Intelligence is an arbitrary word with varied meanings and implications. What is valued as intelligent behavior is as diverse as the people and cultures assessing it. Preparing future athletic training clinicians and therapists in a global context requires sensitivity to how intelligence might be valued or determined in different contexts. Navigating the changing landscape of the healthcare industry within this global context requires integrating different theories of intelligence. Therefore, athletic trainers need to be able to recognize what is valued as intelligent behavior in a particular context and be capable to applying their knowledge in a manner appropriate to that context.

When students do not all share similar intellectual strengths, backgrounds, or experiences, courses based on any single form of instructional or learning style may become unnecessarily difficult. Although many athletic training students are kinesthetic learners, research has demonstrated the benefits of adjusting teaching style to the different learning styles.1,2 Unfortunately, what is usually taken from literature is to significantly reduce direct instruction and replace it with exciting, fun, provocative, and interactive learning activities. Reduction or elimination of lectures can also be inappropriate and may alienate students who prefer this learning mode. Not all students learn the same way or appreciate the same teaching styles, and some students may prefer a more traditional form of instruction. Furthermore, some material is best delivered through direct instruction. Not all educators are capable or willing to eliminate it from their repertoire. A teaching style is needed that is diverse enough to introduce different modes of conveying knowledge and assessing learning, while not alienating some students by catering to others. The purpose of this report is to present multiple intelligence (MI) theory, briefly review other intelligence theories, and encourage consideration of the usefulness of these theories in athletic training education.

How Is Intelligence Determined?

Theories developed to promote understanding of intelligence include multiple intelligence, contextual intelligence, triarchic intelligence, emotional intelligence, and different learning style frameworks. The psychometric view is the most traditional, which posits there is only one type of intelligence, i.e., general intelligence (g factor). The psychometric view suggests that every individual is born
with a predetermined intelligence level, which can be assessed in the same manner for all individuals within a diverse population. General intelligence is believed to be represented by the intelligence quotient (IQ) or other standardized tests.\(^3\),\(^4\)

Alternatively, there are many researchers and scholars\(^3\),\(^4\) who believe that intelligence is more than an IQ score and that it is the product of different abilities that uniquely contribute to performance. They argue that intelligence depends on an individual’s capacity to diagnose and respond to his or her environment. Gardner described intelligence as the ability to respond to new events and situations successfully, which includes the capacity to learn from past experience.\(^4\) He challenged the notion of a single form of intelligence and disagreed with models that define intelligence in terms of IQ because it focuses too much on logic and language and ignores other important abilities that determine success.\(^4\) Gardner proposed an intelligence framework that recognizes and acknowledges that people have different cognitive strengths and weaknesses. Gardner claimed that intelligence is measured by what the culture values and that it is not a universal trait. He called this the theory of multiple intelligences.\(^3\)

**Multiple Intelligence Theory**

Multiple intelligence (MI) theory offers a pedagogic approach that may help to address the learning preferences of a wide variety of students with different intellectual strengths. MI is based on the premise that there are many different types of talents or knowledge that could help individuals respond successfully to circumstances and enhance their life. Gardner’s MI theory proposes nine intelligences that can be addressed in athletic training education (Table 1).

MI theory has gained recognition in primary and secondary school settings\(^8\) and has been credited for increases in math scores and ability when compared to traditional instruction models.\(^9\) Although MI theory has been embraced by many primary school educators, the available research on MI in higher education is limited. Barrington\(^8\) has presented a compelling argument that MI is an inclusive pedagogy that could better inform teaching and learning in higher education. Nursing literature claims that MI “provides a conceptual framework for designing classroom activities that promote an interactive learning environment and energizes the nursing lecture.”\(^10\) Holland\(^11\) claimed that sports therapy students in the United Kingdom benefited greatly from an integrated curriculum based on MI theory.

MI theory proposes that people have a complex range of intelligences, some of which are more dominant than others and that each intelligence is relatively independent from the others. Gardner was not the first to challenge the traditional notion of intelligence (i.e., IQ or \(g\)). Sternberg and Detterman\(^5\) have described intelligence as an adaptation to the environment. Athletic training literature has related intelligence to context (i.e., contextual intelligence or CI), describing it as the ability to quickly recognize the salient variables in any situation and then adjust behavior and actions to act accordingly,\(^12\) which has been described as “very important” to athletic training practice.\(^13\) Nursing literature in New Zealand has referred to CI as a core competency of nurse leaders.\(^14\) Gould and Caswell\(^15\) have recommended that athletic training educators challenge athletic training students to “flex” from their dominant instructional preference, which they report to be necessary for overall professional development. Intelligence is a complex concept that is based on the values of certain cultures or groups, which may not be shared by different populations. According to Gardner’s theory, having one “universal” way of assessing intelligence, such as IQ, is unreasonable.

MI theory relates to the manner in which individuals develop skills important to their way of life or the skills that are valued by an individual’s culture. Intelligence is viewed as “a biopsychological potential to process information that can be activated in a cultural setting to solve problems or create products that are of value in a culture.”\(^16\) This understanding does not mean that intelligence must consist of one or more dimensions but simply that it emphasizes the ability to solve problems and to fashion products as building blocks of intelligence.

Although educators may not be able to incorporate each of Gardner’s intelligences into every classroom session, the probability of satisfying more students will be increased when a concentrated effort is made...