

UNLOCKING LEARNING POTENTIALS: THE IMPACT OF DIGITAL PORTFOLIOS IN EDUCATION

Abstract

The chapter examines how technology is being used in education, with a focus on how digital portfolios are being used as a pedagogical tool to promote student learning. The present chapter investigates the use of technology in education, with an emphasis on using digital records (portfolio) as a pedagogical resource to increase student learning. The introduction focuses on how technology has transformed many facets of life and how it has integrated with language learning. It introduces the idea of a digital portfolio, which is defined as a digital collection of artefacts that represents the experiences, successes, and reflections of a person or organisation. The move from traditional hard-copy portfolios to digital portfolios is covered in the article, along with the advantages that were seen in students' learning behaviours and technical abilities. It highlights the need of integrative learning, in which students actively look for links between knowledge from the past and the present to promote deep comprehension.

Keywords: Technology in Education, Digital Portfolios, Pedagogical Tool, Student Learning, Integrative Learning, Language Learning, Digital Collection

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I. INTRODUCTION

The advent of technology more than twenty years ago has made our lives more meaningful in every way. In everything from military to business, entertainment to education, technology has enabled individuals to gain more knowledge in a world where everything is seamless, fast and mobile. For example, teachers and students are absorbing new trends and possibilities in the use of technology in teaching and learning.

Technological invention is an introspective medium that helps students to improve their overall abilities to master a new language, to learn about intercultural/cross cultural perspectives and interact with knowledge of the content. As technology allows students to build their reality in novel ways, a new method to teaching ESL is required in terms of high-tech development and student paradigm shift. As a result, technology has become an increasingly important aspect of the study of language. This is especially true because creating a digital portfolio may help teachers and students improve their multimedia technology abilities.

According to Lorenzo (2003), A digital portfolio is an online assemblage of objects that contains resources, accomplishments, and demonstrations of an individual, organisation, or institution. Text, graphics, or multimedia information stored on a CD-ROM or DVD may be included in this collection....(p.2)

The following are what Garrison (Garrison & Ring, 2013) identifies as components of what she calls a “true Digital Portfolio”:

1. It is digital.
2. It includes proof of the author’s skills, experiences and accomplishments.
3. It contains reflection.

The main objective of the present module is to assist you in understanding and facilitating the creation of additional learning portfolios that are designed to advance your learning.

II. FROM HARD-COPY PORTFOLIOS TO DIGITAL PORTFOLIOS

Hard-copy portfolios generally contain a collection of artefacts that represent a student's work. Students are asked to collect their best work and sometimes reflect on this work.

The fields of education, creative arts, digital marketing, entrepreneurship and journalism have long used the hardcopy portfolio, assembled in file folders or notebooks, to serve as an example and showcase of a student's work. Portfolios for learners in these and other professions are established as a great tool to showcase their abilities. Portfolios have become a central way to demonstrate student learning and encourage the expansion of a student-centered environment. The movement included more active strategies to increase and deepen learning.

Students developed distinct learning habits and skills when constructing a digital portfolio, which were not noted when generating hardcopy portfolios. Reynolds (2004) highlights the additional advantages.

Digital profiling necessitates the development of a number of skill sets, each of which improves a student's capacity to engage more deeply in what they have learned. For example, generating hyperlinks, the major activity in producing web pages, necessitates making new connections with what the students have previously studied. Such hyperlinking practises and promotes the development of metacognitive skills. (pp. 2–3)

Difference in Hard Copy versus Digital Portfolio

Hard-Copy Portfolio	ePortfolio
Work done by an individual	Work done by individual but can be a collaborative effort
Limited audience—generally instructor/artificial	Students control who can see but can be used in multiple ways for multiple audiences
Difficult to keep and store over time	Online storage
	Hyperlinking—critical thinking exercise in and of itself
Viewed usually from beginning to end, one page at a time	Reader creates own journey using links and navigation system
	Emphasis on what students can do
May include student reflection on work, rarely over more than one course	Creates opportunity for student reflection and integrating learning
Primarily written work	Students can demonstrate learning in multiple modes—visual, oral, written, video

III. BACKGROUND AND LEARNING CONTEXT FOR DIGITAL PORTFOLIOS

The most convincing reasons for using learning Digital Portfolios come from research on learning, on how the brain works, and on motivation. The concept of transformational learning comes from the work of Jack Mezirow. In an overview article of the theory, E.W. Taylor (2007) explains:

Transformational learning, according to Mezirow, is not a “additional” method or method of education. Mezirow sees this as the essence of adult education, whose purpose is "to help individuals become more independent thinkers by developing the ability to negotiate their own values, meanings, and goals instead of for acting uncritically towards others". (Mezirow 1997, p. 11).

