

# Chapter 25

## Designing and Delivering Web-Based Instruction to Adult Learners in Higher Education

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### ABSTRACT

*The essence of this chapter is to discuss theories and practices including approaches that instructional designers consider when designing Web-based instruction for adult learners. The importance of the chapter is to discuss best practice activities and theories as well as technologies that enable adult online learners to be involved in the design of their Web-based instruction. This represents recognition that adults have accumulated a repertoire of knowledge and experiences that inevitably will enrich the course materials. The theories discussed in this chapter are constructivism and connectivism; these theories improve adult involvement and help them to establish learning networks for exchanges of ideas using cultural artifacts and various interactive and video technologies. These technologies include Adobe Connect, Camtasia, Articulate Storyline, SoftChalk, Prezi, Google.docs, and Google Hangout. The idea is to provide rich virtual learning environments to help adult learners explore learning and connect with each other without inhibition. The traditional method of instruction, which is teacher-centered, is considered inadequate for the present digital age with its rapid knowledge transformation. The roles of technology leaders within the institutional leadership and factors that may impact negatively on Web-based instruction for adults are also considered.*

### INTRODUCTION

The purpose of this chapter is to explore and address issues which are pertinent in designing and delivering effective web-based instruction for adults in a manner that recognizes adult needs and weaknesses including adult learning principles.

To achieve this, the web instructional designer should collect data from the adult students using short diagnostic questionnaire following their (adult learners) registration for web instruction. The rationale for the short diagnostic questionnaire is for the instructional designer to develop a profile of the learners' needs and weakness

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so that appropriate instructional materials will be developed to address those needs and weaknesses. Diagnostic questionnaire will be further discussed later in the chapter. Online instruction for adults should be based on the needs of the adult learners rather than on what the instructor knows and can offer. Selection of the learning contents should reflect the interest of the learner and resources available for online pedagogical practices. However, effort should also be made to properly address the existing body of knowledge within the discipline of interest.

It is critical that the web instruction be based on sound learning principles such as constructivist and connectivist learning theories. These will be fully explained in this chapter and their application into instructional design will also be analyzed. Teaching and learning have moved away from simple instruction where teachers deliver learning materials without input from the learners. This type of instructional delivery is described as “banking” Freire (1970). According to Freire, students are perceived as empty barrels and the teacher is regarded as the knower who is expected to fill the students (the empty barrels) with knowledge. This is an out-dated pedagogy which Knowles (1968) points out contradicts adult learning principles. Bruner (1966) has argued cogently that the essence of education is not to create a living library but to educate learners so that they can use the knowledge they have acquired to create other knowledge. Some web instructions are restrictive; they tend to focus mainly on the course materials posted on online and do not provide avenues for learners to explore and question the assumption made about knowledge. Learning is an individual activity; however, most instruction is presented as if it is a group activity.

In some cases, online instruction tends to be mechanical and lacks human attributes. Therefore, to humanize web instruction and establish human

connection, it is recommended that the instructor should introduce herself/himself to the adult students using interactive video at the beginning of the course. This first encounter will be used to establish a working rapport between the instructor and the adult learners. Adults have different learning characteristics and therefore learn differently. Somehow, web-based instruction tends to ignore the uniqueness of adult learning characteristics. Our society is become more fluid in terms of cultural make-up yet; instructional strategies continue to reflect a 19<sup>th</sup> century method of teaching and training which essentially is described as teacher centered.

Educational institution tends to play catch up in embracing new and emerging technologies. In this chapter, the use of various software and cloud technologies to support and enrich adult web instruction will be discussed. These technologies include Camtasia, SoftChalk, Articulate Storyline, Prezi, Adobe Connect, Google.docs and Google Hangout including the use of digital images. The goal is for the web instructional designer to adequately develop teaching and learning activities using available technological resources that have contextual application in the larger society. The essence of web-based instruction is that distance becomes less of a problem because internet is a power virtual environment that embodies extensive resources for teaching and learning as well as the ability to connect individuals worldwide. In this chapter, tips and approaches that will be beneficial in designing appropriate and effective web instruction will be considered. Technology integration has been defined in various ways and from narrow a perspective. This chapter will provide a broader definition of technology integration. Also, the role of technology leaders in relation to web instruction will be considered and barriers that may hinder web instruction will equally be assessed in the chapter.

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