

THE ASSESSMENT IN ART EDUCATION THROUGH E-PORTFOLIOS

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ABSTRACT

Art education should reflect students' daily life, their personal, social and cultural values, and their visual environment which is mostly being digitalized nowadays. As digital technologies change our world rapidly, and creates new ways of understanding, art educators need to develop students' critical understanding through integration of digital technologies. Art educators also need to assess the visual qualitative products of art education to examine the process of learning. E-portfolios can be suggested as a tool in this process. They provide an easy to use, storage and management platform which can carry huge amount of information including texts, images, sounds, and videos; and also retrieve from the limitations of lack of time. The main purpose of this study is to examine the new strategies, integrations and implementations of e-portfolios used for assessment in art education. The study was conducted within the literature review.

Key Words: Art Education, Digital Technologies, E-Portfolio.

INTRODUCTION

Art education is one of the key element for students to develop understandings about their inner-self perceptions as an individual and to find their positions in social life as a part of the community. Therefore art education should reflect students' daily life, their personal, social and cultural values, and their visual environment which is mostly being digitalized nowadays. The possibilities of new technologies are endless. Technology will continue to evolve into daily life. New technologies refer to the production of information, visualization, media, and communication systems, networks, hardware and software devices in contemporary societies. Individuals become enable to inquire and examine ideas and issues to solve problems using new technologies and a new way of thinking (Krug, 1999, p.2). Education, and art education in specific, can't be considered not effected and not transformed in the digital world we are living in. As Krug (1999) states, personal experiences and culture are constitutive of who we are as teachers and play a role in shaping our pedagogic practices (Krug, 1999, p.2); so digital visual culture we are experiencing these day compels art educators to explore strategies that expand pedagogy into the contemporary spaces of the student interest (Hostert, 2010, p.91) and art educators are capable of seeing new pedagogical possibilities when working with digital technology in curriculum (May, 2011, p.39).

As digital technologies change our world rapidly, and creates new ways of understanding, art educators need to not use the current art curriculum directly but also develop students' critical understanding of the world and art, through integration of digital technologies. Art educators also need to assess the visual qualitative products of art education to examine the process of learning. Researchers suggest art educators employing the portfolio as a tool to have better ideas to modify their learning environment and instruction (Wang, 2010). Recently e-

portfolios begin to take the place of traditional portfolios. The usage of e-portfolios in the field of art education is an important area which deserves more attention, considering its importance for the individual, artistic and professional developments of art students, pre-service and in-service art educators.

The Term of E-Portfolio in Art Education

Portfolios occur in many different areas in various types; in business, art or education, and prepared in traditional or digitally. A portfolio simply means an organized presentation of an individual's education, work samples, and skills. An artistic portfolio is a sample of an artist's work or a case used to display artworks (Wikipedia Portfolio, 2012). For educational purposes, the definition of a portfolio is more complicated; teachers prepare portfolios to develop their teaching or job applications, students prepare them to develop their learning, pre-service teachers to reach both above, parents want to see them to learn about their child's learnings, and institutions need them to learn their own progress. As Abrenica (2012) stated, institutions, teachers, students and parents could follow student development by collecting and organizing student work samples over a period of time. In addition to understand and develop the learning environments or evaluation of courses, portfolios also provide a method to students' artistic development in art education. However the usage of portfolios in art education is not a new idea, they have received increasing attention in the past decade.

A typical portfolio prepared by a pre-service art education teacher, consists of a curriculum vitae, an autobiography including a statement of one's educational philosophy, national and state standards based art curriculum developed, art classroom observations written by students, interviews with in-service art teachers, coursework and relevant activities, review of literature for relevant theories and practices, case studies, presentations, a list of professional organizations in which being a member, photos of creative works or projects, academic transcripts, and letters of recommendation. In summary, a portfolio provides comprehensive frame of a pre-service teacher than a simple resume or transcript (Cho, 2007, p.69). For a K-12 or high school student, a portfolio generally means to collect artworks for a period of time. The term of "portfolio" can turn to the "folio" in this time, which refers to an entire body of both strong and weak, or finished and unfinished works of students. So portfolios are used for storing 'best' works of art. (Bain Bittel, 2001, pp.8-15). After all, portfolios require a great amount of time to collect, space to keep and energy to manage the works of students. Considering the student counts in the art classes it easily can turned to a challenge for teachers educating in K-12 or high school classes. Organization is another problem when it comes to keeping too large works. Also the cooperatively created works caused some issues to whom would kept them. E-portfolios can provide new solutions and opportunities for those problems students and art educators have to face. An e-portfolio is a tool for easy storage and management; it can save many time and spaces for classrooms (Lu, 2007), as they solve the sharing problem among the cooperatives.

