one and the others went on counting again. By grouping those with the same number, it was ascertained that each group became heterogeneous in nature. After the groups of six were formed, desks were relocated so that the classroom organisation became convenient for project-based learning. After sharing the tasks, the researcher clarified what was expected from the students. During the project study, the students' task was to study the presented materials, obtain relevant information, create the project and then present it in front of their friends in the classroom. Before starting to create the project, the students were assigned to project groups and they were given the tasks. The students were made to create study calendars and determine control points in the study calendars. Each project group was given the necessary materials presenting the target tasks and information, then they were let create their projects in the groups. At the end of a four-week study in project groups, the students presented their projects in front of the classroom and received feedback both from the researcher himself and their peers in the classroom. In relation with the evaluation, the projects were evaluated by the researcher and the students in other groups with (1) researcher evaluation and (2) peer evaluation forms. After scoring the projects of the groups, the students of the best three projects earned some certificates and awards. Thus, the students in the groups competed with the other groups instead of their team and/or class mates. At the end of the project-based learning process, all the projects created by the groups were presented to the other students and teachers in some certain parts of the school. Meanwhile, the researcher served both as a designer and a facilitator in the learning process. The researcher formed the groups, prepared the materials and presented the principles and procedures of project-based learning as a designer and he walked around the classroom and helped the students who needed help as a facilitator during the learning process.

All the students in the groups (experimental and control groups) were exposed to the same content for the same duration in the study. Duration of the lessons was for 45-minute periods. Each group received an equal amount of instruction for four weeks period. According to Manson and Bramble (1997), the longer the time spent the greater the probability that something could influence the subjects' environment that in turn would affect the results. Because of this, the duration of four weeks was deemed appropriate to see the effects of the experimental treatment without incurring the difficulties described by Manson and Bramble (1997). Both the experimental and the control groups were taught by the researcher himself.



## **Data Analysis**

In order to analyse the data obtained from the study, "academic achievement test" and "English course attitude scale" were used. The statistical analyses were made via SPSS 17.0. In this study, statistical techniques such as mean ( $\overline{X}$ ), standard deviation (Std. Dev.) and the independent samples t-test were used in the analysis of the data. The p value was held as .05.

# **Findings**

# **Analysis of the First Research Question**

The first research question of the study was "Is there a significant difference between the achievement levels of the students in the experimental group and the students in the control group in terms of the usage of project-based learning?" So, before the treatment an independent samples t-test was employed in order to determine whether a statistically significant mean difference existed between the experimental and the control groups with respect to their pre-knowledge and understanding of concepts in "past activities" unit. The comparison of pre-test results of the students in the experimental and the control groups are presented in Table 2.

Table 2. Comparison of Pre-Test Achievement Scores of the Students in the Experiment and the Control Groups

Groups	η	$\overline{\mathbf{X}}$	Std. Dev.	df	t	p	
Experimental	30	48.5	17.5	64	5.4 0.60 <b>5</b>	0.605 0.048	0.04*
Control	30	48.2	17.9	04	0.695	0.94*	
*n> 05							

In Table 2, the pre-test achievement scores of the students in the experimental group and the control group have been compared. The average score of the students in the experimental group has been found as  $\overline{X}$ experimental = 48.5±17.5; and the average pre-test score of the students in the control group has been found as  $\overline{X}$ control= 48.2±17.9. The difference between the students of these two groups has been analysed through independent samples t-test. The t-value has been found as  $[t_{(64)} = 0.695]$ . According to these results, there is no statistically significant difference between the pre-test scores of the students of these two groups in .05 level [p= .94, p>.05]. Prior to study's experimental process, it can be said that both groups' pre-learning levels in "past activities" unit in English lesson are equal to one another.

Table 3. Comparison of Post-Test Achievement Scores of the Students in the Experiment and the Control

Groups						
Groups	η	$\overline{\mathbf{X}}$	Std. Dev.	df	t	p
Experimental	30	73.3	12.4	<i>C</i> 1	2.26	0.0010*
Control	30	62.3	15.1	04	64 3.26	0.0018*
*n< 05						

The post-test achievement scores of the students in the experimental and the control groups have been compared in Table 3. The average post-test score of the students in the experimental group was found to be  $\overline{X}$  $_{experimental}$ = 73.3±12.4, and the average post-test score of the students in the control group has been found as  $\overline{X}$ control= 62.3±15.1. The difference between the two groups has been analysed through independent samples t-test.



The accounted t-value has been found as  $[t_{(64)}=3.26]$ . The students in the experiment group  $[\overline{X}_{experimental}=73.3]$ showed significantly better achievement compared to the students in the control group [ $X_{control} = 62.3$ ]. So according to these results, it can be said that there is statistically significant difference between the post-test scores of the two groups in .05 level [p=.0018, p<.05]. When one looks at the average scores of the groups, it can be seen that the students in the experiment group have reached a higher achievement level compared to those in the control group. The experimental method, which is project-based learning, applied has been more effective than the instruction based on student textbooks in the control group.

# **Analysis of the Second Research Question**

The second research question of the study was "Is there a significant difference between the attitude levels of the students in the experiment group and the students in the control group towards the lesson in terms of the usage of project-based learning?" So, before the treatment an independent samples t-test was employed in order to determine whether a statistically significant mean difference existed between the experimental and the control groups with respect to their pre-attitude towards English lesson. The comparison of pre-test results of the students in the experimental and the control groups are presented in Table 4.

Table 4. Comparison of Pre-Test Attitude Scores of the Students in the Experiment and the Control Groups

Groups	η	$\overline{X}$	Std. Dev.	df	t	p
Experimental	30	1.58	0.502	64	64 -0.247	0.81*
Control	30	1.61	0.496	04	-0.247	0.81**
*n> 05						

In Table 4 given, the pre-test attitude scores of the students in the experiment and the control groups can be seen. The average pre-test attitude score of the students in the experiment group has been found as Xexperimental = 1.58±0.502; and the average pre-test attitude score of the students in the control group has been found as  $X_{control} = 1.61 \pm 0.496$ . The accounted t-value between the average scores of the two groups is  $[t_{(64)} = -0.247]$ . The data obtained are not statistically significant in .05 level since the pre-test attitude scores of the students of these two groups are similar.

Table 5. Comparison of Post-Test Attitude Scores of the Students in the Experiment and the Control Groups

Groups	η	$\overline{X}$	Std. Dev.	df	t	p	
Experimental	30	2.73	0.452	64	61	6.16	0.0001*
Control	30	2.03	0.467	04	0.10	0.0001*	
*n< 05							

The post-test attitude scores of the students in the experiment group and the control group can be seen in Table 5. The average post-test attitude score of the students in the experiment group has been found as Xexperimental = 2.73±0.452; and the average attitude post-test score of the students in the control group has been found as  $X_{control}$  = 2.03±0.467. The t-value obtained from the average scores of the two groups has been found as  $[t_{(64)}=6.16]$ , which shows the statistically significant difference [p=.0001, p<.05] between the groups. In light



of the data acquired in the research, it can be said that the students in the experiment group have reached higher attitude scores compared to those in the control group. The experimental method applied has enabled the students to develop positive attitudes towards English lesson.

# **Conclusions and Discussion**

The purpose of this study was to investigate the effects of project-based learning on academic achievement and attitudes of ninth grade students towards English lesson and to compare it to that of instruction based on student textbooks. For this reason, experimental and control groups were formed for the study. Whereas project-based learning was applied to the experimental group, instruction based on student textbooks was applied to the control group in the study. As presented in the pre-test findings of English academic achievement test of "past activities" unit, there was no significant difference between the experimental and control groups in terms of their academic achievement scores in English lesson. The findings of post-test at the end of the four-week implementation, however, indicate that the experimental group performed better than the control group. The difference acquired between these two groups can be attributed to the responsibilities that the students took in project-based learning, the active role of the students in the learning process. Working in the groups, which project-based learning was employed made the students learn the responsibility, provided them with motivation to learn, and enabled them to acquire knowledge by receiving different ideas and understanding the others point of view in the lesson. The positive contribution of project-based learning on students' academic achievement in this research supported the findings reported in the related literature both from different countries and Turkey in every level and field of education (Meyer, 1997; Bağcı et al., 2005; Aladağ, 2005; Gültekin, 2005; Chen, 2006; Çırak, 2006; Çiftçi, 2006; Özdemir, 2006; Sylvester, 2007; Kemaloğlu, 2006; Yalçın, Turgut and Büyükkasap, 2009; Baş and Beyhan, 2010). For example, Çırak (2006) investigated the effects of project-based learning in an elementary English lesson. She organised her second grade classroom in an elementary school and the teaching materials with the principles of project-based learning. The data revealed that, at the end of treatment of the study carried out by Çırak (2006), the students in the experimental group outperformed than the students in the control group where traditional instruction methods were used. Furthermore, Meyer (1997) studied fourteen fifth and sixth grade students' challenge seeking during projectbased mathematics instruction in a classroom. He drew on five areas of research: academic risk taking, achievement goals, self-efficacy, volition, and effect. He reported on the effects of fifth and sixth grade students' motivation and that although the surveys were useful in characterizing general patterns of challenge seeking, more individual and contextualized information was necessary for understanding how to support students engaged in challenging academic work, such as project-based learning. According to the results obtained both from the related literature and this study, it can be possibly said that project-based learning increased the students' academic achievement levels positively. However, in the studies carried out by Demirel et al. (2000) and Yurtluk (2003), no change was observed in the academic achievement levels of students both in the experimental and the control groups in relation with the use of project-based learning in the experimental group.

In terms of the attitude towards English course, there was a significant difference between the experimental and the control groups. As presented in the pre-test findings of English lesson attitude of students, there was no significant difference between the experimental and control groups in terms of their attitudes towards English lesson. The findings of post-test at the end of the four-week implementation, however, indicate that the experimental group performed better than the control group. In other words, the students who were educated by project-based learning had more positive attitudes towards English lesson than those who were educated by the instruction based on student textbooks. Erdem and Akkoyunlu (2002), Aladağ (2005), Gültekin (2005), Ciftci (2006), Özdemir (2006), Yalcın, Turgut and Büyükkasap (2009) and Bas and Beyhan (2010) carried out studies by project-based learning in different learning atmospheres. They explored students' attitudes towards courses by project-based learning. In their studies, they found that there was a significant difference in the attitude levels towards the lesson between the groups, which project-based learning (experimental group) and the other group for which the instruction based on student textbooks (control group) were used. The students who were educated by project-based learning had developed more positive attitudes towards the lesson than the students who were educated by the instruction based on student textbooks. These results resemble to the result of this study. It can be said based on the findings; project-based learning was more effective on the development of students' attitudes towards lesson than the instruction based on student textbooks. However, Demirel et al. (2000) and Yurtluk (2003) investigated the effects of project-based learning approach on learning process and learners' attitudes. In their researches, it was found that there was no significant difference between pre- and post-test results of attitude scale in control and experimental groups.

