

Self-Directed Learning and the Millennial Athletic Training Student

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Athletic training educators (ATEs) have a responsibility to remain aware of our current student population, particularly how they learn and give meaning to what they have learned. Just as clinical athletic trainers (ATs) must adapt to ever changing work schedules and demands, so too must athletic training educators. In addition to adapting to students' learning behaviors, athletic training educators must prepare students to become life-long learners through an introduction of adult learning theories that strengthen their educational and professional future. Therefore, the purpose of this column is to present a basic working model of self-directed learning and explain how educators can use this theory to ensure the professional success of Millennial students and, ultimately, strengthen the profession.

The Millennial Student in Athletic Training

As society sees new generations grow and develop, we as ATEs also see how each subsequent generation influences our profession. Just as the the Baby Boomers, and Gen Xers have all had a hand in influencing professional practice, so too will the next generation of ATs: Gen Y, better known as the "Millennial Generation." By having a better understanding of who these future professionals are and how ATEs can guide their professional practice, we can provide insight and affect how student can grow as a professional for years to come. This understanding can foster new ways of reaching our future leaders and create ways of enriching their professional development.

Born between 1982 and 2002, the Millennial Generation or Millennial student, like generations before them, already have a wealth of literature reflecting on the characteristics that define them, even within AT.¹⁻⁴ Monaco and Martin⁵ were one of the first to provide a conceptual framework and describe how the athletic training Millennial student functions in the classroom, during

clinical education experiences, and in the professional practice setting. They also provided ATEs with a comparative working outline of who these students are relative to their peers, their innate characteristics, and what one can expect from them due to their life experiences. Most specifically, the authors suggest these students will excel when given (1) clear definitions and paths to success in class, (2) specific and clear expectations of course assignments, (3) positive and timely feedback, (4) creative and varied multimedia delivery, and (5) the ability to link "real life" application to the course content and evidence-based practice knowledge from their instructors.

Additional research examining Millennial students presents ATEs with even more characteristics of this generation as learners. Described as a group of learners who are high achievers, Millennial students often take a team oriented approach to learning, are under pressure to achieve, and confident, but are often sheltered from the harsh realities of life and the real world.^{5,6} The Millennial student is different in nature from those of previous generations who chose to work alone, were power driven, but had a sense of working their way up the professional ladder.⁶ Other ways in which these students differ from past generations include: (1) smaller family units and fewer siblings, (2) more educated parents, (3) higher median family income, and (4) more cultural awareness.⁶

To the ATE who must interact with these students, understanding their educational needs plays a large role in ensuring student success. In an era immersed in electronic media, one author suggests that educators must be willing to use as many electronic devices as possible in the delivery of course content as the best way to communicate with students.⁷ In support of that argument, others believe that in order to keep a student motivated in the 21st century, internet and multimedia access must be used in all facets of education including such methods as electronic textbooks.⁸ They also believe that some traditional teaching methods, such

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as the lecture only approach, will quickly cause students to lose interest and disengage them from the subject matter. Due to the ubiquitous nature of electronic media in today's culture, it is imperative for ATEs to adapt to the ever-changing classroom environment and incorporate even more multimedia devices in all areas of our student's education experience.

Millennial students also differ in their classroom relationships with peers. By having a highly team oriented approach to learning, the Millennial student is one who learns well within groups where collaborative and cooperative group learning is emphasized.^{5,9} By incorporating properly structured group assignments, students are free to explore alternative learning strategies and encouraged to work with others outside of the formal classroom developing the necessary characteristics for success such as respect, accountability, and responsibility.¹⁰ With group learning as a major force in their learning experience during their formative school years, these students have little experience learning in isolation, which is what they will mostly likely experience in the classroom on their first day on a college campus unless this is specifically addressed within the curriculum.¹

Another important characteristic includes the need for this generation of students to have a supportive learning environment through mentoring and coaching in all aspects of their education that continues even into the professional workplace.^{5,11-12} This has become a growing trend for these students as a defining trait of their life experiences, including that of a sheltered upbringing with very attentive parents.⁶

However, up to this point, very little, if any, classroom or clinical education in athletic training has focused on the andragogical method with the Millennial student. ATEs should consider how the inclusion of this method could have a profound impact upon student success and achievement. Here, ATEs could include and emphasize seminal andragogical tenants such as (1) immediate application of knowledge, (2) increased performance of gained knowledge (ie, taking their educational experiences back to clinical experiences or practice setting to facilitate practice behaviors), and (3) the facilitation of a student's growing reservoir of knowledge in a value appreciative environment such as the classroom or clinical education experiences.¹⁵ (ie, addressing the needs of the patient on a personal and societal level as described in the disablement model).

The Millennial Student and Adult Learning Theories

To gain an even greater perspective on how ATEs can influence students to become successful professionals, ATEs must consider where they will be as credentialed professionals soon after becoming athletic trainers. One avenue that can guide ATEs in this venture is to become well versed in adult education theories which include the andragogical teaching method and one of its major tenants, self-directed learning.