In higher education, while educators are devoted to producing graduates who are self-directed learners and autonomous thinkers, we frequently fall short of our goals. According to Ryan and Deci's (2000) research, when we undertake something because it is fundamentally pleasurable, fascinating, or motivating, we create greater quality learning. Environments in which learners feel a feeling of competence, autonomy, and connectedness support effective learning and intrinsic motivation.

Neuroscience study supports the premise that we should educate for a single objective: long-term learning with the ability to apply that information. To achieve the objective, faculty must know where students are in their understanding of the content area,

and students need to understand how learning actually happens. Gamson (1988) correctly argues that learners "need to talk about what they learn, write about that, recount it to prior knowledge, and relate it to their daily activities."

As an educational tool, the digital portfolio offers many opportunities to engage students using hands-on methods that we know promote deep learning. Most important, Digital Portfolios are a living document, a discussion between the student and teacher, student and colleagues, student and the world. Students can create a Digital Portfolio in groups, sharing ideas, talents, and critiques, and determining standards based on real peer work and evidence in work of excellence in diverse fields.

IV. WHAT IS INTEGRATIVE LEARNING ?

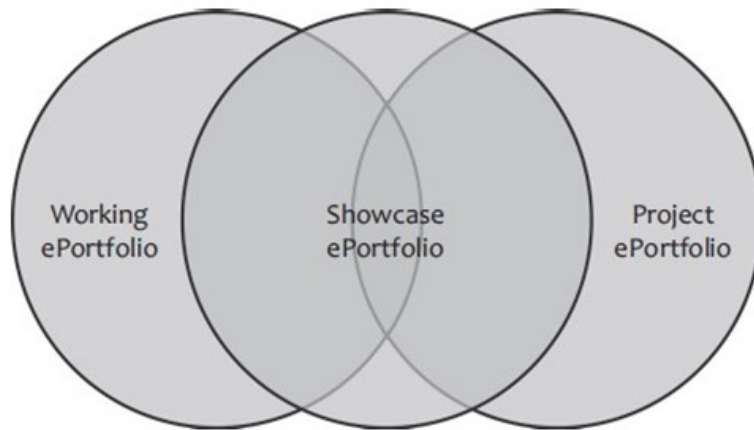
Integrative learning system like Digital Portfolio such as this is necessary for us to be successful in our complex world. We need to integrate our learning throughout our lives. All learning is integrative learning. We survive in the world because we are able to make connections between what we have learned in the past to what we are learning in the future. Learning mathematical tables at the very early stage builds the skills necessary for us to do multiplication in later grades. When we are faced with solving a multiplication or division problem, we can call up and use the knowledge we have about tables to help us solve our current problem.

To be able to engage in integrative learning, one must seek to see connections. In reality, connections are always there; we just don't always see them. Seeing oneself as a learner—motivated and capable of putting ideas together—is an important part of using integrative learning. Integrative learning requires students to be motivated and intentional in their efforts to learn. Huber and Hutchings (2004) explain integrative learning as follows: One of the most difficult issues in higher education is developing students' abilities to integrate their learning across settings and throughout time... The capacity to associate is central ... whether focused on discovery and creativity, integrating and interpreting knowledge from disciplines, relating knowledge through real-world engagements. (p. 1)

An emphasis on integrative learning may assist undergraduates in putting the pieces together and developing habits of thought that will equip them to make informed decisions in their individual, specialized, and public lives. (p. 13)

It is proposed that the concept of surface and deep education and learning is related to the idea of integrative learning. Surface learning occurs when students focus their attention on what is needed to pass a particular class. Deep learning, on the other hand, occurs when students engage more fully with the content. Definitely, the students intentionally employ deep learning strategies with the goal of being able to integrate their knowledge.

V. THE DIGITAL PORTFOLIO IN STUDY PROGRAM



All learning outcomes that are part of the course are essential. The Digital Portfolio allows students to show their abilities in all or just a few of them. It also gives students a means to help students understand how they can be integrated.

In a Digital Portfolio that is in use, students must record all or some of the tasks they have completed in the course and review their knowledge through specific reflective prompts. The artifacts are stored inside their active Digital Portfolio. This type of Digital Portfolio aims to help students build a space to reflect and collect many objects and information. To make a showcase, students need to choose something, which is why the reflection and collection part is essential to the process.