On the other hand, Tretten and Zachariou (1995), Korkmaz (2002), Çiftçi (2006) and Özdemir (2006) found out in their studies that students who were educated by project-based learning method were more successful in problem solving skills, self-esteem, interest in topics, work habits, communication, motivation, academic risk taking and creative thinking skills. On the results of these studies, it can be said that project-based learning method not only has more positive effects on students' academic achievement levels and attitudes towards the lesson, it has also more positive effects on students' academic risk taking, problem solving and creative thinking skills. According to Blank (1997), Çınar et al. (2005) and Çiftçi and Sünbül (2006), students in the project-based learning atmosphere are exposed to a wide range of skills and competencies such as collaboration, project planning, decision making, critical thinking and time management. Collaborative learning allows students to bounce ideas off each other, voice their own opinions, and negotiate solutions - all skills that will be necessary in the workplace. As Özdemir (2006) states, a project-based learning lesson provides students with the opportunity to learn in an authentic, challenging, multidisciplinary environment, to learn how to design, carry out, and evaluate a project that requires sustained effort over a significant period of time, to learn to work with minimal external guidance, both individually and in groups, to gain in self-reliance and personal accountability. As Eryılmaz (2004) stated, via peer instruction, such as in project-based learning, students can develop their academic achievements and attitudes since interaction between group members in a social context is essential for learning as proposed in social constructive theory and context are important to understand what occurs in society and to construct knowledge (Derry, 1999). Meanwhile, it is suggested that teachers should group the students together whenever and wherever possible (Scott and Ytreberg, 1990). Students enter into a friendly competition with other groups during project works and pay effort in order to be successful. As a result of their achievements, they feel the happiness and excitement of achieving something. At the same time,



students feel the pleasure of producing something and displaying something different, which in turn makes them feel valuable, skilful and knowledgeable. In that way, it can be said that their self-confidence and feeling of competence for next project tasks is improved. It can be a contribution to turn to positive academic achievements and attitudes of students towards lesson (Yalçın, Turgut and Büyükkasap, 2009).

Creating products with the work put into the study increased the students' academic achievement levels and improved their attitudes towards English lesson. In addition to the academic achievements in the experimental group expressed positive attitudes towards learning English, the students seemed rather happy to learn English through project-based learning because they were able to progress at their own pace and, at the same time, contribute to others' learning in such a supportive and encouraging learning context. In this sense, the most important thing in research was the experimental group students had more fun when they were learning and they also had the chance of socialisation and cooperation which are more important for them in these ages. As the related literature suggests, the development of positive attitude is linked to the direct involvement of students (Bergeson, Fitton and Bylsma, 2000). The researcher also saw that project-based learning helped the learners develop many skills like intellectual, social, emotional and moral skills which are the skills the learners have to develop at school learning as well as the students had no anxiety while learning. Also, Çırak (2006) and Özdemir (2006) saw in their studies that the project works helped the young learners to develop many skills in English lesson like, physical, intellectual, social, emotional and moral skills which young learners have to develop. According to Duxbury and Tsai (2010), foreign language anxiety is a universal phenomenon that inhibits students' achievement in ESL and EFL classrooms and it can be reduced through social interaction such as project-based learning. The results of the study also indicate that the activities used in the treatment provided more opportunities to the students to get involved in the activities than the participants in the classroom conducted by following the requirements of the course book. By this way, students not only had high achievement levels in English lesson, but also they had a chance to practise their different skills such as drawing, writing, thinking, researching, discussing, creating, etc. which are seen as crucial factors in learning a foreign language (Harmer, 2001; Hill and Flynn, 2006).

As there are only few studies on the application of project-based learning in English lessons especially in Turkey, there is a need to conduct more studies on this issue. This current study may give insights to teachers about integrating project-based learning into high school English lessons. It is suggested that researchers should study the effects of project-based learning on students' academic risk taking, metacognitive skills and motivational levels, problem solving and communication skills, creativity levels, vs. with their academic achievement levels and attitudes towards English lesson and/or other lessons.

As a result of this study, in which the effects of project-based learning on academic achievement and attitudes of students towards English lesson were examined, the following suggestions can be suggested depending on the findings obtained in the study:

1. In light of the gathered data in the study, project-based learning was found to be more effective on students' academic achievement levels and attitudes towards the course than the activities instruction based on student textbooks. So, it is suggested teachers should use this approach in their lessons. Because, after the



- experimental process of this strategy, students rose their academic achievement and attitudes towards the lesson in a greater extent.
- 2. Teachers should direct the process of the approach effectively so that if they cannot direct the strategy effectively, students can be frustrated and demoralised, they can be bored with the lesson and the strategy can be unsuccessful from the beginning of the process. Because of this situation, seminars and courses should be organised as to train teachers to use this approach effectively in their classrooms so that they can create a more positive classroom atmosphere. Also, teacher education programmes should be reorganised to contain both the practice and the theoretical knowledge/framework of project-based learning.
- 3. By project-based learning, students have a chance to practise their understanding on the learning material by interacting and communicating with their peers in the groups. Students do not memorise the concepts and other things, they do study the learning materials and learn deeply. In other words, they have a chance to practise their understanding on the learning material with project-based learning. So the learning environment should be organised so that students interact face to face with each other and share the responsibility of the learning process.
- 4. Teachers should give projects to students so that students have a chance to select from a number of subjects. In addition, teachers should pay attention to the students so that the students organise their work with the principles of project-based learning.
- 5. High School English Curriculum in Turkey should be integrated with the techniques and principles of project-based learning in order to develop students' academic, communicative and creative competences as well as other social and emotional skills.
- 6. Similar researches can be carried out in other lessons and institutions such as elementary school or university level.

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# A DEFINITION OF LITERARY LITERACY: A CONTENT ANALYSIS OF LITERATURE SYLLABUSES AND INTERVIEWS WITH PORTUGUESE LECTURERS OF LITERATURE

Rita Baleiro

School of Management, Hospitality and Tourism, University of the Algarve (Portugal)

rbaleiro@ualg.pt

**Abstract:** The aim of this paper is to present a definition of literary literacy in the context of majors in languages, literatures and cultures, in Portugal. A definition of literary literacy was deduced from a content analysis of primary data sources and from the theoretical underpinnings of the transactional theory of reading. The primary data sources are fourteen Portuguese and English literature syllabuses from four Portuguese universities (Lisboa, Nova, Coimbra and Porto) and twelve interviews with Portuguese university lecturers of literature. Based on the findings of a content analysis of both syllabuses and interviews, from the lecturers' point of view, a literary literate student doing a major in languages, literatures and cultures must, above all, be able to contextualize literary texts and their authors both historically and culturally, must be able to present an interpretation as a coherent text, and must be able to do and organize bibliographical research.

Keywords: literary literacy, higher education, Portugal.

# Introduction

In Portugal, research into literacy has expanded fast over the last two decades with an emphasis on reading literacy (Lages, 2007; Santos, 2007; Sim-Sim and Viana, 2007) and information literacy (Malheiro et al., 2010). The majority of these studies have focused on how elementary or secondary school students read, on adults' reading habits, on the system of adult education, and on the role played by university and public libraries. The few studies with a focus on higher education students often fall within sociological theoretical frameworks, and examine students' social and cultural background, students' leisure practices, attitudes and representations of the world, i.e., political systems, family, labour market (Almeida et al., 2003; Balsa, Simões, Nunes, Carmo, and Campos, 2001; Guerreiro and Abrantes, 2004).

As a result, in Portugal, investigations into literacy and literary reading in higher education are scarce; and investigations that examine literacy and literary theory jointly, such as the study presented in this paper, are even scarcer. And, apparently, the same happens outside Portugal, as Lisa Eckert (2008) acknowledged in an article on the study of the intersection of reading strategies in secondary and post-secondary education.

Despite David Barton's observation that 'literacy and literary have grown apart in an almost deliberate distancing of elite culture and mass culture' (2009: 167), literacy theory and literary theory are associated research fields, as both are concerned with the meaning production process and with individual responses to texts (Kern 2002; Kern and Schultz, 2005). The operations involved in the act of literary interpretation are described in the transactional theory of literary reading (Iser, [1978] 1980; Rosenblatt, [1938] 2005), and demand the activation of a cluster of skills that can be presented under the heading 'literary literacy'.

Regardless of the acknowledged importance of the reader's role in the meaning making process of a literary text, in the university context, many of the literary literacy skills that students activate in a given situation, in order to interpret a literary text, are not determined only by their individual choices, motivations and interests. Instead these skills are determined by various contextual



elements, with the student being just one of those elements. As a result, in the process of defining literary literacy in the context of majors in languages, literatures and cultures (LLC), in Portugal, this study focuses on two of the elements of the context that often determine these skills: literature syllabuses and lecturers of literature.

Considering that literary literacy is not a one-dimensional concept, in this study, the concept is presented according to the three-dimensional model of academic literacy by Bill Green (1999) and Bill Green and Cal Durrant (2001); this is a model that includes a critical dimension, a cultural dimension and an operational dimension.

Taking into account that the design of any research project depends to a large degree on the researcher's underlying theoretical assumptions about the concepts that he/she is dealing with, in the next section the theoretical underpinnings of the main concepts of this study are sketched out, i.e., literacy, skills and literary reading.

# Literacy

A definition of literacy must account for the nature of this concept which is situated, contextual and, consequently, relative and culturally bound. Literacy is much more than 'the individual capacity of processing written information in daily life' as it is commonly defined. As David Barton (2009) argues literacy is above all of a social nature, it is culturally sensitive, and it is always embedded in a specific situation and context. This is why definitions of literacy are so broad and heterogeneous. However, by assuming that literacy 'is a stable, coherent, identifiable configuration of practices' (Barton, 2009: 38) serving a specific purpose in a specific context, it is possible to present a definition of literary literacy in the context of majors in LLC, in Portugal.

Therefore, in this study, literacy equates to the continuous and creative processing of the written word that occurs in a given situation and in a given context. This continuous and creative processing of written work can be revealed when reading a literary text or writing a job application letter, for instance. The common goal is always to produce "something" with meaning, taking into account the conventions of the context in which the literacy skills are activated. Transferring this definition of literacy to the context of the majors in LLC, the context this study focuses on, one can merge it with the concept of 'interpretative communities' presented by Stanley Fish (1980), according to whom communities/contexts define the reading and interpretation strategies of literary texts. From Fish's point of view these strategies are imposed on the reader who, as a consequence, does not act independently. In my opinion, it is not just the community the person belongs, but the different contextual dynamics, that influence literacy events: 'the particular activities where literacy plays a role' and literacy practices: 'the general cultural ways of utilizing literacy which people draw upon in a literacy event' (Barton, 2009: 37). If the community could fully determine literacy activities, then every student in a given university class would present the same interpretation of a particular literary text. Thus, although context shapes literacy activities, it does not totally determine them; other dynamics interfere, such as the individual's character, the individual's attitude or the type of task to be performed. In sum, literacy implies the activation of specific skills, which are determined by a configuration of practices in a given situation and context. In the next section I will focus on a concept often associated with literacy: the concept of skill.