The digital portfolio is in accordance with the contents of traditional portfolio, but created and managed technology based. There are many kinds of e-portfolios depending the platforms they have created. In a more traditional way, works can collected using photograph machines, scanners or video cameras and burnt into a CD, DVD or archived in a USB. Some can use web pages to create an e-portfolio if they know how to use specific program or softwares. Another way to create an e-portfolio is using blogs as a portfolio platform. A redesigned table given below is summarized the features of various kinds of portfolios:

Table 1: The comparisons among the traditional portfolios and e-portfolios (Referred from Lu, P. (2007). The Integration of Blog Platform and E-portfolio in Art Assessment, *International Journal of Arts Education, InJAE* 5.2, ©NTAEC, p.160)

	Portfolios used traditional platforms	e-Portfolios used digital platform	e-Portfolios used webpage platform	e-Portfolios used blog platform
Way of editing portfolios	Paper	CD, DVD, USB and computer	Computers and internet	Computers and internet
Difficulty at editing and modification	Easy	Rather difficult (problems about burning CD's, DVD's or loss of data)	Difficult (needs knowledge about specific softwares, uploading issues and etc)	Easy (Blogs are free and easy to use)
Way of saving portfolios	Needs lots of space and the risk of getting lost	Not as much as traditional portfolios but need a space any way	Digitalized storage doesn't occupy any space	Digitalized storage doesn't occupy any space
Way of portfolio requesting	Not easy to request and access	Not easy to request and access	Checking web pages by order are not so easy to request	Request by time, themes and key words
Way of portfolio sharing	Difficult	Rather difficult	Difficult	Easy
Way of portfolio feedback	Difficult	Difficult	Difficult	Easy (also interactive)
Way of portfolio subscribing	None	None	None	Easy (and free most of the time)
Multimedia functions	Text and images	Multimedia can be added (Text, images, sounds, videos etc.)	Multimedia can be added (Text, images, sounds, videos etc.)	Multimedia can be added (Text, images, sounds, videos etc.)

Krug's definition is perfectly summarizes all said; 'An e-portfolio is an electronic database or a series of webpages specifically developed collaboratively by and for students and teachers to review and assess student performance and understanding' (Krug, 1999, p.2). The key words can be specified as 'flexibility', 'collaboratively', 'accessibility', and 'chronologically' for all types of e-portfolios. They are archives of learning, discovery, progress, achievement and reflection. Besides of the advantages of using e-portfolios all mentioned heretofore about being one each perfect storages as time and space savers, holding huge amounts of data in various medius, being interactive and collaborative, they also serve to enhance skills in technology. According to Abrenica (2012), the teacher and student would gain experience by creating, selecting, organizing, editing and evaluating the e-portfolios. Students would feel a sense of accomplishment and empowerment by displaying, sharing and presenting their e-portfolios to teachers, classmates and parents. And this brings the idea of importance of assessment through e-portfolios in art education because the most distinctive feature of e-portfolios is to transform learners in to both evaluative and evaluaters.

Assessment Through the E-Portfolios

The process of criticism, interpretation and evaluation seems to be difficult in the art world because of the nature of art in accordance with the similar purposes in other disciplines. When it comes to art education, assessing by quantativie methods with grades, it becomes more difficult because of the qualitative nature of

the process. So, the evaluation of artistic works of students becomes one of the most difficult task for art educators. There are some complications for art educators to contend with about the subjectivity, lacking of time and space, the methods used in assessment, or transparency. The “transparency” means that the assessment in art education should be observable for teachers, students, school administrations and parents. Portfolios, and e-portfolios especially, can provide practical and possible solutions.

