

Using the *Teaching Perspectives Inventory* in Athletic Training Education to Improve Teaching and Learning Strategies

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INTRODUCTION

When educators and students communicate there are assumptions that both parties understand each other and assumptions about what is meant by the way information, concepts and content are communicated.¹⁻³ These assumptions can be based on the individual actions, beliefs, and intentions that each party brings to the teaching and learning environment. By learning more about the actions, beliefs, and intentions that we, as educators, bring to the teaching and learning environment, we can learn how to teach more effectively and how to achieve specific teaching objectives. The actions, beliefs, and intentions that athletic training educators bring to the teaching environment constitute what Pratt³ calls a “teaching perspective.” It can be useful for athletic training educators to find their dominant teaching perspective because there are a number of specific teaching activities and strategies that work well from each perspective. The purpose of this column is to illustrate how athletic training educators can identify their dominant teaching perspective, and employ effective teaching strategies that are appropriate for their teaching goals using the *Teaching Perspectives Inventory* (TPI).

OVERVIEW

The actions that athletic training educators take when teaching may take a variety of forms, depending on the setting. For example, instructors in the classroom may choose to use lectures, problem-based learning (PBL) or team-based learning (TBL) activities to teach content to groups of students. In the laboratory environment, instructors may use large-group exercises, small-group activities, or even individual teaching activities to help small groups or individuals apply principles they have learned. The actions that approved clinical instructors (ACI's) use in the clinical setting may include, and should include, regular use of

positive and constructive feedback regarding psychomotor skill demonstration, or supervised application of clinical skills on patients. Regardless of the site, effective educators plan specific teaching activities that aim to accomplish the goals of the teaching session.

Many times an educator's teaching intentions help explain the actions he or she takes while teaching. Intentions of teaching include learning about the educator's purpose, responsibility, and what he or she intends to accomplish during the teaching session. An educator's intentions may also include introducing a set of concepts, working with struggling students, developing proficiency of laboratory or clinical skills, or helping the student gain new perspectives or think differently about a subject. Assessing one's intentions related to teaching can help an educator make a judgment about his/her teaching effectiveness.²

For many educators, philosophical beliefs about teaching may guide their teaching intentions, which in turn guide the actions they take in the teaching and learning environment.² Pratt² found that an educator's beliefs are the most solid and unchanging aspect of teaching, and that educators were amenable to a variety of changes in teaching circumstances as long as they could maintain the integrity of their teaching beliefs.

Athletic training educators in all settings are more effective when they facilitate critical thinking, demonstrate professionalism, are responsive to students,¹ and take responsibility for a student's success and academic excellence.⁴ Teaching cognitive knowledge and psychomotor skills, as well as fostering professional development are also goals of the learning process in athletic training education programs. Educators can help optimize their role as the manager of the learning process by selecting effective and appropriate teaching strategies that match his/her actions, intentions, and philosophical beliefs.

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The Teaching Perspectives Inventory (TPI)

The *Teaching Perspectives Inventory* is an instrument that allows educators to identify the lens through which we view our teaching.⁶ More specifically, the instrument allows educators to assess their actions, beliefs, and intentions related to teaching, whether in the classroom or in the clinical setting. Developed by Daniel Pratt using his direct observations and research,^{2,5,6} the TPI is a 45-item survey that uses a 5-point item scale to rate an educator's feeling about his/her actions, beliefs, and intentions related to teaching. The TPI has been used over the years to study adult educators⁷ from business, law, pharmacy, nursing, and other professions in the United States, Canada, and Singapore (available at <http://www.teachingperspectives.com>). These perspectives are labeled: (1) Transmission, (2) Apprenticeship, (3) Developmental, (4) Nurturing, and (5) Social Reform (Table 1). Alpha reliabilities for the individual perspectives range from 0.81 to 0.92, and the overall internal consistency is 0.80.⁷

Athletic training educators may benefit from completing the TPI because the instrument helps to identify one or more dominant perspectives from their teaching. This is important, because there are specific teaching strategies and activities that can be used within each perspective to help make the educator effective. Implementing these strategies and activities provide some guidance in designing effective classroom lesson plans, laboratory activities, or clinical education practices. It should be noted that all of the perspectives from the TPI may be useful, and that there is no "best perspective" of teaching.

Transmission Perspective

Educators who take the transmission perspective of teaching are committed to mastering the content of a course. Their goal

is to pass on a specific body of knowledge or skills in an efficient manner. The educator expects the learners to learn the content, and the learners expect that the educator will take them through a specific set of learning exercises that will lead to content and skill mastery. We often refer to this an Educator (Teacher)-Centered instruction.