Andragogy

Although the origin of the term andragogy can be traced back as early as 1833, American adult education scholar Malcolm Knowles

is credited with bringing the term to the United States in the late 1960's, early 1970's.¹³⁻¹⁴ As Knowles conducted research on this topic, he discovered that andragogy is of the utmost relevance to the concept of adult learning. Knowles first defined andragogy as an "emerging technology for adult learning."^{15(p58)} He later refined andragogy to mean "the art and science of helping adults learn."^{16(p43)} Andragogy has also been seen as "the single most popular idea in the education and training of adults."^{17(p91)} The concept is based on the premise that adult learners (including ATS and AT professionals) process information differently than children. Table 1 outlines Knowles¹¹ six basic assumptions pertaining to this notion.

The andragogical model assumes adult learners are active engagers in their own learning process and information gathering. Through andragogy, the instructor of adults now serves as a facilitator or coach such as is the case of Approved Clinical Instructors (ACI) rather than as a traditional lecturer. The andragogy model of learning also allows adult learners more responsibility for individual learning and application of new information. The experience of an adult learner also plays a role in the learning process and the accumulation of knowledge. However, this often comes at a cost. Many ATEs may feel they need to give up control of the flow of information, a challenge for many who are trying to meet all of the defined clinical education competencies or who struggle with how to engage and reach the Millennial student.¹⁸

Traditionally, instructors have commonly used teacher centered, directed-instruction, which Knowles refers to as pedagogy.¹⁶ In this pedagogical model or ideology¹³ instructors assume the role of information leader, controlling the learning environment. Here instructors deliver information from their own perspective and control what information is presented to and practiced by the learner. The instructor (ATE) controls the tempo of the course, emphasizing individual strengths and hiding weaknesses. The ATE remains within his/her comfort transferring knowledge that is meaningful for them, while forcing ATS to learn and work in a zone unfamiliar to or uncomfortable for them. Today, though the andragogical method (which is viewed as a program of

Table 1. Six Basic Assumptions Pertaining to the Concept of Andragogy

1. Self-concept moves from one of being a dependent personality toward one of being a self-directed being.
2. One accumulates a growing reservoir of experience that becomes an increasing resource for learning.
3. Readiness to learn becomes oriented increasingly to the development task of social skills.
4. Time perspective changes from one of postponed application of knowledge to immediacy and, accordingly, orientation toward learning shifts from one of subject-centeredness to one of performance-centeredness.
5. Motivation to learn becomes internal.
6. Adults need to know why they need to learn something before undertaking to learn it.

elective assumptions)¹³ is being implemented more often for the adult learner since it respects the students' experiences and individuality and allows them to take ownership for the transfer of information, thereby allowing them to learn within their zone of comfort. This can be clearly defined in our current state of CPE for the AT in how they are free to pick and choose individual CPE activities that may not necessarily address any areas of weakness or a lack of knowledge in a performance domain.

Because athletic training students are performing many tasks in their clinical education experiences that are near or at professional caregiver status, ATEs should consider and respect these students as adults who have a direct link to patient care and patient outcomes. By being educators to students who conduct themselves as mature adults and meaningful professionals, ATEs must realize that integrating adult-learning principles and allowing supervised autonomy can only assist students in becoming more refined healthcare providers.

Self-Directed Learning

Self-directed learning is a critical facet of adult learning. Though the idea of self-directed learning paints a picture of learning and practicing in isolation, this is quite the contrary to the implementation of learning on one's own intuitiveness. "To many practitioners, the term self-directed learning conjures up images of isolated individuals busily engaged in determining the form and content of their learning efforts and controlling the execution of these efforts in an autonomous manner."^{17 (p56)} Knowles^{19 (p18)} made the distinction that "self-directed learning usually takes place in association with various kinds of helpers, such as teachers, tutors, mentors, resource people and peers."

Self-directed learning can be viewed in a wide array of terms and definitions. It is described as "a major deliberate learning effort which the learner himself or herself is responsible for most of the day-to-day planning of what and how to learn"^{20(p2)} or a process where individuals take the initiative in designing learning experiences, diagnosing needs, locating resources, and evaluating learning.^{19,20} Believing that self-directed learning is an essential concept in the andragogical model, Knowles¹⁹ insisted that self-directed learning was imperative to both the learner and teacher. Knowles¹³ made a clear distinction between the two main tenets in self-directed learning. First, self-directed learning is self-teaching. This occurs when learners take it upon themselves to seek out the necessary instruments and resources to teach themselves the needed skills or knowledge. Second, self-directed learning is personal autonomy in which learners begin "taking control of the goals and purposes of learning."^{13(p135)} Of these two concepts, Knowles believes that the latter is more important to the adult learner.

Knowles¹⁹ offers five basic assumptions regarding self-directed learners. First, learners become more self-directed as they mature and develop. Second, self-directed learning includes the learner's experiences as an important learning resource. Because all adult learners bring different experiences and perspectives to the table, their experiences play a major role in creating the necessary information pertinent to the learner.