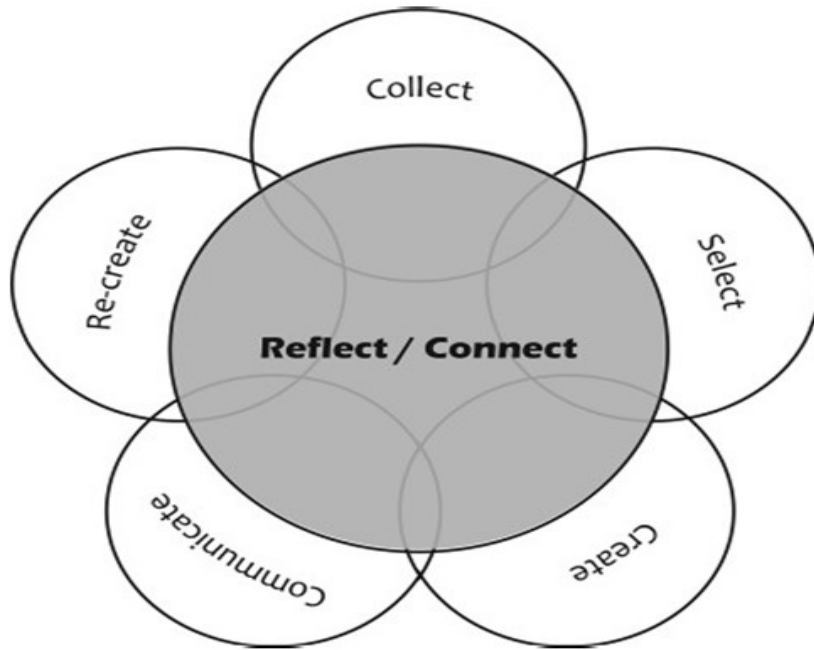
Students can develop a project or a Digital Portfolio, which is geared towards illustrating the processes and results of a particular task given in a class or course. They can be either small-group or individual Digital Portfolios. In the case of the traditional lab manual assignment, students can make a Digital Portfolio to document the procedure of experimentation, including the method and the result.

Most Digital Portfolio assignments are typically an accumulation of the student's assignments in a class or program. They present the work of the student and may be the final product. Portfolios are used to select, reflect, and evaluate aspects in an overall Digital Portfolio procedure. Students choose their most impressive work in an exhibition portfolio and solicit comments and discussions.

VI. PROCESS OF MAINTAINING YOUR PORTFOLIO FOR THE PROGRAMME

The way we organize and encourage our support for the development of any kind that is a Digital Portfolio in our learning is crucial. Whatever the task is, it is crucial to develop the potential to get actively involved with your participation in the Digital Portfolio process. B. L. Cambridge (2001) provides three steps that students could follow when creating a Digital Portfolio: gather to select, reflect, and review, which serves as the base to facilitate an effective Digital Portfolio process or folio thinking in courses or the programs.

Integrative Learning Digital Portfolio Process



The central focus of the process lies in the reflection process and connecting. The actual learning process through a portfolio is when you intentionally make relationships across time and context. Reflection is the process that lets you connect these dots.

Collect refers to collecting artefacts from learners to create the Digital Portfolios they make. As a class, it is essential to save copies of your completed assignments, class activities, and other materials related to your studies like pictures, research articles, and urls to relevant websites and novel ideas.

The Choosing part of the process deals with developing displays of Digital Portfolios and various types that comprise Digital Portfolios. Based on your goal and the audience of Your Digital Portfolio, it is possible that you could select artworks that show off your most impressive work. In some cases, you could select pieces that show improvement.

Creating components in Digital Portfolio is the Digital Portfolio process that includes making the Digital Portfolio, using technology to construct it, and making decisions regarding its structure and structure.

The communicate portion in this Digital Portfolio process asks you to think about the goal for this Digital Portfolio and consider their intended audience when creating it. The majority of Digital Portfolios are made to be used by someone else. Furthermore, it is important to note that a Digital Portfolio is not a only a one- way communication tool and requires discussion or feedback on the content. This is apparent when you submit the Digital Portfolio assignment in a course and then receive feedback from your instructor.