### Skill

Due to the ambiguity of the concept of skill, it is important to clarify how this term is used in this paper. Skills are personal constructs that need to be activated in order to perform a given task. This activation depends on the adoption of a certain attitude. In other words, the person needs to make a rational decision to activate certain skills according to the task that he/she has to perform. Therefore, skills emerge from actions and are permanently reconstructed and recontextualised from clusters of



processes that the person needs to undertake: the activation of prior knowledge, a focused comparison between prior and new knowledge, an analysis of the data gathered in a situation – reading a literary text, for instance – and the performance of a number of mental operations, such as, reasoning, making decisions and hesitating, amongst others.

# **Literary Reading**

This study approaches literary reading from the transactional theory of reading. Thus, it is assumed that the reader plays a vital role in the dynamic process of meaning production. This, however, does not mean that readers should respond to texts exclusively from an over subjective standpoint. As Wolfgang Iser ([1978] 1980) claims, although reading is the basis for all interpretation processes of a literary text, there is a difference between an 'innocent' reading and reading as a conscientious act that has the potential to turn itself into interpretation by involving the creation and confirmation of hypotheses in a permanent interaction between reader and text. I have taken this theoretical approach to literary reading for two reasons. The first is connected to the fact that the meaning of a literary text is unstable. Therefore, only the intervention of the actions performed by the reader fix a certain pattern of meaning. The second reason is a consequence of my own understanding of the act of literary interpretation: I consider it to be an idiosyncratic act wherein the reader chooses to activate certain literary literacy skills and not others, while paying close attention to his/her emotional response to the text, to the textual material – the words and sequences of words in the text – and to the conventions of the community he/she belongs to.

When reading literary texts, the reader has to be reflective, attentive and select information in order to confirm hypotheses in an ongoing interaction with the literary text. This is a type of text which is most often characterized by ambiguity, offering multiple possibilities for meaning and, as a result, imposing resistance on the process of meaning production. In the act of literary reading, the reader has to adopt an aesthetic attitude in order to inhabit 'the proposed world' created in the text wherein the reader can project his/hers possibilities for meaning (Ricoeur, 1991: 86; emphasis in the original). During this process, the reader fills in the 'blanks' in the text and, after producing several units of meaning, he/she is able to produce a meaning that renders the literary text coherent. For this reason, reading equates interpretation.

After this brief presentation of the transactional theory of reading relating to the act of the interpretation of literary texts, one of the assumptions of this study is further clarified: the importance of the reader's role and his/her attitude to the act of literary interpretation.

David Barton acknowledges the existence of different types of literacy, when he states that: 'when different practices cluster into coherent groups it is useful to talk in terms of them as being different literacies' (2009: 38). As far as reading literary texts at university is concerned, a number of practices are shared by academia; therefore, one can talk about one of those different types of literacy: literary literacy.

A good starting point to define literary literacy is to identify the skills that should be activated when reading a literary text in a higher education context. This observation leads to the methodological framework of this research.

# **Methodological Framework**

The main research question is: How do Portuguese university lecturers of literature define literary literacy? Figure 1, below, shows how this question is complemented by two exploratory research questions, and which data sources and analysis method are used to answer each question. In order to address the first of these questions – (i) What literary literacy skills should students be able to activate at the end of a literature course? - content analysis was conducted on fourteen Portuguese and English literature syllabuses from four Portuguese universities (Lisboa, Nova, Coimbra and Porto)



between the 2007/8 and 2009/10 academic years. To answer the second exploratory research question - (ii) Which literary literary skills must be activated by a student doing a major in LLC when writing an essay about a literary text? - interviews with twelve lecturers of literature from two Portuguese universities (Algarve and Nova) were conducted.

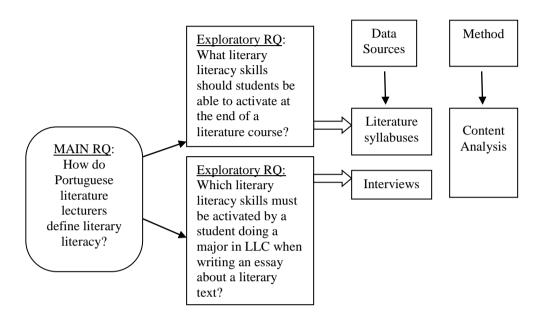


Figure 1: Research questions, data sources and method of analysis

Considering that the act of literary reading cannot be studied without taking into account the context where it happens, for the reason that context influences students (as well as students influencing context), this study focuses on lecturers, because they are one of the elements of that context that shapes 'literacy practices' and 'literacy events'. The reason why the second exploratory research question asks lecturers in literature about the literary literacy skills that should be activated in essays, results from the fact that essays are one of the most common 'literacy events' in majors in LLC. They are a regular repeated activity at university and an assessment instrument with a long tradition in higher education.

Concerning the procedures to collect the data for this research, syllabuses were retrieved from the universities websites and interviews with the lecturers were conducted via email. The main objectives of using such an interview technique were to minimize the possibility of a refusal, which would be more likely to happen in a face-to-face communication situation, and to allow more time for lecturers to reflect on the question. Given the overall orientation of this research, i.e. 'exploratory, fluid and flexible, data-driven and context-sensitive' (Mason, 2002: 24), it falls within the qualitative paradigm. Moreover, its procedures, methods and sample are characteristically qualitative. As is the case with many qualitative studies, the sample was small (twelve participants). This can be justified because the study was not set up to generalize the incidence of its findings onto the wider university population. The criterion underlying the choice of sample was defined prior to selecting the actual participants: they had to be literature lecturers working at Portuguese universities. The reason why the



interviews were conducted with lecturers working at the University of the Algarve and at University Nova (Lisboa) was exclusively one of convenience.

To sum up, a definition of literary literacy was deduced from the content analysis of both syllabuses and interviews and from assumptions about the transactional theory of reading. The definition is presented according to the structure of three-dimensional academic literacy by Green (1999) and by Green and Durrant (2001), which includes a critical dimension, a cultural dimension and an operational dimension.

# Green's Three-Dimensional Model of Academic Literacy

Since Green and Durrant's model is about academic literacy, its content is not considered in the definition of literary literacy presented in this paper. Instead, only its structure has been adopted and adapted in order to fit the concept of literary literacy. Therefore, in this section, the threedimensional model of academic literacy is briefly presented. In Green's own words: '[...] the operational refers to turning 'it' on, knowing how to make it work; the cultural involves using 'it' to do something meaningful and effective, in particular situations and circumstances [...]; and the critical entails recognising and acknowledging that all social practices and their meaning systems are partial and selective, and shaped by power relations.' (1999: 43). Although Green (1999: 43) clearly points out that each of the dimensions is not be understood independently, as they always intercept one another, in this paper, for analytical and presentation purposes, they are shown separately.

# **Findings**

Elaine Showalter points out that lecturers of literature often do not define, in their syllabuses, the skills they hope to teach and to be learned by the end of a literature course: 'By and large, we [lecturers in literature] are not accustomed to defining our objectives as actions or competencies – what students will be able to do, as well as understand - or as transferable skills. As one lecturer comments, "Literature instructors often define their courses by the text on their syllabi...not acts that students will be able to perform." (2003: 24). Despite Showalter's observation, the task of identifying literary literacy skills in Portuguese syllabuses was not difficult. Probably, this was due to the implementation of the Bologna Treaty, in 2006. For the sake of student mobility inside Europe, the Bologna Treaty established that syllabuses would explicitly present their skills and, as a consequence, this has changed the scenery presented by Elaine Showalter.

In fact, most of the syllabuses analysed have a section entitled either 'objectives' or 'learning outcomes'. In these sections lecturers present what students should be able to do at the end of each literature course; information which reveals the literary literacy skills that students are supposed to be able to activate at the end of each course. Although the information under the heading 'objectives' is sometimes vague (e.g. 'the students should be able to analyze a literary text'), the content analysis makes it possible clearly to identify the literary literacy skills lecturers expect students to activate.

Consequently, the content analysis of the fourteen Portuguese and English literature syllabuses reveals that within the:

Critical dimension – Lecturers expect the student to interact actively, attentively and reflectively with the text in order to create a hypothesis of meaning that will render coherence to the text and bring forth an interpretation: he/she 'must be able to do textual analysis'; 'must be able to read critically'; 'must be able to read primary and secondary bibliographies critically' and 'must be able to read key-texts critically' (these sentences were taken from the syllabuses and translated into English).



Cultural dimension - Lecturers expect the student to be able to contextualize literary texts and their authors both historically and culturally and to carry out intertextual readings: he/she 'must be able to place texts in an historical and cultural context', 'must be able to place the authors in an historical and cultural context', 'must be able read in an intertextual and comparative way, attending to several art and cultural expressions' (these sentences were taken from the syllabuses and translated into English).

Operational dimension – Lecturers expect the student to be able to look for and organize information from reference bibliographies: he/she 'must do and organize bibliographical research' (this sentence was taken from five of the syllabuses and translated into English).

The following table displays the most frequently stated skills that students should be able to activate at the end of a literature course as well as the total number of mentions. The skills are presented according to Green and Durrant's three-dimensional model.

Dimensions	Skills	Mentions N=14
Critical dimension	To read critically and to do textual analysis	4
Cultural	To place literary texts and their authors in an historical and cultural context	7
dimension	To compare literary texts with other texts and art forms	3
Operational dimension	To do and organize bibliographical research	5

Table 1.1: The most frequently mentioned abilities in the literature syllabuses

In five of the fourteen syllabuses it was clearly stated that these skills should be activated when students respond in writing to literary texts. These written assignments were explicitly described as 'essays' or 'short essays'. This confirms that essays are one of the most common 'literacy events' in majors in LLC, in the sense that they are a regular repeated activity at university, as mentioned before. Concerning the content analysis findings from the twelve interviews, the following tables disclose the skills the twelve lecturers of literature pointed out, as well as the number of lecturers that mentioned each of those skills:

Critical dimension of literary literacy	Mentions N=12
Present an original theme	5
Comment and/or place hypotheses to explain events and characters' behaviour	3
Identify the literary genre, the theme and the author's intention	2
Avoid too much paraphrasing	2
Avoid plagiarism	2
Describe and analyze the textual structure	1



Identify the uniqueness of the text	1
Present a small number of quotes	1
Avoid the common-places	1

Table 1.2: Critical dimension literary literacy skills identified in the lecturers' answers

Cultural dimension of literary literacy		
Establish and/or identify connections between literary texts and other texts or works of art	5	
Place the literary text in an historical and cultural context	4	
Refer to the author's biographical data	2	

Table 1.3: Cultural dimension literary literacy skills identified in the lecturers' answers

Operational dimension of literary literacy				
Write a coherent essay	7			
Present bibliographic references according to academic formal conventions	4			
Avoid grammar and spelling mistakes	2			
Avoid ambiguity				
Use recent and reliable reference bibliographies	1			

Table 1.4: Operational dimension literary literacy skills identified in the lecturers' answers

# A definition of Literary Literacy

In this section the findings of the analysis are brought together in a final discussion in order to present a definition of literary literacy according to Portuguese lecturers of literature. Based on the number of mentions the most frequently stated skill that students should be able to activate is placing literary texts and their authors in an historical and cultural context. The second most frequent skill is to do, organize, and display the results of bibliographical research. The third most often mentioned skills are: to establish connections between texts or works of art and to write a coherent text to bring out an interpretation of a literary text for a literature class. The fourth most often stated skills that students should be able to activate are to read critically and to do textual analysis.

