

# Chapter 1

## Understanding Your Learner: Conducting a Learner Analysis

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### **ABSTRACT**

*Now more than ever before, health care educators are being challenged to meet the complex and dynamic needs of an expanding health care workforce. Continuing education requirements as well as graduate and undergraduate programs are striving to keep pace with the demands for more highly skilled health care professionals. Likewise, technology and related instructional media have been evolving at an exponential pace. The confluence of these variables requires health care educators to be knowledgeable about the options and tools available to design and deliver instruction using a variety of platforms in more diverse settings. In order to ensure that instruction achieves its intended goals, it is imperative to fully assess the learner characteristics of the target audience. The purpose of this chapter is to discuss the rationale for conducting a learner analysis and utilizing learner characteristics in designing effective instruction.*

### **INTRODUCTION**

Healthcare professionals recognize that in order to provide quality medical care to patients, thorough and ongoing patient assessments are required. A complete patient history, along with an appraisal of current symptoms is necessary before diagnosis and treatment can occur. Similarly, counselors and therapists must first conduct a comprehensive mental health and substance use assessment with each client before determining the most effective treatment approach. Likewise, health care educators must assess and understand the unique characteristics of learners in order to design, develop, and deliver quality instruction. As we know, students enter the health care profession for a multitude of reasons and at dissimilar phases in their professional careers. Some adults return to school after many years of professional practice in an effort to acquire advanced skills, while others may be novices to the health care field. In either case, it is clear that learner populations vary considerably, yet most instructional faculty fail to assess the relevant characteristics of the target learning audience. Neglecting to understand or anticipate the educational needs of students can result in ineffective instruction and ultimately poor

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learning outcomes for students. Therefore, a complete understanding the target learning audience is a crucial step in developing and delivering quality instruction.

Conducting a comprehensive learner analysis is the most effective way to assess the plethora of learner variables that may affect instructional content and delivery. A learner analysis is a basic function of instructional development and results in specifications for effective and efficient instruction (Schwen, 1973). Considerations such as prior experience in the health care field, familiarity with technology, and motivation to learn are just a few of the many factors that may impact the development and delivery of instruction. Conducting a learner analysis should not be confused with assessing student learning styles. Research has consistently shown that learning style instruments are neither valid nor reliable (Dembo & Howard, 2007), thus, there is no evidence that matching instruction to learning preferences such as visual, auditory, or kinesthetic learners improves learning outcomes. In fact, a recent study of pre-clinical undergraduate medical students found learning preferences did not significantly contribute to improved learning outcomes and recommended strategies such as simulations and problem-based debates to promote deep and strategic learning (Liew, Sidhu, & Barua, 2015). Similarly, Cook (2012) noted that assessing prior knowledge and focusing on robust instructional methods are better options for influencing learning than attention to learning styles.

While a comprehensive learner analysis may be cost prohibitive or too time intensive for every course, attention to the most critical attributes of the target learning audience can significantly inform the design and delivery of a new or existing course. This chapter will discuss the rationale for conducting a learner analysis, explore key learner characteristics, and examine the implications these characteristics may have on developing and teaching a course.

## **BACKGROUND**

### **Behavioral Learning Theory**

The earliest theories of learning grew out of behavioral psychology. Behaviorism, as an educational learning theory, suggests that learning results in observable changes in behavior (Ertmer & Newby, 1993). Some of the most well-known behaviorists include Edward L. Thorndike, Ivan Pavlov, and B. F. Skinner. Their contributions to understanding learning focused on the observation of behavior and the predictable link between stimulus and response. Moreover, these early learning theorists argued that observing behavior was the most reliable way to research psychological and mental processes. Behaviorist theory posits that learners should be assessed prior to instruction in order to determine where instruction should begin (Ertmer & Newby, 1993). Limitations associated with behaviorism emerged in the late 1970s as researchers began to explore unobservable phenomena such as memory. As a result, a new theory of cognitive science, where memory, schema formation, and mental processes, was introduced and studied (Winn, 2004).

### **Cognitive Learning Theory**

Cognitive theories of learning focus on how information is received, stored, retrieved, and transferred in memory (Sweller, 2008). From a cognitive perspective, learning is a change in knowledge. The learner is actively engaged in acquiring new knowledge and using that new knowledge to form internal mental

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