Third, self-directed learners exhibit a natural tendency to learn by focusing on tasks and problems unique to them. Fourth, self-directed learners assume that their learning orientation is a result of their previous conditioning in school. Therefore, they feel their learning experiences should be organized as task accomplishing or problem solving projects. Finally, self-directed learners are motivated by internal inspiration such as self-esteem, the desire to accomplish and grow personally, professionally, and with curiosity. Steven Brookfield, another prominent researcher in self-directed learning, discovered that facilitation between learner and instructor was necessary for successful completion of any project.¹⁷ He believed that self-directed learning is a "matter of learning how to change our perspectives, shift our paradigms, and replace one way of interpreting the world of another."^{17(p19)} Brookfield further outlined six basic principles for effective facilitation in self-directed learning (Table 2).¹⁷

By introducing the self-directed learning approach, a concept that might be unfamiliar to the Millennial student, special attention must be made on how ATEs implement this practice. Up to this point in their educational careers, Millennial students have most likely been protected and sheltered by parents and teachers where little to no self-direction and freedom of choice has ever taken place in respect to their educational endeavors. However, from what decades of research has shown us related to self-direct learning,

Table 2. Six Basic Principles for Effective Facilitation in Self-Directed Learning

1. Participation is voluntary; adults engage in learning as a result of their own volition. It may be that the circumstances prompting this learning are external to the learner, but the decision to learn is the learners.
2. Sense of mutual respect among participants. Effective practice is characterized by a respect among participants for each other's self-worth. Foreign to facilitation are behaviors, practices, or statements that belittle others or that involve emotional or physical abuse.
3. Collaboration between members. Facilitators and learners are engaged in a cooperative enterprise in which, at different times and for different purposes, different group members will assume leadership and facilitation roles.
4. A praxis of theory and practice. Praxis is placed at the heart of effective facilitation. Learners and facilitators are involved in a continual process of activity, reflection upon activity, collaborative analysis of activity, collaborative analysis, and so on.
5. Critical reflection of prior assumptions. Through educational encounters, learners come to appreciate that values, beliefs, behaviors, and ideologies, are culturally transmitted and that they are provisional and relative.
6. Nourishment of self-directed empowerment. These adults will see themselves as provocative, initiating individuals engaged in a continuous re-creation of their personal relationships, work worlds, and social circumstances.

the Millennial student will be well suited to evolve into this type of learner due its supportive mentoring and relationship between teacher and learner, collaborative peer learning environment, and an internal motivation to achieve one's goals. In addition, as ATEs we have the unique opportunity to teach our students how to take ownership of their professional continuing education obligations by showing them how self-directed learning can have a positive influence on their learning experience and interests when they previously had no voice in their educational future.

At this point in the discussion we must note that somewhere in our formal interaction with students, possibly imbedded into the curriculum (hopefully early on), a process to demonstrate to the importance of becoming familiar with and engaging in meaningful education should be addressed and modeled.¹⁰ For example, in an introductory athletic training course discussing the concepts of continuing professional education (CPE) within the framework of professional growth and development and meaningful learning could be initiated. Here, we could have the capabilities to familiarize our students not only with the mechanics of CPE, but also how they, as future practitioners and self-directed learners can guide their own learning needs now and into the future.

Application

Having outlined a working model for incorporating adult learning theories with that of the learning style preferences of today's ATS, several inferences can be drawn from the finding. The most apparent of these inferences is that Millennial students are capable of ownership of their work; they also want to link "real life" application to the course content and are very capable learners who are reliant upon electronic media as a major means for their educational needs. Therefore, the athletic training education community needs to consider the use of activities to facilitate these skills. This may consist of the inclusion of more electronic multimedia activities where students are allowed to take control of the goals and purposes of learning. For example instructors can design on-line quizzes requiring students to first search for specific content information to discover the correct response; with the activity completed on the student's timeline rather than on the instructor's timeline. Another example may be the use of increased on-line database searches examining current athletic trainings trends and emphasizing evidence-based practice; but allowing the student to present the information in a way that is meaningful for them rather than for the instructor. Finally, consider the inclusion of an electronic discussion thread owned by the students where they focus on patient problems (instructor identified with clear guidelines) that must be addressed using learned information and in a collaborative approach where students assume the role of different healthcare providers.

Summary

It is apparent this generation of learners has already made an impact upon our profession. A decade of students and young professionals age 18-28 have either entered the profession as athletic trainers, or are in the process of becoming eligible to become one. In addition, ATEs have recognized the obligation to address the educational needs of this generation by dedicating

the 2009 Athletic Training Educator's Conference to the topic of "Reaching Our Millennial Students."²¹ However, we must keep in mind that while this generation has been identified as being very intelligent and technologically savvy, they are, in fact, adults. They should be afforded the opportunity to be active engagers in their own learning process and information gathering, rather than being fed the information. Beginning this process early will hopefully allow students to realize they have control of their own learning process and will demonstrate to them the importance of engaging in a meaningful education.

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