Taking into account the most frequently mentioned skills, literary literacy can be defined as the competency to amplify individual self-reflective interaction with a literary text in order to produce an interpretation. In this process, the student must activate a web of specific skills that reflect the literacy practices of the context of the majors in LLC. These specific skills can be divided into three dimensions that should always intersect one another:

# **Critical Dimension:**

a) To read critically. This means that students must read a literary text in an attentive, informed and creative way (Coelho, 1976). They must recognise that a literary text is brought into existence by the convergence of reader and text; a convergence that is regulated by a set of instructions: some of these are determined in the text, and others (the 'blanks' or 'gaps') are to be determined by the student/reader during the reading process. As a result, when reading a literary text, the student must make predictions about future events and also recognise those predictions, as well as other thoughts and emotions, regarding events, characters and the plot. In this continual process the student creates units of meaning that must be considered in order to produce an interpretation (Iser, [1978] 1980). The skill to read critically also means that the student must draw upon extratextual interpretative strategies (those that the lecturer and the academic community have established to perform the act of interpretation). These strategies must be taken into account, though they do not define entirely the interpretation of a text. This happens because the act of interpretation is always idiosyncratic and the student is not 'a puppet in the hands of some mythical, external power called the environment of culture' (Rosenblatt, [1938] 2005: 148);

b) To do textual analysis. This means students must be able to decompose the whole text into its components. The student must be able to pay close attention to the words chosen by the author, the order in which they are presented, their rhythm, their sound and the effects they produce in the reader (Rosenblatt, [1938] 2005). It is important that analysis of the textual components is not utterly overshadowed by the reader's subjectivity. The student must be able to recognize that a literary text is a creative construction of a universe, with unique rules, in which sequences of words may acquire new and multiple interpretations; thus, it is up to him/her to expand what is explicit and what is implicit in the text, in order to transform the text into a coherent whole. Iser defines this as the 'consistencybuilding process' (1993: 63). This also means that although interpretative operations are individual, they cannot be arbitrary (Culler, 1980). Therefore, the student must be able to identify the text's literary genre, its thematic nucleus, its unique features and, eventually, the authorial intention (Showalter, 2003).

# **Cultural Dimension:**

- a) To place literary texts and their authors in an historical and cultural context. Firstly, this means the student must be able to recognize, identify and reflect on 'the system of living ideas systems', i.e. the culture the text belongs to. Secondly, it means the student must appeal to his/her 'background material' (Rosenblatt, [1938] 2005: 250) or extratextual information (such as biographical data);
- b) To establish connections between texts or works of art. To do this the student must set in motion his/her previous knowledge.

# **Operational Dimension:**

- a) To do, organize, and display the results of bibliographical research about the text, its author, its context and/or prior interpretations of the literary text. This means the student must be able to select, interpret and present such information and its bibliographical references according to academic conventions (Showalter, 2003);
- b) To write a coherent text to bring out an interpretation of a literary text for a literature class.

### Conclusions

From the analysis of the findings of this study, it seems obvious that the traditional stress on textual analysis and close reading is decreasing in favour of the skill to analyse the social, cultural and historical forces that ended up shaping the writer's vision and his/her literary work, in favour of the skill to convene other artistic works to the process of literary interpretation, in favour of the skill to



write a coherent literary analysis essay, and in favour of the skill to use effectively the information brought together by the bibliographical research process. As a consequence, literary interpretation is currently not confined to the words in text, their order, their sound, and their rhythm, but rather to take into account the reciprocal relations of readers, authors, texts, and context (Barton, 2009).

The concept of literary literacy presented in this study is associated with a set of skills that is activated in the interpretation process. However, it is important to state that the student is not expected to activate the whole range of these skills in a single interpretative act. This would be both unlikely to happen and unwelcome, considering that each reader accesses the text from a different perspective, emphasizing certain aspects of the text and forgetting others. In fact, it is the options formed by the reader that will determine the activation of certain literary literacy skills and not others.

As previously stated, the definition of literary literacy is presented as a stable group of skills; however, it is important to emphasize that these literacy skills are not transversal to different contexts and times. As a consequence, this definition fits only the Portuguese university context of majors in LLC at a particular time: the first decade of the 21st century.

In the near future, it would be interesting to repeat this study and to ascertain if there are any changes in the types of skills that lecturers of literature expect their students to activate in the process of interpreting a literary text. It would also be interesting to develop a comparative study, involving lecturers in literature from another European country, or countries, and tehn to analyse differences and similarities.

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# DIGITAL PORTFOLIO AS TOOL IN DISTRIBUTED EDUCATION

Hallstein Hegerholm Nesna University College hhe@hinesna.no

Abstract: Portfolio assessment is a form of evaluation, which is in increasing use in Europe. The use of digital portfolio supports flexible forms of education and learning. The use of portfolio is various and divided in different countries. This study focuses on the process of developing and use of portfolio in the subject of ICT and learning in the distributed teacher education at Nesna University College. The process is founded on theoretical influence of socio-cultural theories, teachers' experiences and students' preferences and achievement. The development and use of portfolio is based on an ongoing evaluation process, which is formulated as "Guidelines of portfolio assessment".

**Keyword**: portfolio assessment, activity theory, distributed education, teacher training

# Socio-cultural view on learning

A way to approach the use of portfolio is to analyze the learning of students (Dysthe & Engelsen, 2003). Socio-cultural theories of learning emphasize people as member of communities where social interaction and the use of tools is a foundation of learning. Man use tools to develop and change an object (Vygotsky, 1978). Leontév (1978) developed this viewpoint as a collective activity. The theory of activity is seen as development of Vygotskys theories of learning and a part of socio-cultural theories. This foundation was expanded by Engeström (1987) into a model where the use of tools where based on the interaction in community. Tools are to be understood as a mediating artefact. The rules and the division of labour make the use of tools to an activity, which develop both social and individual knowledge. Third generation Activity theory deals with at least two integrated activity systems as its minimal unit of analyses. These activity systems are sharing a common part of an object (Engeström, 2001).



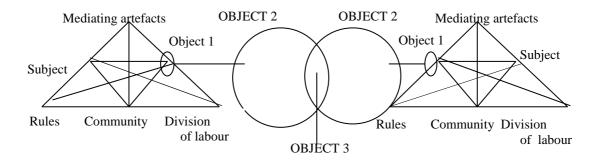


Figure 1: Two interacting activity systems with a partially shared object (Engeström, 2001, p. 136)

This figure illustrates how the subjects in two activity systems use tools as mediating artifacts in communities based on rules and division of labor to affect the objects. Lines in the figure show how all parts in the activity interact. The figure illustrates how objects (1) develop and change in the process (2) and how parts of the objects are partly shared (3).

# Knowledge and information

To understand the use of portfolio it is important to see how knowledge and information contradict and interact. According to Wells (1999) information is second hand and can be distributed and shared. Information is an important part of the learning process, but information it is not knowledge. Wenger (1998, p. 220) points out the difference between information and knowledge: "Of course, availability of information is important in supporting learning. But information by itself, removed from forms of participation, is not knowledge". Knowledge is personal built in a social setting. A socio-cultural view on learning focus on action, tools and community. Language is the basic tool. According to Seljø (2000) "the core of knowledge is speech and action in social context". Wells (1999, p. 91) formulate the process of knowledge building:

Knowing starts with personal experience which amplified by information, is transformed through knowledge building into understanding, where understanding is construed as knowing that is oriented to action of personal and social significance and to the continual enriching of the framework within future experience will be interpreted" (ibid.).

The interaction between knowledge and information is described in this way (ibid.): "... the level of information that has little or no impact on students' understanding until they actively engage in collaborative knowledge building...". Nardi puts it like this: "Cognitive science has concentrated on information, its representation and propagation; activity theory is concerned with practice, that is, doing and activity, ..." (1996, p. 14). This view on knowledge building is central in the work of customization the use of portfolio in ICT and learning.



# A study of the developing process of portfolio in ICT and learning

# ICT and learning

ICT and learning is a subject in the teacher training of Nesna University College and the continuing teaching of people working with education. The subject is one year of study divided into 2X 30 e-credits. Each half-year study consists of tree modules of 6, 12 and 12 e-credits. The content of the subject emphasizes basic problems in ICT, ICT as tools in learning processes, ICT used in work and society and the developing of digital literacy. It was established 1984 and from 1995 also given as a part of distributed education on Internet. The education was offered both in classroom and on Internet until 2001. At that time the students of classroom had access to each other in the classroom community, the teachers of the class, the IT-support system and the teaching given on Internet. From 2001 the only option given was on Internet. In 2002 the portfolio evaluation was established. Later the use of LMS Moodle was implemented. The changes of the subject ICT and learning in the first years of 2000 was based on teachers experience and internal discussions, influence of socio-cultural theory, interviews and a survey completed in 2000.

# Method and research question

The question of this research is: How did evaluation processes establish and develop the use of portfolio?

The design of the research is founded on a case study concept (Yin, 2009). This kind of case study recognizes both quantitative and qualitative data as evidence in analyzes (Ibid. p. 132). It also emphasize a theoretical foundation: "... the better case studies are the ones in which the explanations have reflected some theoretical significant propositions." (Ibid.).

A questionnaire of the year 2000 is central to answer the research question. The survey had 25 questions with five grades between agree and disagree. In the survey there also was three open questions, which focus on learning achievement and improvement of the given education. Internal discussions, meetings and seminars among the teachers are part of this process (Holteng & Hegerholm, 2004). The students written reflections of the study are also main sources for this analyze. In the period before the implementation of the portfolio the student's reflection on the given education were a separated expression based on teacher's questions. Later, this kind of reflection is integrated in the students' work as a continuing process. To understand the view of the students, a group of five students were interviewed in 2001 about the quality of learning achievement and the education. The description of parts of the survey of



2000 and the evaluation process is published as "En begrunnelse for endring av evaluering" (Hegerholm, 2004).

