# Chapter 19
# Assessing Learning via Web 2.0 Technologies:
## A Dichotomy

**Victor C. X. Wang**
*California State University at Long Beach, USA*

**Beth Kania-Gosche**
*Lindenwood University, USA*

## ABSTRACT

*Online learning takes place among learners of all ages in both formal and informal contexts. Due to the fact that traditional age students learn differently from non-traditional age students, especially in the virtual environment, educators are encouraged to employ either pedagogical or andragogical assessment methods accordingly. Using pedagogical assessment methods may work for traditional age learners. Likewise, applying andragogical methods may work for non-traditional age learners. Available assessment methods such as objectively-scored tests, subjectively-rated tests and criterion referenced tests will be discussed as well as a new form of assessment--learner self-evaluation. To use the proper tests or methods to assess online learning, educators are encouraged to possess both pedagogical and andragogical knowledge and/or skills. Instructors should use a variety of instructional and assessment methods. The authors of this article provide specific examples of online assessments from both andragogy and pedagogy.*

## INTRODUCTION

Before any learning can begin, instructors must determine what learners already know. Then, they can develop objectives, deliver instruction, and conclude if the objectives were met or not using assessment. This is true for all learning, both in andragogy and pedagogy. The fact educators claim that they know more about how children learn than about how adults learn is that pedagogy (the art and science of teaching children) preceded andragogy (the art and science of helping adults learn, as defined by the father of adult education, Malcolm Knowles). There are many reasons why

teachers need to know how learners, whether children or adults, learn. If teachers do not know how learners learn, how can we expect teachers to assess if learning is truly taking place? Black and William (1998) call this "the black box," with most researchers studying inputs and outputs but not the process of learning. As most teachers know, assessment is no easy task. "Probably no other activity that takes place in education brings with it so many challenges," stated Salvia and Ysseldyke (2001, p. 5) in their textbook on the topic. This is true in both andragogy and pedagogy.

Once learning is successfully assessed, teachers can identify the gap between learners' present level of knowledge and the desired level. In other words, a gap is successfully identified so that teachers know exactly how to teach learners and what to help learners learn in order to close that gap. Without identifying that gap, instruction on the part of teachers will be aimless. Assessment is the foundation of all learning, whether formal or informal. In an informal context, learners may assess themselves and act accordingly; for example, a person who wants to fix a leaky faucet in his or her house might find a gap between the objective and his or her knowledge. The person would then seek to find ways to meet the objective, whether it is calling a plumber, going to a home improvement store to seek advice and necessary tools, or looking up the problem on a website. In the formal environment, assessment is often driven by the instructor, who often determines the time frame and type of assessment. However, all assessment has the same purpose.

*High quality assessment procedures take into consideration the fact that anyone's performance on the task is influenced by (1) the demands of the task itself, (2) the history and characteristics the individual brings to the task, and (3) the factors inherent in the context in which the assessment is carried out (Salvia & Ysseldyke, 2001, p. 6).*

In an online environment, designing effective assessments may be even more challenging for instructors. Learners may have different comfort and skill levels with the technology being utilized. For example, those learners with previous exposure to the course management platform or a particular software program may have an advantage over those who have never previously utilized it. In an assessment taking place in a face-to-face class, instructors may observe the physical environment where the assessment occurs and how long it takes the learners to complete. However, in an online class, the learner could be virtually anywhere in the world, if he or she has Internet access. Thus, the context in which the assessment takes place can be difficult to determine. All three of the previously mentioned factors must be considered in any type of assessment, whether online or face-to-face.

Can instructors use the same assessment and evaluation methods to assess learning of children and adults? Are there different assessment and evaluation methods that teachers can follow when teaching primarily adult learners? Because of the web 2.0 technologies and economic downturn in the United States of America, 47% of students are returning students (adult learners who have worked for some time and now have decided to retool their knowledge by attending universities) on campuses (Back to College, 2010). Higher education is experiencing what is called the graying of American campuses. Since these returning, adult students may know how to assess their own learning, the role of the faculty member may need to shift to better accommodate their needs. However, many instructors use the traditional assessment and evaluation methods for a variety of reasons. Instructors can use other innovative, andragogical assessment and evaluation methods when assessing adult learning. It is true that instructors have to assess learning pedagogically when assessing learning on the part of children or when certain assessments are mandated, such as a multiple

## Related Content

Explaining Young Consumers' Online Purchase Behavior under Risky Conditions: Perspectives from Mental Accounting

Zeki Atl Bulut, Ali Naci Karabulut, Tuba Uçma Uysaland Ali Çalar Uzun (2015). *International Journal of Online Marketing (pp. 65-80).*

www.irma-international.org/article/explaining-young-consumers-online-purchase-behavior-under-risky-conditions/141486

Promoting City Branding by Defining the Tourism Potential Area Based on GIS Mapping

Ya-Hui Hsuehand Chia-Chih Chang (2019). *Brand Culture and Identity: Concepts, Methodologies, Tools, and Applications  (pp. 626-642).*

www.irma-international.org/chapter/promoting-city-branding-by-defining-the-tourism-potential-area-based-on-gis-mapping/213729

Getting Brand Commitment Through Internet and Mobile Sports Marketing: An Insight on Real Madrid Football Team

Verónica Baena (2018). *Sports Media, Marketing, and Management: Breakthroughs in Research and Practice  (pp. 1-17).*

www.irma-international.org/chapter/getting-brand-commitment-through-internet-and-mobile-sports-marketing/199106

Digital Customer Journey in the Luxury Hotel Experience: A Case Study Approach

Jonathan Gomez Punzon (2021). *Advanced Digital Marketing Strategies in a Data-Driven Era (pp. 246-260).*

www.irma-international.org/chapter/digital-customer-journey-in-the-luxury-hotel-experience/284293

Predicting Student Retention by Linear Programming Discriminant Analysis

Jaan Ubi, Evald Ubi, Innar Liivand Kristina Murtazin (2014). *International Journal of Technology and Educational Marketing (pp. 43-53).*

www.irma-international.org/article/predicting-student-retention-by-linear-programming-discriminant-analysis/116438