Teaching from this perspective focuses on developing specific learning objectives to ensure the learners gains mastery of the subject material in question. The educator creates specific learning goals and objectives, specific content areas to be taught, and specific assessments and rubrics to measure the extent of one's learning. Transmission perspective educators are very content-focused, and do not like to deviate from the material that is to be covered in a given class period.

While there are a number of effective teaching strategies within the transmission perspective, there are some difficulties associated with it. Educators may find it difficult to work with people who do not understand the logic of their content or their educational process. Educators may not always understand exactly where and why learners struggle with the content they are trying to teach. One way to address this is for educators to make their teaching "come to life" by presenting real-world problems and solutions that are based on the course content. An example of this would be for an athletic training educator to use case-studies after covering a section of content. Case studies offer students an opportunity to practice diagnostic or treatment skills and learn to make thoughtful, evidence-based decisions.⁸ For example, students in an injury evaluation course may learn about the structures of the elbow, as well as certain conditions and diagnostic criteria for them. Framing this content with a case study (fictional, researched, or actual encounters with a patient) about cubital tunnel syndrome may provide students with some

Table 1. Teaching Strategy Summary for the Teaching Perspectives Inventory.

Perspective	Transmission	Nurturing	Apprenticeship	Developmental	Social Reform
Goals	Help students master content	Develop complex reasoning and problem-solving skills	Performing meaningful tasks in real settings; professional socialization	Develop positive student attitudes and academic persistence	Change way students think about professional activities or issues; present alternative or opposing viewpoints
Strategies	Use activities to make content relevant to students; add context to the content	Challenge learners' knowledge; use self-directed learning	Students observe and then perform clinical tasks in an authentic environment with supervision and feedback	Clearly identify learning objectives and assessment format; emphasize to the student what is done correctly; give positive corrective feedback	Critical analysis of research or professional practices; identify and challenge assumptions
Examples	Teach anatomy within a framework of a case study; use an orthopedic surgeon as a guest speaker	Present complex cases with many variables; challenge students to apply knowledge	ACIs provide experiences for students to fabricate splints for patients after demonstrating the technique	In a laboratory setting, give a structured activity along with the assessment; the instructor should use encouraging phrases while reviewing the student's performance	Critique the clinical use of contrast baths with conflicting evidence; identify assumptions about emergency action plans

context for learning the material.⁸ Inviting an orthopedic surgeon to speak to the class about surgical repairs to the ulnar collateral ligament may also get the students excited to persist in their efforts to master the concepts from the class.

Developmental Perspective

The developmental perspective is founded on the constructivist orientation to learning⁵ and the goal is to develop more complex reasoning and problem-solving skills within a particular field. In order to accomplish this, educators must understand how students think and feel about the field or content under investigation. Athletic training educators can do this by frequently posing questions to learn what the students think and/or believe. Once this is established, educators can then begin to help the learner advance to more complex methods of thinking and reasoning. Athletic training educators can teach by asking questions that challenge students to think about things in a deeper or more complex way. Using examples that are meaningful to the learner based on his/her experiences is also effective in this perspective.

The assumption behind this strategy is based on a dichotomy of events. When one's knowledge or experiences fit with what someone already knows, the learner maintains a strong conduit to that knowledge. When knowledge or experiences are not consistent with the learner's current knowledge or experience, he/she must either change the old way of thinking or reject the knowledge.

Athletic training educators can be successful at teaching from this perspective by structuring complex questions in their teaching activities. In the classroom, educators in an upper-level athletic training course may ask questions that require integration of knowledge from previous lesson or even previously taught courses. Clinical instructors can present real injury cases with complex variables to students, asking them to consider the best course of action based on the available evidence. Educators functioning under the developmental perspective are also likely to benefit from introducing the concept of self-directed learning which is a critical facet of adult learning.⁹

Apprenticeship Perspective

The apprenticeship perspective focuses on learning by performing meaningful tasks in real settings of application.⁵ The learner learns by seeing the educator or clinician perform, and by being able to perform the task or skill himself or herself – the concept of “see one – do one,” but in a more controlled environment with more concrete objectives and assessment tools and supervision. As learners practice a skill, they also use the language and social behaviors associated with the learning environment. They learn not only the knowledge and skills associated with a particular setting, but they also learn how to “fit in,” and how to think the way that others in that setting do. This is consistent with the concept of professional socialization in athletic training.¹⁰

There are several methods that educators can use to teach clinical skills from this perspective. A laboratory session in fabricating splints for the hand and fingers taught from this perspective, for example, may encompass the objectives of learning basic splinting terminology, performing psychomotor skills related to the topic, and assessment through a simulated clinical environment. In teaching the terminology, the educator would present the terms and definitions, and then have the class engage in dialogue (eg,

communicating with another healthcare professional or a writing assignment (eg, SOAP note) using the appropriate splinting terminology. The educator would need to circulate around the room to offer feedback to students on their use of the terminology.