# Analyzing the process of developing digital portfolio

The data is analyzed as a case study research (Yin, 2009). Such an analyze will here be explanation building on a repeating case with multiple sources (Ibid p. 142). The case is the developing process of portfolio in ICT and learning which is expressed theoretically as two activities. The sources are written and spoken opinions and experiences of alternating students and teachers over the years in ICT and learning. Developing the Guidelines of portfolio assessment is an ongoing process, which has the roots back to the year of 2000. These sources together with the theoretical foundation enlighten the case of the developing process of the guidelines.

# Evaluation of classroom- and Internet students

Looking into the answerers of the survey of 2000 and the reflections of the students, some tendencies can be summarized. On the question of the importance of your own work on your private computer and software, it was a difference of the answers of Internet students and classroom students. The Internet students valued their own work as more important than the classroom students (Hegerholm, 2004). This is reasonable since classroom students can rely on help from teachers and the IT-service on the campus. The Internet student is more alone with her computer. Internet students had to use their own computer asking for support of other distant students. Internet student had to lean on distributed cooperation. Another question in the survey asked the students if they are satisfied with the scope and angel of the working tasks. Internet students prefer comprehensive working task as foundation of teachers guiding and evaluation. Internet students also valued the opportunity of giving written explanations of the working process. Questions in the survey – one of them open, ask the students if they are satisfied with the information in the study. Internet student valued formal and detailed written instructions and guidelines in their work and in depth guidance of teachers (Ibid).

Before the year of 2000 the evaluation of students was based on a four hour written examination - the student had to handwrite answers on written questions. This was done in a large room where both classrooms and Internet students s where placed together with many other students, without help or cooperation. No aids were allowed.

A comparison of the student marks, summarized by the university college, shows that the Internet students had a better result and marks than the classroom students (Hegerholm, 2000). To the teachers this was strange. The classroom students had access to both the teaching and support system of the classroom and the one on the Internet. There could be different explanations on this tendency. Motivation and age could be such explanations. Focus in the study, however, is on evaluation. The response from the students described an evaluation situation where reproduction of information was valued instead of giving credit to knowledge. Reflections on this matter were expressed in interviews in 2001. Such expressions are formulated in this way (translated from Norwegian). Per: "To write with a pencil about what we have installed and fixed on the computer seems like a vaster. It do not give credit to what we have learned." Grete: "To try to rewrite software without ordinary aids seem useless". Karen: "All the important work I have done with my own teaching with ICT tools is without importance on such an examination".

An analyze of he content of examinations shows fairly 70% of the questions (Hegerholm, 2004) asked for reproduction of written or oral information. In this situation the location of the education - Internet or classroom, seems without importance. The reproduction of books and other information has not been the goal of student's work and actions in the study. The learning process of developing achievement - for example in their own teaching, was in this context without importance. It was obvious for the teachers that the evaluation had to be changed.

## Evaluation and digital portfolio

Traditionally these forms of evaluation are in use in Norway:

- ζ Oral examination
- ζ ζ Written examination
- Practical examination (vocational education)
- Multi Choice (questionnaires)
- Home examination
- Dissertation / thesis
- Portfolio ζ

For teachers the main purpose was to leave the form of evaluation, which favoured reproduction of information. The goal was to develop a form of evaluation that gives priority of knowledge building. At this time the use of portfolio was recognized in EU (Hamp-Lyons & Condon, 2000) and developing in higher education in Norway (Ellmin, 2000).



Zubizarreta (2009) summarise the advantages of Electronic portfolios in the US Department of Educations' initiative of "Creating and Using Portfolios on the Alphabet Superhighway" in this way:

- Electronic portfolios foster active learning.
- Electronic portfolios motivate students.
- Electronic portfolios are instruments of feedback.
- Electronic portfolios are instruments of discussion on student performance.
- Electronic portfolios exhibit "benchmark" performance.
- Electronic portfolios are accessible.
- Electronic portfolios can store multiple media.
- Electronic portfolios are easy ton upgrade.
- Electronic portfolios allow cross-referencing of student work.

According to Dysthe and Engelsen (2003) portfolio have purposes and goals for society, school courses, teachers and students working and learning process. The most important condition, in the context of ICT and learning, is the possibility to evaluate and interact on the achievement and product of students work during the course. Portfolio evaluation establishes the student's marks as an end-evaluation. This gives the teacher the opportunity to guide the students during the course. It also gives the students opportunity to cooperate and build different kinds of communities. Portfolio integrates processes, which value the student's reflections. Reflection can be feedback to the teacher and the school on the quality of the course and the teaching. Portfolio rates the student individually. This can be used to sort students according to the rules of the society. The developing of portfolio artefacts tells the school and the teachers about the quality of student work.

Based on the students and teachers experience the teachers of the course of ICT and learning formulated the first Guidelines of portfolio assessment in 2002 (Holteng & Hegerholm, 2004). These guidelines are formally discussed and revised every year. Informal there is a continuous process of work and discussions - both among students and teachers, to integrate and adapt these guidelines to new situations and challenges in ICT and learning (Ibid).

## Digital portfolio in the activities of ICT and learning

It is possible to see portfolio as a tool for both teachers and students. The students and the teachers are subjects in different activities. The students direct their work towards an object of work tasks, the teachers towards evaluation. In both communities the portfolios are tools to meet the requirements of the education. Portfolios are tools in both a work and an evaluation process. Both the evaluation process in the activity of teaching and the working task of the activity of learning has a shared object: "Guidelines of portfolio assessment".



#### **ACTIVITY OF LEARNING**

#### **ACTIVITY OF TEACHING**

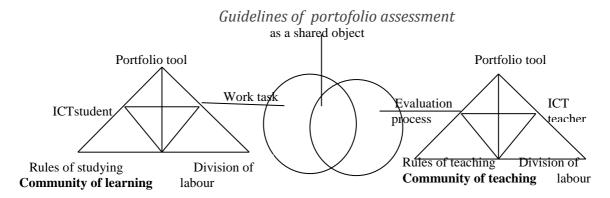


Figure 2: Two interacting activity systems with a partially shared object (After Engeström, 2001)

This figure illustrates how the shared object interact with the two main activities of ICT and learning. The "Guidelines of portfolio assessment" is the shared object of the working task and the evaluation process. It shows the digital portfolio as a tool in the teaching and the learning process. The guidelines influence on the use of the digital portfolio tools. It also guides the rules of teaching and the division of labour in the communities of the teachers and learners.

## Conclusion

According to socio cultural theories the activities of teacher and students in ICT and learning are founded on actions with tools in communities. The communities have the rules and division of labour as central elements. Learning is a process of knowledge building where information is an important part. The use of digital portfolio is directed by the "Guidelines of Portfolio assessment". The developing of the guidelines have been an evaluation process where teachers experience and the opinions of the students, focus on these central conditions:

In the working and evaluation process the teachers organize and distribute the information, which the students are going to use in their knowledge building. The guidelines of the portfolio evaluation presuppose a division of labour where working process integrate both individual responsibility and cooperation in groups. Both processes are certified in a reflection report. The portfolio evaluation rates the student as an end-evaluation where the teacher is the guide in the working process. This foundation is implemented in "Guidelines for portfolio assessment" The "Guidelines of portfolio assessment" is now used in the international course of ICT and learning and is attached to this paper.



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## Appendix

# Guidelines for portfolio assessment for ICT and learning

Portfolio assessment is a form of working and assessment that are in increasing use and can replace the traditional written examination. It involves an educational viewpoint that emphasizes self-development, reflection and cooperation. However, the concept of portfolio assessment has not yet found its final form. Therefore, portfolio assessment used differently in various subjects and contexts. We will therefore attempt to describe how the Section of Informatics in the University College of Nesna wants to carry out our form of portfolio assessment.

## Work Requirements

Each student will in the course of the program carry out a specific number of work requirements to cover the objectives for the course. Work requirements represent goal in curriculum, and shall be delivered to guidance and censorship in digital folders designed for portfolio assessment. Work requirements are the foundation of the students' work during the course, and will be evaluated at the end of the course.

All work requirements are individual, but still there will be required to cooperate with others. This means that work requirements can be developed in collaboration with other students, but final products shall be individual. Cooperation can take place "face to face" or "online" as a form of group collaboration. Cooperation can also be developed by the fact that students can consider and comment on each other's work, thus contributes to make them better. Students can cooperate with and can receive response from user groups and colleagues. On the basis of self-assessment, feedback from teachers, fellow students, colleagues and user groups, work requirements can be improved and changed, until submitted for final assessment. Collaboration shall be described and documented in a reflective document.

#### **Document of reflection**

Each work requirements shall be accompanied by a document of reflection, which describe the student work- and learning process. Document of reflection shall describe changes and development of the product. Such documents should always be developed as a part of work requirements. Reflection documents are individual.

Reflection document should contain the following:

- Explanation of the key point in the product.
- Description of the learning process and learning outcome
- Description of what kind of cooperation there has been
- Possible documentation of the division of labor between you and fellow students
- Description of feedback from user groups, group work, discussions with colleagues and fellow students
- Changes as a result of advice and guidance of teachers.

Otherwise, details can always be clarified with the teacher in each subject.

#### Guidance

Students will receive fast responses to inquiries about academic matters. For each work requirement, students have the right to one guidance from the teacher, assuming that the product is delivered before the deadline has expired. This guidance aims to strengthen the learning process in the subject as well as to improve the quality of answers. The guidance to each work requirements will be given for a limited

## Assessment

The date for final submission of the Portfolio is set in advance. When the products are delivered, there will be a process of final assessment and determination of grade for the course. Formal aspects of assessment are described in the Examination Regulations of The University College of Nesna.

