# Chapter 26
# Using Andragogy and Bloom's Digital Taxonomy to Guide E-Portfolio and Web Portfolio Development in Undergraduate Courses

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## ABSTRACT

*This chapter offers suggestions and discussion on e-portfolio teaching approaches and how andragogy and Bloom's Digital Taxonomy can be weaved into teaching and learning to create active learning through e-portfolio development. The chapter connects andragogy (Knowles, 1980) and integrates the educational objectives in the cognitive domain put forth by Bloom in 1956 and then updated by Anderson and Krathwohl (2001) and eventually aligned to the digital realm by Churches (2009) to use as a model for teaching Web portfolio development in undergraduate courses. The Web portfolio has value for the student as a real-world tool for use in career advancement. It can be integrated into curriculum by faculty as a platform for assessment of higher-level cognitive objectives. This chapter includes a framework for a portfolio seminar course and how it implements Web portfolio (e-portfolio) components, which may provide a model for faculty developing future e-portfolio courses.*

## INTRODUCTION

The mission of this chapter is to identify and define the value of Web Portfolios for undergraduate courses using the lens of Bloom's Digital Taxonomy. The Web portfolio (also known as the e-portfolio -the terms are virtually interchangeable today) is a critical platform for students and graduates to connect their skills, abilities, and accomplishments and present them to teachers, professors, potential employers, clients, and other assessment centric audiences. The objectives of this chapter are to offer a template for faculty who are investigating, managing, and developing Web

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portfolio (e-portfolio) initiatives in undergraduate communications courses for use as an active learning tool, not simply as a repository. The chapter will provide insight into problems, solutions, and challenges facing faculty with regards to integrating Web portfolio (e-portfolio) into curriculums as an active learning objective.

## BACKGROUND

Goldsby and Fazal (2001) cited that student created portfolios are commonly "used in teacher preparation programs to demonstrate teaching skills and expertise. This practice was introduced as test scores alone lack the comprehensive scope needed for effective assessment and evaluation, portfolios can be implemented to interpret/make decisions regarding learning of teaching competencies" (2001, 607-608). The case for the student portfolio in any discipline can be made on the same basis; electronic portfolios provide a new level of assessment that cannot be measured by traditional methods such as standardized tests, applications, and resumes. Electronic portfolios and Web portfolios provide assessment of competency within a discipline.

The old models of professional and personal identity, skills assessment, and promotion are fading in what Dr. Stephen Covey (2004) describes as the age of the knowledge worker. In the knowledge worker age, the focus is on intellectual capital and exhibiting the skills of someone who is technologically savvy, but sensitive to the vision and voice of traditional values that enable people to thrive, such as mentoring. The Web portfolio feeds the emergence of intellectual capital by providing a platform for the knowledge worker to exhibit their personal and professional qualities. Mentoring will be increased as the Web portfolio becomes a standard learning tool within mainstream education at all levels. Teachers will need to teach students how to make Web portfolios. In turn, these students will later become mentors to others in their lives who are creating Web portfolios. Electronic portfolios and Web portfolios feed the process of lifelong learning (DiMarco 2006).

Educators on all levels need to embrace the Web portfolio as a tool, regardless of their discipline. As a tool, it should be mastered by teachers and taught to students within the appropriate contexts of their disciplines. If a student creates an art portfolio, it has a structure and presentation style that will focus on the artwork and the skills of the artist. If the portfolio is for a student in the discipline of English, the portfolio should focus on the writings and literature aptitude of the creator. In his personal case study on Web-based portfolios for technology education, Professor Mark E. Sanders (2000, 11) stated that:

"These technologies should be prominent within our curriculum. Often, they are not. Web-based portfolios offer a meaningful way for technology students to gain a thorough understanding of these critical new technologies beyond mere Web research. Web-based portfolios provide benefits that can never be realized with conventional portfolios."

To follow up Professor Sander's statement, it is critical for all instructors and students to embrace Web portfolio exploration, creation, and development not only in technology and education driven disciplines, but also in all disciplines. The Web portfolio has been growing well beyond the boundaries of education and technology fields and is finding its way outside of educational institutions and into human resources and other corporate directions. This idea is supported by Moonen and Tulner (2004) and Conrad (2008) who describes interest in electronic portfolio is growing. Starting as early as 2004, EIfEL (European Institute for E-Learning) provided all of its members with an electronic portfolio, the most innovative and fastest growing technology in the field of education, training and human resource development. While most current e-Portfolio initiatives happen in primary, secondary, and higher education, the full potential of e-Portfolios will be demonstrated