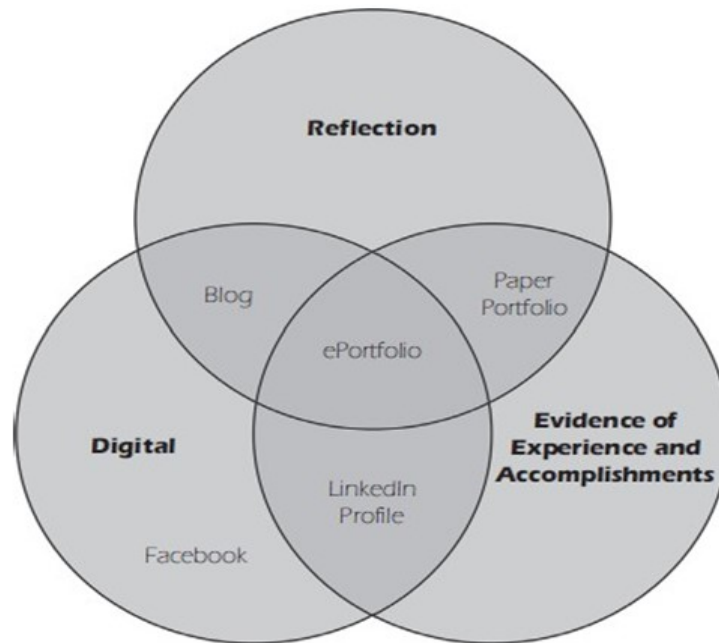
The dialog within the digital portfolio may result in it being a creation part of the process, where new thinking and revision, or the desire to develop the brand new digital portfolio, occurs and can transform the existing portfolio into an eye-catching Digital Portfolio.

VII. HOW TO COMMUNICATE EFFECTIVELY IN DIGITAL PORTFOLIOS

As we often hear, the medium is the message (McLuhan, 1964), and this is especially true in a Digital Portfolio as well as in other kinds of student work. Let us discuss the concept of digital presence and digital identity, its importance, and the role of the Digital Portfolio in establishing one's digital identity.

Digital Presence

Websites such as Facebook and LinkedIn, and blogging sites (Blogger, Wordpress, Tumblr) are widely used. Whether we like it or not, this digital content is often part of the first impression we make on our current and future friends, colleagues, and employers. Students must learn to control their online profile. The Digital Portfolio helps students manage their digital presence by allowing them to create a digital identity that represents their beliefs, abilities, and achievements.



The center of the Venn diagram represents the Digital Portfolio, the intersection of evidence of experiences and accomplishments and reflection in a digital medium. In creating a Digital Portfolio, students have the ability to master all three of these areas. Other forms of a web presence offer a more limited view of an individual

VIII. CONSIDERING DESIGN ISSUES IN CREATING THE DIGITAL PORTFOLIO

Students should consider the following regarding the design of their Digital Portfolio

Think about what you put in the URL:

1. For a student learning Digital Portfolios, it is probably best to use his or her name. MyPortfolio, MyFirstYear, FinalPort does not provide specific information.

Think about what each page on the Digital Portfolio looks like:

2. Include white space. Reading online is difficult if web pages are just a long series of text. It is helpful to have white space between paragraphs and text and illustrations to break up text. makes reading more legible
3. Increases comprehension of what one is reading
4. Include a relevant illustration or two on each page; text only is not very welcoming or compelling.
5. Think about your writing. Use short sentences and short paragraphs. Consider using bulleted lists when appropriate on your pages..
6. Make sure your welcome statement is clear. Let your reader know what your Digital Portfolio is about. Remember, use white space, illustrations, and short sentences and paragraphs.