Section of Informatics, University College of Nesna



# 'AN INVESTIGATION TO IMPROVE ENTREPRENEURSHIP MODULE IN VOCATIONAL AND TECHNICAL HIGH SCHOOLS IN NORTHERN CYPRUS'

Beste Sakallı Middlesex University

**Abstract:** Considering the 'good relationship' of entrepreneurship with the economy, it is very clear that the countries should pay a great deal attention to entrepreneurship education and be careful about the approaches and policies they implement regarding the issue. At this point, as a high school teacher caring about education and considering the role of entrepreneurship, it was not surprising to start my research journey by asking whether there is an entrepreneurship education in vocational and technical high schools in Northern Cyprus and how relevant it is to the context of Northern Cyprus and if not relevant how it could be improved. Having searched on the matter, I have found out that entrepreneurship is taught as an elective lesson at grade 10 students. It is one of the courses under the professional development courses. Entrepreneurship module is the material of the course and it has been developed through the project of Vocational and Technical Education System Project (MEGEP). Analysing the current entrepreneurship module with the purpose of seeing how relevant it was to the Northern Cyprus environment, I have found out that although general descriptions are discussed, the main focus in the module was on the entrepreneurship in Turkey. So, it needed to be redesigned to make it more workable for the unique environment of Northern Cyprus. Thus I have defined the title of this project as an investigation to improve entrepreneurship module in vocational and technical high schools in Northern Cyprus.'The main aim of the project is to identify the needs of the entrepreneurship module that is taught at vocational and technical schools in North Cyprus and to develop a framework to teach entrepreneurship effectively. First of all the project will try to do a need analysis for the entrepreneurship module. The data will be collected from teachers, students and experts, and a framework will be formed with the light of this output. After designing the new framework, the module will be taught at the vocational and technical high schools for one semester. At the end of this semester, the teachers suggestions, ideas will be taken and the recommendations will be done. Thus the aim of this project is to see the combination of theory and practice at the same time, collect data form the real situation and contact with the people who are directly related to this subject.

Action Plan methodology will be used in this project as it includes improvement, its nature to combine theory and practice and its benefits to my professional growth and development. In order to do it, the data will be collected from grade 12 students of vocational and technical high schools, subject teachers of entrepreneurship module, the members of the committee (who approved the teaching of the module), the chair of department of the School of Computing and Technology at Eastern Mediterranean University and the top executives of the civil society organizations such as Cyprus Turkish Building Contractors Association, Union of the Chambers of Cyprus Turkish Engineers and Architects, Cyprus Turkish Union of Bank Employees, Cyprus Turkish Accounting Union, Chamber of Commerce, Chamber of Industry, State Planning Office. The project is important as it will not only include and collect theoretical data, but also will include practical data regarding entrepreneurship as well. This project is significant for the Ministry of Education and Culture as it will determine the needs of the current entrepreneurship module and restructure it in the context of vocational and technical schools in

North Cyprus. It also will map the policy makers and experts of the ministry. The findings of the project will be a light for the experts to form and implement new policies regarding the entrepreneurship education in vocational and technical high schools based on North Cyprus context. The re-structured module will satisfy the needs of the students and teachers, and will create more beneficial learning environment for entrepreneurship as the students and teachers as main actors will be involved in the project.

**Keywords:** Entrepreneurship module, vocational and technical schools

#### Introduction

One of the biggest problems of Northern Cyprus is unemployment. Especially young people have been suffering from this problem. Due to this problem they cannot make decisions and plans for their future. Of course the job opportunities in the public sector are limited and insufficient in providing jobs for every single person living in this country. Certainly, this is not only the problem of people only but also the problem Northern Cyprus. Because considering the long term effects of this situation, the stability and the lack in the diversification of jobs, will be a risky factor for the economic development of the country. Entrepreneurship, with its feature of turning creative ideas into the real, will be the best solution for the current unemployment problem. Its positive aspects will be felt in the economy in the future. Thus, we as a country must have a module which is very practical and appropriate for the Northern Cyprus environment in order to educate well-equipped entrepreneurs who would be responsible for building the future.

Entrepreneurship is todays key instrument on brining developments to the economy by giving chances to everyone who could think creatively, organize his/her plan appropriately and put them into the action. There are many approaches on the definition and description of entrepreneurship. This is emphasized in most of the articles which is published in the field of entrepreneurship. Freeman and Soete (1997,in Dodgson, 2011) maintain that there are a lot of definitions about innovation and entrepreneurship. Similarly when Augustin-Jean (2010:319) writes that 'the definition of entrepreneurship itself is subject to debate', he is emphasizing that there is no one correct definition. Spencer et al. (2008) expresses that despite the increase interest in the field of entrepreneurship, a universally recognised definition has not been produced yet. Gartner (1990,in Seikkula-Leino, 2011) asserts that the meaning and foci of entrepreneurship show differences in various contexts. Of course, this uncertainty about its definition may seem like a far possibility to reach to an agreement about it however there is one important point about entrepreneurship that most of the authors would come to an agreement about it. This would be explained as the positive relationship of entrepreneurship with economic growth.

Regarding the above mentioned issue, many authors (Schumpeter, 1936; Hayek, 1937/1949; Casson, 1982) believe that even though there are many different factors that drive an economy, entrepreneurship has been accepted as a main condition of positive economic movement (cited in Aoyama, 2009). Equally, Carree & Thurik (2003, in Koster and Rai, 2008) explain that entrepreneurship is mostly recognized to be a necessary source when long-term economic development is considered. Likewise, many authors (Baumol, 1968; Stevenson

and Jarillo, 1990; Wennekers and Thurik, 1999; Van Stel and Caree, 2004) state that attention paid on entrepreneurship lies its acceptance as an activity that is valuable for the growth of economy (Spencer et al.,2008). According to Lundstrom and Stevenson (2005, in Hadjimanolis, 2007) entrepreneurship is accepted as a necessary factor in a knowledge-based economy in order to support the fields of employment, economic development and innovation(Stel, Carree, & Thurik, 2005). This relationship is also stated in the web page of the summary of the EU legislation. In that report, entrepreneurship is mentioned together with the word 'creativity' and it is defined as one's creative capacity in order to realize the opportunity and to follow that opportunity aiming at producing new value or economic achievement. It is further explained that the creativity is emphasized because of its role in bringing competitiveness to the environment of enterprises. It is stated that new entrepreneurial movements would promote productivity and would put pressure on the improvements of efficiencies of the organizations, markets, sectors, etc...Then the outcome would be the competitiveness in the economy, which would mean new enterprises, new job opportunities and decrease in the unemployment rate (europe.eu, 2007). Thus, all those mentioned proves that, in today's world, countries which consider economic development cannot ignore 'entrepreneurship.'

As a result, considering the 'good relationship' of entrepreneurship with the economy, it is very clear that the countries should pay a great deal attention to entrepreneurship education and be careful about the approaches and policies they implement regarding the issue. At this point, as a high school teacher caring about education and considering the role of entrepreneurship, it was not surprising to start my research journey by asking whether there is an entrepreneurship education in vocational and technical high schools in Northern Cyprus and how relevant it is to the context of Northern Cyprus and if not relevant how it could be improved.

Having searched on the matter, I have found out that entrepreneurship is taught as an elective lesson at grade 10 students. It is one of the courses under the professional development courses. Entrepreneurship module is the material of the course and it has been developed through the project of Vocational and Technical Education System Project (MEGEP).

Analysing the current entrepreneurship module with the purpose of seeing how relevant it was to the Northern Cyprus environment, I have found out that although general descriptions are discussed, the main focus in the module was on the entrepreneurship in Turkey. So, it needed to be re-designed to make it more workable for the unique environment of Northern Cyprus. Thus I have defined the title of this project as an investigation to improve entrepreneurship module in vocational and technical high schools in Northern Cyprus.'

#### Aims of the Study

The main aim of this project was to improve the current entrepreneurship module in order to develop a good framework for vocational and technical high schools in Northern Cyprus. Besides the main aim, the project sought to foster entrepreneurship and to present a guide that would assist policy makers and the other researchers who planned to conduct a project in the field of education and entrepreneurship. Considering the aim of the project, the main research questions addressed to the followings:

RQ1. What are the deficiencies of the current entrepreneurship module?

**RQ2**. How can these deficiencies be improved?

**RQ3**. What kind of framework is needed to adopt to develop a good practice?

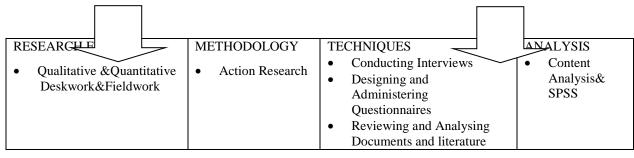


First of all, I have identified the deficiencies of the entrepreneurship module, in doing so I intended to find out how the deficiencies could be improved. In an effort to accomplish this, I have decided on the stakeholders of this project, have chosen my methodology taking the primary aim of the research into the consideration, then I have decided on the data collection methods and prepared data collection instruments. After undertaking my research following the action plan for my project, I have analysed the findings. The next step included the examination of the required changes and re-designing the module with the light of outputs. At the end, the new module was implemented at vocational and technical high schools and it was completed after the final edit with the suggestions taken by the teachers who used it in their classrooms.

All of the grade 12 students of vocational and technical high schools who had studied the current module when they were grade 10,teachers who had used the current module, the member of the committee that approved the module as a teaching material, the chair of the department of the School of Computing and Technology at Eastern Mediterranean University, the top executives of the civil society organizations including the chair of the Union of the Chambers of Cyprus Turkish Engineers and Architects, Chamber of Commerce, Chamber of Industry, the representative of the state planning office and Deputy leader of EU VETLAM Project and Vocational Education Professional were the main stakeholders of this project. They have been selected as stakeholders as they were the right addresses to find out answers to the main research questions and to achieve the aim of the project.

#### Methodology

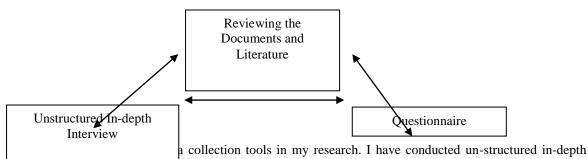
# Table 1. Summary of Methodology. **AIM** to develop the module in order to develop a good framework for vocational and technical high schools in Northern Cyprus **OBJECTIVES** to gather information in order to identify the deficiencies and formulate solutions to improve those deficiencies to analyse the results to identify a good framework in promoting learning about entrepreneurship and to draw adequate conclusions and recommendations for policy actions



I have discarded others and used action research. There were three reasons behind that. The first one was about its nature in bridging the gap between theory and practice. I believe that this is an important point as bridging the gap between theory and practice increases its applicability and acceptability as it doesn't isolate the real context from theory while trying to bring improvement to practice. It takes the authentic world into

consideration as it is, enabling the researcher to produce concrete and adequate solutions to the problem. The second reason was, it is about taking steps towards change and bringing development to the systems. My personality who always looks for bringing developments to the systems it belongs to, is very much associate with the action research considering this feature. The third reason was, its having a collaborative nature. In my opinion the significance of this lies on, involving the voices of people working cooperatively together in order to improve a situation and bring workable developments. This nature of action research is linked to work based program as the researcher attempts to bring changes to the work place.

In order to reach reliable and valid results in the findings I have used combination of three research techniques which are reviewing the documents and literature, interviews and questionnaires as shown in Figure 2.



interviews with the teachers, successful entrepreneurs, the top executives of the chambers, the representative of the state planning office, and the deputy leader of EU VETLAM project. I have administered questionnaires to the students and reviewed the documents and literature.