Many argue that portfolios are an effective method of authentic assessment and that they more holistically document students’ growth as well as their thinking process. Since 1980s, there has been a great deal of interest in the portfolio as an alternative assessment tool. Gardner and Eisner suggest portfolio assessment method in the arts. The introduction of the portfolio idea has made an enormous difference in students’ perceptions regarding evaluation. Students begin to look at what they are doing and how they are developing rather than simply worrying about what the teacher is going to think about the final product (Bain Bitteli 2007, p.15-16). As Lu (2007), stated that e-portfolios allow teachers and students to better assess students’ artworks for evaluation purposes and for monitoring development and achievement levels (Lu, 2007, p.156). Most of the time ‘Rubrics’ are used to assess the art works included by e-portfolios. A rubric is a checklist or chart helps students understand what is expected in a final product. Usually presented in the form of a matrix, with the required components of the performance being listed on one axis and the different levels of performance on the other (Cennamo, Ross & Ertmer, 2009, p.377). Rubrics can be manipulated for the different subjects or courses to be used for tracking student progress. They also empower and encourage students as they know, at that point, what is expected and how it is evaluated.

METHODOLOGY

The main purpose of this study is to examine the new strategies, integrations and implementations of e-portfolios used for assessment in art education. The study was conducted within the literature review. Written and online sources, reached in English and Turkish, examined for the recent applications and examples related to study subject.

FINDINGS

Bain Bittel (2007), mentioned a database in her dissertation called ‘Portfolio Clearinghouse’, and clarified something interesting that the base ironically contains no examples of portfolio usage in conjunction with art, art education, fine arts, or digital art in higher education (Bain Bittel, 2007, p.16). The link she gave is not active today to check the last situation but there is a similar condition has to be faced for whom related to e-portfolio usage in art and art education, especially in Turkey. Countless of studies can be reached in any quick glimpse on the subject of usage e-portfolios in education. Although the literature review related to the subject can give accessible academic researches in written or online in Turkish, the counts of studies are limited in comparison to English. There are only a few academic researches studied about e-portfolios and their usage in art education, in Turkey. Two of them given below are investigated the digital portfolio assessment process in different levels of art education. The word ‘experiments’ means in the following subtitle that researches or platforms in different countries; ages or grades of study subjects; methodologies; and technologies. The samples in this study are selected considering their approaches about e-portfolio application, assessment and platform. The first and second experiments are from Turkey, and the researchers used mostly the quantitative methods and the platforms used for e-portfolios are digital but not online; third one is from Taiwan and uses the platform of blog with e-portfolios, and last one is not an academic research but a platform about a software online which was thought, might be useful for the art educators want to use such a system.

Experiments with E-Portfolios in the Field of Art Education

Dikici and Tezci (2006), investigated the effect of digital portfolio assessment process on the drawing and story writing performances of the 14-15 ages students. A pre-test, post-test model applied for the study in which an

experimental and a control group were used to gathering data from 52 high school students. A digital portfolio assessment rubric was prepared for evaluating. The quantitative results of the study indicates that digital portfolio assessment improves student performance. Determining assessment criteria improved the cooperative working so the learning environment has developed socialization of the students positively. There are some difficulties experienced by the students about using information and communication technologies, and burning the huge sets of data into the CD. However, it can be said that interaction between student and teacher during the process increase the students' critical and creative thinkings (Dikici & Tezci, 2006, pp.46-54).

In another study researched by Dikici (2009), aimed to investigate digital portfolio assessment in higher art education with the combination of self, peer and instructor ratings. Data collected from 34 undergraduate students in the research. They asked to prepare their portfolios in computer, in 4 weeks. The content of the portfolios is creating scrapbooks about the artists they've chosen from the Renaissance to today. They also allowed to use some programs and softwares such as Word, Paint Brush, PowerPoint presentation, Illustrator and Photoshop and also the various internet sites. They used scanners to transfer the works, founded in magazines or newspapers, into the digital environment. Students stored their works in e-mails, CD's, DVD's and USB's. Digital portfolios evaluated using the rubric prepared by the students and researcher. Students evaluated the portfolios of their own and peers' at first and then the researcher evaluated all the portfolios. In the Quantitative part of the study the correlation of the scores searched for the relation between the self, peer and instructor. The lowest correlation values were found between the instructor and the peer, and the highest correlation values were found between self and the peer. Semi-structured interview method used to gathering data in the Qualitative part of the study. The problems of the study are, the lack of websites; and the hesitation of students assessing the self and peer. In the interviews, students judged the peer assessment to be less trustworthy than instructor assessment. According to Dikici, it might be caused by Turkish culture because a teacher as a superior authority figure considered the most trustworthy person. (Dikici, 2009, p.91).