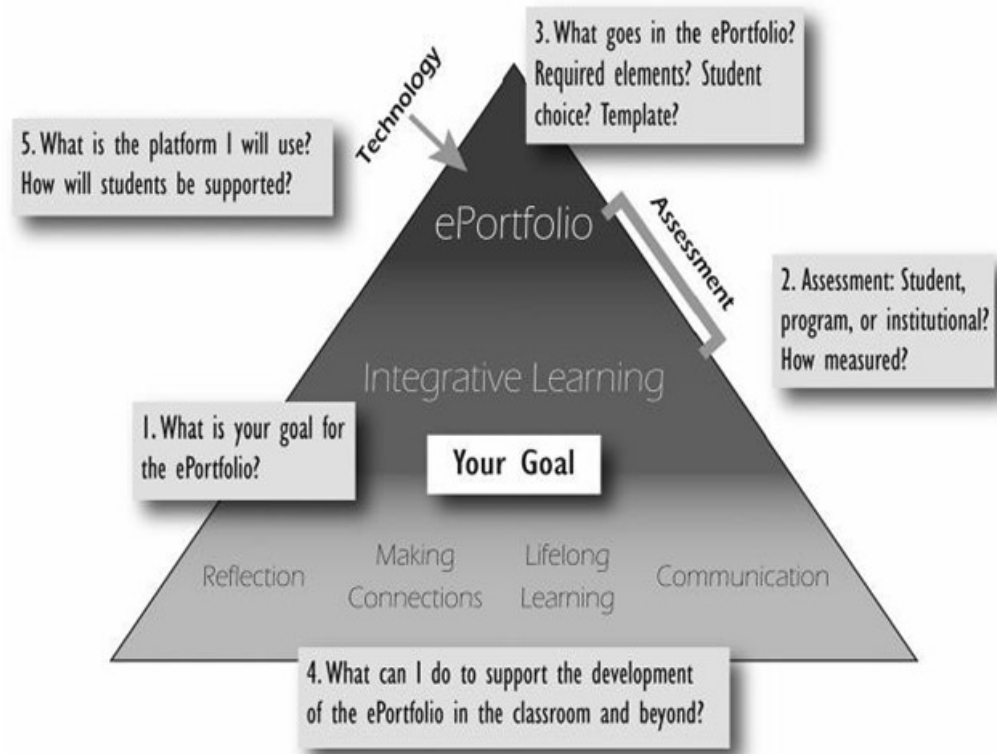
IX. CREATING THE DIGITAL PORTFOLIO

Let us discuss some basic ideas the student should consider when thinking about creating Digital Portfolios.

Implementation model, The Digital Portfolio Integrated Learning Framework is useful for thinking about how to start implementing a digital portfolio.

1. **What is your goal for the Digital Portfolio?:** We want to make it clear that choosing a system is not the best place to start when considering how to use digitized portfolios. Determining your intended use of the online portfolio, as well as your practices and procedures, is the most crucial step.
2. **Assessment:** Student, program, or institutional? What is the measurement?: Consider how you will evaluate the Digital Portfolio after outlining your objectives for it. For administrative or institutional purposes, you may need to consider how you will grade the digital portfolio in your course as well as how it will be evaluated outside of the classroom.

Implementation Model



- 3. What are the important and essential components? Learner choice? Template?:** You can decide what should be included in the electronic portfolio once you are certain of your objectives and have considered how you will evaluate students' accomplishment of those objectives. What components of the electronic portfolio are necessary for you to see?
- 4. What can I do to support the development of the Digital Portfolio in the classroom and beyond?** The faculty should think about the classroom strategies and activities that can support students in reaching the learning goals and building their Digital Portfolio. Again, these practices are the foundation of an integrative Digital Portfolio. 4. What can I do to develop the digital portfolio in the program? The teachers should consider the activities and strategies they can use in the classroom to help students develop their online portfolios and achieve their learning objectives. Once more, an integrated electronic portfolio is built on these practices.
- 5. What system do I employ? What kind of support do students receive?** You can reach the next stage, choosing a system for your Digital Portfolio assignment, by responding to questions 1 through 4. It is impossible to determine which features your programme should have without responding to the questions above.

X. INDIVIDUAL FACULTY ADOPTION OF DIGITAL PORTFOLIOS FOR CLASS OR PROJECT-BASED DIGITAL PORTFOLIOS

A wide range of platforms for creating Digital Portfolios is currently available. Some are free to download, while others are available with learning management software.

The most popular and accessible platforms for building digital portfolios are:

1. Google Sites (<https://sites.google.com>)
2. Weebly (www.weebly.com)
3. WordPress (<http://wordpress.org>)
4. Wix (www.wix.com)

All these platforms contain instructions on how to build websites using their site. For more ideas or if you have questions, search the Internet for a multitude of answers. While the search results may not necessarily be the best or the most up-to-date, they can point you in the right direction. YouTube is also a good resource to create your own tutorials for your students to use. YouTube videos and other already developed tutorials using these platforms can easily be found on the web ready to adapt for your purposes.

XI. DIGITAL PORTFOLIO STRUCTURE

Structure	Description	When Activity happens in class	Activities/Assignments that demonstrate learning	Reflections	Completed
Welcome page/introduction to digital portfolio					
Learning goals/outcomes					
1					
2					
3					
4					
5					
6					

To create the structure for your Digital Portfolios, recall your thinking on and planning how to integrate Digital Portfolios and integrative learning. Students can create their Digital Portfolio shell at the beginning of the class and add activities and assignments in the appropriate places as the class progresses.

XII. CONCLUSION

In this module, we discuss the concept that is Digital Portfolio and how Digital Portfolio is an effective instrument to help you advance your career. Digital Portfolio does not simply require you to gather objects and then upload them to a website. It is a meticulous process that requires dedication and commitment to the science of learning to make the connections you require and enable you to integrate and expand your knowledge.

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