#### Significance of the Study

This project is significant as it puts great deal of contribution to the education by bringing a change with the re-designed entrepreneurship module which could also be identified as the evidence of achievement for this project.

I have collected information from too many sources while conducting this research. In order to collect all these information I visited relevant institutions and reached the data considering the ethical considerations. Besides theoretical richness of the project, I collected data from all relevant partners who could be identified as the best sources of practical information. Thus this study is important as it covers both theoretical and practical data which improved the level of authenticity of the new module and made it more usable and real for the Northern Cyprus business context.

The project did not only fulfil the needs of the teachers and the students and build more effective learning environment, but also it fulfilled the needs of the business world and the entrepreneurs. Therefore this project closed the gaps between the real business environment and the class environment.

This project is important for the future and economic development of the Northern Cyprus. With the new module, young entrepreneurs, who were more aware of the Northern Cyprus business environment, would be graduated. Therefore it is not only an investment for today but it is also beneficial for the future.

## **Research Findings**



Analysing the interviews and the questionnaires, the findings could be summarized in the table below:

	-Northern Cyprus and Entrepreneurship		
Content	Sectors in Northern Cyprus		
	Real life stories of entrepreneurs in Northern Cyprus		
	The Skills(Ability to telescope, future orientation, opportunity and goal oriented)		
	Laws in Northern Cyprus		
	<ul> <li>Procedure for establishing a business in Northern Cyprus</li> </ul>		
	Needs of Northern Cyprus		
	Module that includes examples from Northern Cyprus		
	Module that considers the people, geographical structure and the level of the students		
	-Feasibility studies		
	-Information about an entrepreneur		
	-Presentation of the role and the importance of entrepreneurship and		
	- CV writing techniques		
	- Professional development		
	-Knowing yourself		
Method	Inviting entrepreneurs to the classroom and organizing visits to workplaces		
Structure	-Explaining topic point by point makes the subjects confusing for students		
	-Topics are explained in a detailed way		
Activities	EU practices		
	Content base		
	NEW MODULE		

After I have determined the content, I have made my plan about collecting the necessary data. I have visited all the institutions, used web-sites and searched on the books. In order to re-design the module in a correct format, I have followed the guider of how to write a module. After I have re-designed the module, the teachers have used it in one semester and I have made last changes according to the results of the interviews. In these interviews all of the teachers expressed in different words that the new module is a good work.

## Conclusion

The results of this study constitute a rich setting of future developments for Northern Cyrus Education System, specifically for vocational and technical high schools. It has provided considerable feedback for the policy makers of Ministry of Education and Culture in Northern Cyprus in this field. Overall the research conducted provided valuable findings and identified the areas that require changes in order to create a more beneficial learning environment and sustainable economic development in Northern Cyprus.

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## E-PORTFOLIO APPLICATIONS IN EDUCATION

Assit.Prof.Dr. Nilgün TOSUN Trakya University Faculty of Education Edirne, TURKEY nilgunt73@yahoo.com

Teacher M. Fatih BARIŞ Tekirdağ Teknik ve Endüstri Meslek Lisesi Tekirdag, TURKEY mfbaris@yahoo.com

Abstract: Continuous developments in education technologies are accompanied by diversity of methods and applications in education. The process starting with computer-assisted learning is now in a different dimension via increasing internet possibilities. Another important factor in this issue is that learnercentred approach has been accepted widely and become widespread. Transition from portfolio to eportfolio is one of the current examples to be given about changing process in education technology. The approach which places learners and assignments at the centre has turned into a "learner work file" or in other words "portfolio" format through developing. Portfolio is a big assignment and study collection where a learner collects his studies. The concept of "e-portfolio" has replaced portfolio as information and communication technologies have become main components in education. In this study, information will be given about types of e-portfolio and using them in education.

Key words: Portfolio, e-portfolio, education technologies, electronic work file, learner work file.

#### Introduction

While information societies have the every kind of power today, revealing a profile of thinking and producing individual primarily depends on an effective education system. The failure of the students who learn superficially, memorize and are listeners in the real life conditions is a known fact. In addition, it is not expected to realize the transformation and production of information in a society including these individuals. Training students who can relate the new information and the skills to the old ones, rely on themselves and are participating, thinking, investigating is the indicator of an effective education. Effective education can be realized with the different approaches according to the technological developments, expectations, and the needs of the society. When considered from this point of view, learner-centered education is a significant approach accepted in the recent years. Because, learner-centered education is a very effective phenomenon for becoming an information society. In this approach, individual development, learning the learning and active participation of the students are basically taken into consideration. Also, prioritising the assignments and studies of the students are among the principles of this approach. Student-centered education; the education period for the individuals who have the skills of scientific thinking, have learnt to learn, productive, can reach the information and use it, have communication skills, have adopted universal values, use the technology effectively and have realized themselves is a reconstruction which will supply the participation of the students at every stage (M.E.B, 2003). As can be seen from the definition above, student not only learns and listens but also participates actively and takes responsibility. S/he learns via questioning and discovering. Also, s/he gains experience in both individual and group work. Furthermore, s/he can apply what s/he has learnt in the school environment to the real life conditions. Since the evaluation is realized according to the learning process, criteria and individual

development of the student, it has been much more objective and healthier in such an educational approach (http://talimterbiye.mebnet/ogrenci%20merkezli%20egitim/ogrencimerkezliegitim.html).

Information and communication technologies are one of the significant contributors of learnercentered education approach. Besides the traditional stationary, computers, datashow, portable memories and modems, iPods and tablets, and also with the technological tools like internet have started to be utilized. Especially, with the introduction of the internet to the education life, some educational tools have been replaced by the electronic versions. For example, the portfolio which is defined as a large collection of the student's homework and studies has been replaced with e-portfolio by the development of information and communication Technologies. E-portfolio is also known as "electronic business zone". Development in information and communication technologies, the increase of the numbers of users in these technologies, easily adaptation of the new generation to these technologies has facilitated the use of e-portfolio. E-portfolio that is foreseen to be used in the coming years as an indispensable part of the education has been used as both an education tool and evaluation material in many countries. With the development of infrastructure of the education technologies, the increase of portfolio applications will enable learner-centered education approach to improve.

## The Importance and the Aim of the Study

In this study, the advantages and disadvantages of using an e-portfolio for the students are mentioned and explaining the concepts of portfolio and e-portfolio, the differences and similarities between them are demonstrated. Sample e-portfolios are presented as well as presenting the benefits of using e-portfolios in education. Thus, it was aimed to form a base for e-portfolio concept and explain that e-portfolios could be used in different format in education. In accordance with these aims, this study will be an important and a good resource for the special interest group.

#### **Method of Research**

For the information related to the use of portfolio which is the topic of the study in education, the national and international literature review was realized. The study was realized by compiling the obtained information from published and electronic resources.

## What is E-Portfolio?

It is seen that the word portfolio comes etimolgically from the originally Latin words "portare" (to carry) and "folium" (paper,sheet) which came together as "portafaglio" in Italian and then it was formed as "portfolio" in English (OED, 2007). Portfolio is a collection or a personal archive which indicates the development process of the student by examining it from the very beginning in detail with the outcomes. Arter and Spandel (1991) define the portfolio as the reflection of the students' studies with the aim of presenting their success in one or more areas. According to another definition, portfolio allows students to evaluate their own work, provides students to see their personal development and creates a basis for evaluating their performances

individually (Grace, 1992). Collins (1991) defines this issue with a pedagogical approach that portfolio is learner-centered and enables the student to indicate his/her individual efforts, achievements, developments in one or more learning intervals (Gun & Peddie, 2008). According to another definition, portfolio is a personal which the person depicts and documents his/her successes (http://www.wikipedia.com, 2007). At first, while the studies used to be realized on papers were archived in general, by the development of the technology, they started to keep these studies in electronic environments such as tapes, floppy disks, CDs, DVDs and removable disks. This type of portfolio which is more effective, striking and appealling with the audio and video materials is called as electronic portfolio (e-portfolio). Even though it is called as 'Digital portfolio' or 'Digital Development (product) File', generally the term e-portfolio is preferred. According to portfolio expert David Niguidula, e-portfolio is software which helps students to present their mastery and skills in a richer way.

As Özyenginer (2006) quoted, NLII (2003) defined the portfolio as an authentic and reliable collection obtained from development of an individual and a group over time in accordance with special purposes designing with the aim of presentation to one or more than one person and reflection.

"the question 'What does 'e- prefix' add to the term of portfolio?" can be answered by using the results of comparison portfolios and e-portfolios. Accordingly e-portfolio has extra features such as;

- a wider context
- serving different groups (individual, student associations, regions and cities, social communities)
- archiving
- link building /thinking
- cooperation
- reorganization
- publication

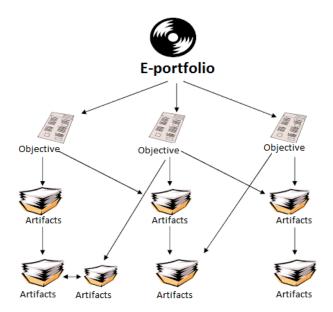
A linear organization in which the works and the targets are liste done by one is available in the traditional portfolio (Figure. 1).

**Figure 1.** Linear structures of traditional bag development file (Heath, 2005).



Figure 2. Multifaceted Structure which can establish complex and multiple connections of Electronic (Digital) Development File (Heath, 2005).





There is a hierarchical structure that allows multiple and complex relations in e-portfolio (Figure 2).

As Çayırcı (2007) quoted from Downling (2000) and Chang (2001), similarities and dissimilarities between portfolio and e-portfolio are like in the Table 1.

**Table1.** The similarities and dissimilarities between portfolio and e-portfolio

Table1. The similarities and dissimilarities between portiono and e-portiono			
Similarities	Dissimilarities		
-Using goals -Process operation -Security problems	Media-Communication Environments		
-Learner-centered	Portfolio E	-Portfolio	
-Exchanging ideas			
-Continuously updating	- Storage Problems	-Application	
-Reflective thinking	- Exchanging ideas is easier	-Easy Sharing	
-Multimedia	among people	-Exchanging ideas with broad masses	
-Presentation of the	-Cost of Cheap Management	-Focusing on product rather than process	
studies, reflective learning,	-Easily Publishing of Studies	-Accessing and updating anywhere	
reflection and sampling		-The need of computer and internet	
-Ensuring the transition to life-		infrastructure to use it	
long learning		-Limited access opportunity	
-Emphasizing the successful			
results			

According to Table 1, portfolio and e-portfolio show similarities at some points and show dissimilarities at some other points. In spite of similarities and dissimilarities, all portfolios serve for the common aims. Continuously developing information and communication technologies, easily obtaining them, and meeting of new generation with these technologies as soon as they are born cause the portfolio to become highlighted. It has been no longer difficult to use e-portfolio in the education of such a generation that uses technology properly.