Lu (2007), investigated the strategies and effectiveness of implementing blog as a learning portfolio platform for assessment. The term 'blog' is a contradiction of 'weblog' and is a web-based publicly accessible personal journal (Greene, 2004, s.214) which is including images, videos and text in a chronological order, and also allows readers to post comments in response to blog posts (Colson, 2007, s.168). Literature reviewed in this study and 111 six-grade students from a certain elementary school in Taipei were selected as research subjects to proceed the study of action research model. The duration of the study is 4 months and a rubric used for scoring as the questionnaires used to find out students' opinions about e-portfolios on blogs. The result of the study appears that the art portfolio assessment with Blog Platform has some positive effects on cooperative learning and peer assessment. The blog platform is equipped with the features of timely feedback and easy operation. If it is coordinated with e-portfolio, it will be most appropriate when used to keep records of art learning and process of art creation and to carry out instant interactions between the teacher and the students as well as the peer assessment among students (Lu, 2007, p.154, 156).

Creating e-portfolios by using software online is another option for art students, educators, and institutions. There are a lot of sites and most of them require payment to access. Digitation is one of those softwares but the reason it has selected for this study is that it gives lots of examples in the field of art education, especially in NaeA website. Digitation is an online system, which provides a web-based e-Portfolio and assessment management system to colleges, K-12 schools, and professional organizations. The web-based software allows faculty members to create and manage course content, as well as share and view student contributions. It began as a research project in the founder Jeffrey Yan's own classrooms in 2001, was commercially released and first launched in 2004 at Rhode Island School of Design (RISD) for the sharing of rich media works by the students. It has also notably expanded its client base and is used by faculty and student in several thousand schools in both the U.S. and abroad. Digitation e-Portfolios can be used for collaborative learning, sharing work, and showing future employers student creations. Digitation also features a static saved copy of an e-

Portfolio submission, so that a student's progress throughout a course can be archived and assessed over time. The electronic portfolio module includes a unique assessment system, which can be used for 'the metacognitive process of learning' in addition to a 'career showcase tool.' (Wikipedia Digication 2012). Digication Assessment Management System (AMS), solution for tracking, comparing, and reporting on student progress and performance gives faculty and administrators the tools they need to assess a class, department, or institution based on personal standards, goals, or objectives. The Digication AMS integrates tightly with e-Portfolio system, enabling students to record and showcase learning outcomes within customizable, media friendly templates. The assessment supported with integrated E-Portfolios, formative assessment (written feedback), summative assessment (score by Rubric), flexible workflows, rubric builder, standards/goals manager, and customizable reporting packages (DIGI[cation] Higher Ed, 2012). Examples of e-portfolios created with the system can be seen in the official websites of Digication (DIGI[cation] Home, 2012) and featured e-portfolios of art educators in website of National Art Education Association (NaeA, 2012).

DISCUSSION AND CONCLUSION

In United States and in Europe, art teachers prepare professional teaching portfolios, contain artifacts that show their credentials as a teacher, their lesson or unit plans, their personal artwork, and their students' artwork, for the job applications. She considers the electronic teaching portfolio is an excellent addition to hard copy portfolio, according to the responds of the conducted survey by herself, and referring e-portfolios should not be viewed as a replacement for a professional teaching portfolio. Art teacher applicants can provide a link to a website for their electronic portfolio or can give CD/DVDs for their portfolios (Buffington, 2011, s.11). There is a common understanding similar to Buffington's 'additional' e-portfolio idea. In Turkey, Art Education Departments don't have courses in their curriculums, related to portfolio method for pre-service art teachers. Some of the students, especially the ones in Graphic Design Major, have some assignments about creating a portfolio but they are not digital but in hard copies all. In Turkey, art teachers don't use teaching portfolios for job applications unless it's not a private school, but pre-service teachers in art education can use portfolios for their graduate education or for the job opportunities in other artistic fields. Moreover art teachers has to examine examples of portfolios to make their teaching process better; even they don't have to create a portfolio for job applications. Turkish Ministry of National Education also suggests portfolios in art education as an assessment tool in primary (MEB, 2009, pp.22-24) and secondary school visual arts courses (Peşkersoy, & Yıldırım, 2010, pp.205-219). Considering the importance of portfolio and impact of technologies nowadays, Art Education Departments in Turkish universities should place more emphasis on the method and platforms of digital portfolio.