Next, the educator would demonstrate the psychomotor skills to be practiced, such as fabricating a splint from a thermo-moldable plastic material. The students in the class would then practice the skills with a partner or in small learning groups. The educator would need to be available to offer feedback and additional instruction to the students. Having other subject matter experts available could enhance this activity as they may offer a unique perspective into the psychomotor skill.

The last activity of the session would be an assessment in a simulated clinical setting. The task for the students would be to demonstrate a skill as part of a physical assessment on a simulated or a live patient. In addition to performing the skill in isolation, they would also be required to explain the procedures to the simulated patient. The educator can assess their skills and provide feedback on their performance. By adding these areas of dialogue, athletic training educators can assess students' knowledge of the terminology and social skills associated with the setting.

In all of these cases, the instructor is there to assess the students' level of knowledge and skill while giving them guiding assistance. Learning what students can do on their own, and what they can do with some assistance, is creating a “zone of proximal development.”^{11(p.86)} Once the educator identifies this zone, specific learning activities can be given which allow students to focus on a few items of knowledge or skill. Instructors will be effective when they teach within this zone, and properly adjust the zone as the student gains more knowledge and skill. This underscores the need for athletic training educators to provide appropriate supervision and feedback to the students with whom they work, especially in the clinical education setting.

Nurturing Perspective

From the nurturing perspective, the educator focuses on the development of positive student attitudes and academic persistence, with the idea that these attitudes will help the student become motivated to achieve success. By developing positive learning attitudes, students will gain confidence in their abilities and excel academically and socially.⁴ Pratt⁵ also believes that teaching from this perspective may become more important when the material is more difficult as more encouragement may be necessary for student achievement.

An educator who teaches from the nurturing perspective can have the same goals for a session as in the splinting class example above. While teaching terminology related to splinting, the educator would allow class members to discuss the terms with a partner and then with a larger group. As the groups discuss the terms and concepts, the educator would need to encourage each member to actively participate, and to ask questions to other members. The goal of this exercise is to allow all learners to come to a common ground with their knowledge of the terms. Feedback from the other members will help clear up any confusion about the terms, which will help develop confidence in moving to the next activity. Group members who can accurately explain the terms to their peers will also develop confidence as well as master the content.

For the next activity, psychomotor skills can be taught by practicing the skill, and receiving feedback that emphasizes the parts of the skill the students do correctly. As the educator or the students' peers provide feedback, they should spend most of the time pointing out the parts of the skill that were performed correctly, and giving praise for good performance. Corrective feedback should be done with a high degree of tact, and should include some encouraging phrases like, "Try it this way, and I am confident you will get it."

The last activity involving a clinical simulation can also be taught from the nurturing perspective. To set up a positive experience for the student, the educator should specify the most important parts of the assessment ahead of time, and give adequate practice time to develop them. If the students were to be assessed by working with a partner, then working with a familiar partner would help relieve stress for the student. Right before the student is assessed, the educator could reiterate the important components of the assessment and express his or her confidence in the student.

Social Reform Perspective

Teaching from the social reform perspective, the educator attempts to change society in a way that is meaningful. Effective educators will help students understand different values and ideas that are found in the academic literature, textbooks, or in the profession. Within this perspective, educators may challenge students to think differently about commonly accepted professional practices, or to critique the materials used in the learning environment. Educators may also encourage students to take action(s) to improve things seen as unacceptable.

Athletic training educators may teach from this perspective in several different settings. In the classroom, a professor may challenge students to think differently about policies in emergency care. Analyzing policies related to emergency action plans may provide a rich discussion about alternative points of view. Educators may also ask students to support or refute a clinical practice by evaluating the quality of the evidence supporting it, which is part of evidence-based practice.¹² Analyzing research and textbooks may provide the setting to critique the logic that helps shape clinical practice policies. By challenging what is assumed or believed, and attempting to make improvements in the profession, students will learn a deeper meaning of the content taught in an athletic training education program.

CONCLUSION

Athletic training educators in the classroom, laboratory, and clinical settings may benefit from completing the Teaching Perspective Inventory, and reflecting on the dominant perspectives they

embrace. As athletic training educators learn more about their actions, beliefs, and intentions related to teaching, they will be able to identify new strategies to foster a positive learning environment and increase the effectiveness as educators and ACIs. Effective educators and ACIs can, and do, improve their students' learning outcomes, keeping their students engaged in learning, and helping students maintain their enthusiasm for learning now and in the future.

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