## **Use of E-Portfolio in Education**

"Why should e-portfolio be used in education?" this question can be answered with the words of Anne Gilleran 'People should introduce themselves digitally in a digital world' can be an answer. EIfEL (European Institute for E-Learning) answers this question as 'in an information economy, information workers need tools of personal information management (http://www.eife-l.org). Zeynep Kazan stated in her master thesis (2006) that Australian teachers with the network of Australian State Schools explained their aims at using development files in education (Demirli, 2007) as follows:

- Defining and evaluating the student as a learner
- Forming tasks and paralel structures considering learning goals
- Making students reflect what they have learnt
- Encouraging students to talk about what they have learnt
- Showing the students what, how and why they learn
- Providing students with help and information during the transition between levels.
- Developing evaluation techniques.

We can count many reasons for the use of e-portfolio in education besides the ones listed above. The main ones of these are storage/access, multi-media usage, computer usage skills and evaluation (Regis University Electronic Portfolio Project).

Storage/Access: Information in e-portfolio is stored in digital environments such as hard drives, server, and portable drives. This also means a very physical space. It offers the opportunity of storing the information full of folders in large volumes in asmall space. However, the required information can be accessed very quickly and easily thanks to simple tools to be added to the e-portfolio. The lost information can be regained easily and the new study of the student can be easily added to the e-portfolio.

Multi-media Usage: The paper-based portfolios both have low interaction and are not the efficient environments to show the various abilities of the students at the same time. In e-portfolio, the user can upload multi-media objects such as audio, images, animation, moving images to his/her new study so this makes his study more effective as well as allowing his/her abilities to present.

Computer Skills: While students are forming their e-portfolio contents, they can also improve the ability of using computers.

Evaluation: The study of the student is evaluated with the pre-determined standards and critera in e-portfolio. This makes the student obliged to make a specific plan and continue his work in accordance with this way.

E-portfolio has been used developing since 1990s and become widespread depending on the developing technology. Many universities try this new education and evaluation approach and do academic studies on this topic. Kazan (2006) has listed the advantages and disadvantages of e-portfolio as follows.

## Advantages

Electronic Development Files Strengthen the Active Learning: Learner-centered education and active learning occur when the students take their own learning responsibility and manage their own learning. Development files

also help students have goals relating to learning and examine these goals regularly and take their own responsibility.

Electronic Development Files motivate the Students: Knowing to present the studies they have done to the audience, students create their studies more carefully and thoughtfully. At the same time, accessing the previous studies, they can take steps more consciously evaluating themselves.

Electronic Development Files are Feedback Tools: The efficiency of learning goals forms a feedback system which allows the effectiveness of learning strategies and the clarity of information presentation. This gives feedback not only to students but also to teachers, school, parents, and other people allowing the information exchange between them.

Electronic Development Files are Evaluation Tools: They form a very effective method which reveals the students' studies and learning process can be measured in a determined way from the beginning to the end according to the target behaviors. Evaluation becomes a part of learning. They also allow the research elements, education and guidance activities, students' studies and products and at the same time studies done outside the education system to be evaluated more integrated and understandable.

Electronic Development Files allow the Students Studies to be Shared: The dynamic nature of internet pages and easily sharing feature of electronic media enable the student's studies to be shared with a wide audience in a meaningful way. Information and material sharing between the students who have done the similar studies will remove the workload and unnecesarry repetition. Development files improve students' responsibility and autonomy sense. It is a better way of self-assessment, self-expression, monitoring and updating changes.

Electronic Development Files improve the Concept of Lifelong Learning: They also allow the students to review and renew his/her every information and skill accumulation during lifetime.

Electronic Development Files are Discussion Tools about the Acts of Students: Development files are concrete tools reflecting the communication between the teacher-student, parent-teacher, parent-student, and studentstudent.

Development Files allow complicated arrangements for the studies to be documented effectively: This is one of the unique features that electronic development files offer.

Thanks to links, whenever wanted, they can pass from one step to another or to retrospective studies within the process. Studying in this way becomes more creative and offers many other changes.

Electronic Development Files allow the Students to Recognize the Technology: They make the students who are far from the technology close it and improve the skills of using technology.

Electronic Development Files can store a Wide Variety of Data: Electronic development files have a very flexible structure. Students can create and store their own oral and written work, image files, artistic work, and animations via them. This expands the student's point of view as a learner and makes the learning more exciting.

Electronic Development Files are easily Accessible: They are stored in a way that students, teachers and parents can easily access every time. Furthermore, they can be accessed from all over the world and shared by everybody via internet.

Electronic Development Files take up less Space and are Portable: Student products can be stored and carried easily in the memories which have high capacity with the current technology but have a very small physical size.

It is easy to save, copy, back up, and update Electronic Development Files: Student file develops with the student himself/herself. In the direction of this development, the nature of electronic development files is convenient to add something and make changes easily in a short time.

#### **Disadvantages**

In addition to the advantages mentioned above, e-portfolios have some disadvantages as well. They can be cited as follows:

- -Self-learning methodology that is available in the nature of the development files depends on the maturity and motivation of the student. For this reason it may not be convinient for the all types of learning styles.
- -If the teachers do not direct the students enough about reflection and not support them, students cannot be sure about how reflections they will make and this can cause shyness.
- -Development files consist of both process and product. If necessary time is not spent on the process of development files, the resulting product (outcome) will be poor. In this respect, development files are timeconsuming.
- -If the necessary software, hardware and devices are easily obtained to create electronic development files, it can be costly for a person to obtain them by himself/herself.
- -Creating electronic development files requires technological knowledge and skills.
- -Preparation process of electronic development files can sometimes be stressful and annoying.
- -Creating electronic development files takes time.

Gülbahar and Köse (2006) list the advantages of using e-portfolios in education as follows:

- -The process of creating e-portfolios encourages revealing clearly all learning achievements and expectations of all individuals in school.
- -Students are supported to reflect their learning levels during the process of creating their e-portfolios.
- -Teachers can have an opportunity to give feedback relating the studies of students and direct them.
- -E-portfolios allow students to indicate their personal developments by organizing learning materials.
- -Students can use multi-media components according to their will so they can improve their information and communication skills.
- -Students studies can be shared by teachers, friends and other related people comfortably and can have a shape to give feedback.

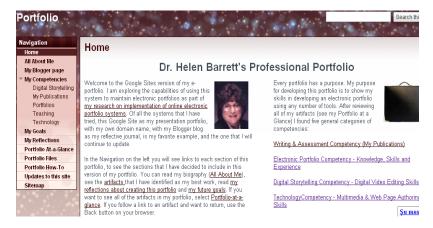


In spite of the disadvantages, studies regarding the use of e-portfolios in education still continue. In this context, it is possible to encounter with many amateur and professional samples of e- portfolios. Some examples of e-portfolios designed with educational aims are as follows:

Example 1. An e-portfolio examining digital economy prepared by Adrian Kenett.



Professional e-portfolio of Helen Barrett who is one of the pioneers of e-portfolio Example 2. (http://sites.helenbarrett.net/portfolio/).

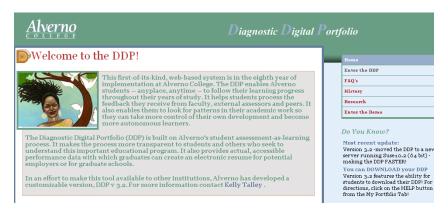


Example 3. Student interface of e-portfolio prepared for an academic Portugal study in (http://eportefolio.ese.ipsantarem.pt/repe\_en/).





Example 4. A sample e-portfolio in which students can introduce their own studies prepared by Alverno College (http://ddp.alverno.edu/).



The number of these samples is increasing day by day. E-portfolios are getting more important in traditional, distant, and mobile education. Additionally, under the umbrella of lifelong learning, it is possible to encounter e-portfolio samples not just in schools but in workplaces and education centers. Besides the examples given above, e-portfolios can be examined in the following sites.

- http://eportefolio.ese.ipsantarem.pt/repe\_en/
- www.efoliomn.com
- www.cte.jhu.edu/epweb
- www.vismt.org
- www.union.edu/PUBLIC/ECODEPT/kleind/conncoll/
- www.ddp.alverno.edu/
- www.iwebfolio.com
- http://portfolios.education.wisc.edu/
- www.stolaf.edu/depts/cis/web portfolios.htm
- www.taskstream.com

## Conclusion

Changing and developing by means of technology, the term portfolio which has been used since the 1970s has been called e-portfolio. It was previously used for promotional purpose, later on; it has taken place in many different areas. After the 1990s, having used for educational purposes, e-portfolio is actually an advanced homework archive. According to another definition, e-portfolio is a collection that offers and supports personal development. The student can monitor his/her personal development and see the development stages by using e-portfolio. S/he gains self-confidence and responsibility with individual and group work. Furthermore, s/he can adapt the information and skills s/he has learnt to his/her private and business life in the future. Students can improve their computer, internet and information literacy skills using e-portfolios as well. It is an important issue to create the content and configuration of e-portfolio platform to realize these returns. For this reason, a lot of software and hardware are needed. Although there are free software and hardware, a lot of commercial software and hardware are also available in this area. It is an important issue to create the

content of an e-portfolio as well as creating it. It will not be hard to motivate the student with a well-prepared e-portfolio and content. Additionally, motivation will bring success. Eportfolio, allowing the student to become in the center and introduce his/her products, will be a tool that many educators will prefer more in the coming years. Most probably, high school and higher school graduates will be using e-portfolios instead of their CVs in their job applications. For the next researches, different types of courses can be taught with e-portfolio support in different education levels. The effect of e-portfolio on student's academic success and skills can be explored. Additionally, it will be very easy to use e-portfolios for a new generation that lives closely with information and communication technologies. In order to encourage the students to use e-portfolios, all these applications should be graded. An understandable language should be used in interfaces and contents and interfaces should be created according to the design rules. If it is possible, the effectiveness of e-portfolios can be increased integrating in the social networks (blogs) that new generation commonly use such as Facebook, Twitter, etc.

E-portfolios can also be utilized in workplaces for different purposes besides education. For example, business products of workers such as projects, reports etc. can be archived with e-porfolios. It can be used to determine the incentives like promotions, premiums, upgrade. In addition to these, it can be used for documentation of the past experiences in business applications.

The knowledge and skills of the managers and educators regarding this issue should be primarily developed to use e-portfolio in education and business world effectively and desirably. They should be persuaded that using e-portfolios will be profitable for themselves, students, and employees. Designing, developing and introducing of e-portfolio and its content should be systematic and suitable for the criteria. In this way, a wide adoption and productively use of e-portfolio by the society will be possible.

P.S.: Some part of this study was presented as a paper named "E-portfolio Applications in Education" in the 'New Horizons in Education, 2010 Conference.



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