The problem about the hesitation of students in the process of assessment in self and peer, Dikici (2009), mentioned in his study, rooted to the Turkish culture which the instructor considered authority figure and the most trustworthy person in class. It might not be the Turkish culture but educational approaches. The teacher centered approaches adopted in classes until a few years earlier. New approaches such as constructivist learning, student centered classes or schools without walls and technologies, are changing educational systems. Pre-service teachers given the education with new methods, use information and communication technologies effectively, think critically, they are more creative and have more self-confidence. It can be said that the hesitation in assessment process through e-portfolios, is about to fade away nowadays and e-portfolios given much more place in education in the future. Considering the results Lu (2007) reached, the usage of a blog as a learning portfolio platform can be suggested instead of the other digital ways to create an e-portfolio because it effects positively on cooperative learning and peer assessment. The hesitation in peer assessment can be removed through the combination of blogging and e-portfolios.

Blogs are easy to use, requires less information technology, and provide interactive functions. Teachers can use Blog to store teaching materials and students' portfolios as well as the final works, which can be later used as the basis of curriculum evaluation and preer assessment (Lu, 2007, p.159). When in digital portfolios burned in CD's or DVD's can't open a dialog; blog platforms give the chance of interactive discussions amog students, or between students and the teacher. Dikici (2009), and his students used e-mail platforms to communicate but it's between only two people most of the time, mailing lists and forwarding might be the solution for interactivity but blogs are easier to use at this point. The blog e-portfolio platform also provides feedback, which increases the interaction among participants.

In the offical website of digication, a user; James Liou states that "Digication provided students an amazing opportunity to showcase and share their experience with the entire school community, as well as future classes. Many students immediately said, 'I can do this' or 'I like this' and were excited by the opportunity to incorporate their personality into their e-Portfolio." (DIGI[cation] Home, 2012). This is an important feedback from a teacher who used and saw the actual benefits of the system. Most of the studies in literature mentioned about that the students have some problems or hesitations at using digital technologies; creating their works in new softwares or burning their portfolios into a CD or DVD. Liou's feedback shows that using an online system can solve these kinds of problems, and makes the learning and assessment process practical.

Anadolu University, the researcher eployed in, has an e-portfolio system for Open Education Faculty, Program in Pre-School Education and Program in English Language Teaching. In the two courses of the Program in Pre-School Education; 'Teaching Practice II' and 'Community Sevices' instruction and assessment of the learning process performed by the e-portfolio system. Students can register and use the system with a user name and password (ePortfolyo, 2012). Department of Fine Arts Education doesn't have any system like this but the university has the adequate infrastructure and logistics needed for such a process.

The e-portfolio can be applied in art assessment with the interactive model of the e-platform, and be implemented in formative and peer assessment. But the strategies of integrating e-portfolio in art assessment plan still need to further investigated (Lu, 2007, s.158). After 7 years of implementing e-portfolios in college level, Wang (2010), suggests some issues to be considered for future e-portfolio deveelopment. The issues are educational, aesthetic taste and visual quality, identity and authorship, communication and language, and technological. As Abrenica (2012), indicated the teaching methods and strategies will continue to change as research and technologies make advances so the means to assess students must also keep changing and developing regarding the issiues Wang stated. Using e-portfolios which include assessment, admissions, interactive resumes, student galleries, teacher resource sites, collaborative project portfolios, and research presentations (DIGI[cation] Home, 2012) can help keeping the pace with the technological developments in the field of art education. Turkish pre-service art teachers need to learn how they define rubrics to assess e-portfolio, and how they create and manage technology integrated portfolios to develop constructivist and creative learning environments.

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