

Column: Current Literature Review

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Our charge is to monitor education related journals (i.e. *Journal of Nursing Education*, *Journal of Higher Education*, etc.) and identify articles which are the most applicable to our readers. We will provide brief synopses of the articles plus potential applications to AT education. Please feel free to contact me if you have questions, comments, suggestions for

this reoccurring feature, or if you would like to review an article that you feel is particularly applicable to athletic training educators. I would also like to hear about implementations you have made from the concepts we present in this feature.
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Chaplin, S. A model of student success: coaching students to develop critical thinking skills in introductory biology courses. *International Journal for the Scholarship of Teaching and Learning*. (2007) 1(2). <http://www.georgiasouthern.edu/ijstol>. Reviewed by David Diers, Governors State University.

Much research exists that shows critical thinking skills are important for a university student's success. However, few use good experimental design examining effective strategies to improve the critical thinking skills of students. This article is excellent in giving practical and easily implemented strategies to improving critical thinking proven effective by a well-designed and well implemented experimental study. The article presents an exam analysis activity as an example technique. In the exam analysis process, the instructor discusses why each answer on a multiple choice examination is correct or incorrect after students have completed the exam. The next step in this activity is to have the students categorize each question according to Bloom's Taxonomy of learning. This can illustrate to students and instructors which question types students are having most difficulty with (i.e. knowledge vs. application). Additional strategies are outlined in this article as well.

Getting students to realize the differences in learning and how to adequately prepare is a struggle for faculty in all curricula. This

article is an excellent resource to show all instructors how to implement critical thinking strategies which are easily implemented and effective.

Zellner K, Boerst CJ, Tabb W. Statistics used in current nursing research. *Journal of Nursing Education*, 2007;46(2):55-59. Reviewed by Thomas G. Porrazzo, Alvernia College.

The authors emphasize the importance of teaching statistical skills in the field of nursing education. A review of over 400 nursing research articles exposed the same "Top 10" statistics most frequently used and showed up in 80% of the research. Medical and healthcare professional journals publish articles in which basic understanding of statistics is assumed. Teachers in varied disciplines must identify the statistical methods most often used so that current research can be understood as evidence-based material is presented.

Research has shown that most professionals in the allied health professions have the desire to understand evidence-based research. This desire must be accompanied by the ability to understand various statistical methods. As athletic training research continues to grow and become more sophisticated, it is imperative that both students and professionals in the field have a good understanding of these statistical methods. This article is a wonderful supplement for a research class as well as the certified athletic trainer with a desire to improve their understanding of research.

Noble, L & Richardson, J. Communication skills teaching-current needs. *The Clinical Teacher*. 2006; 3 (1): 23-28. Reviewed by Courtney Burken, University of Mary-Hardin Baylor.

This article is a good summary of current communication skill context in teaching and evaluation in the British medical curriculum. It summarizes current issues and trends in effective



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communication between physicians, physicians and patients, and physicians and other professionals while clarifying that a number of misconceptions exist about communication, communication skills, and teaching those skills. The predominant point is that communication can be taught through practice and feedback if repeated practice and communication consistency are emphasized and maintained throughout the curriculum.

The authors provide a list of specific tips for achieving communication skill consistency and advocate reflection as a method of enhancing communication skill techniques so that the practitioner can see when ineffective communication occurs and learn appropriately. A focused list is also provided for clinicians and clinical instructors to aid instructional strategies that can take advantage of teachable moments. This is an excellent overview for athletic training educators and clinical instructors as the information is applicable to the clinical setting and the teachable skill of patient therapist communication, especially as cultural issues can clearly affect the patient therapist communication.

Valdez, CA & Paulsen, S (2007). Design and implementation of a video-based clinical examination. *Medical Education Online*. 12(9).

<http://www.med-ed-online.org/volume12.php#T0000109>. Review by: Carrie Meyer, Fort Lewis College.

Evaluation and documentation of student's clinical skills is a critical area for all medical and allied health professions. The article discusses the development and implementation of a Video-Based Clinical Examination (VCE) into an entry-level skills course in the School of Pharmacy. The VCE was based upon patient / pharmacist interactions – these interactions were categorized into different skill scenarios. For each interaction, two video segments were created: an incorrect or incomplete 'interview' and a complete 'interview.' Students would watch a video segment and complete a class activity related to that segment (i.e. propose interview questions and provide rationale for why those questions were needed).

Athletic Training has similar issues with trying to document and provide quality, realistic evaluations of student's clinical skills. The use of video in creating standardized patients, etc can assist with making these more usable, especially if these videos would be used in conjunction with a course management system (i.e. Blackboard, Moodle, etc). With the transition to computer based testing through the BOC, the use of VCE may become even more valuable.

Hockson G, Pichert J, Webb L, Gabbe S. A Complementary approach to promoting professionalism: identifying, measuring, and addressing unprofessional behaviors. *Academic Medicine*. 2007;82:1040-1048. Reviewed by Courtney Burken, University of Mary-Hardin Baylor

The article provides an excellent summary about the process of identifying and addressing unprofessional behavior by physicians in the Vanderbilt University School of Medicine. This process is used in conjunction with their strategies for teaching professionalism. The authors delineate an excellent rationale for the merit of teaching and enhancing professionalism, as well as addressing unprofessional behavior. They also provide a sample case, the process for intervening, and a description of the "balance beam approach" where an individual decides whether to intervene at the time, at a later time, or not at all, based on his/her perceptions of the circumstance and the factors related to intervening. The authors also provide an outline of the intervention skills training procedures and how individuals may utilize them.

Professionalism is a critical component of all aspects of patient care, including in athletic training. Professionalism is also a critical component of teaching in athletic training education programs as we educate students how to be effective and productive athletic trainers and educators. This article provides important context in how professionalism has been, and continues to be addressed "to practice what we preach" in a medical setting.

Damielsen R, Cawley J. Compassion and integrity in health professions education. *Internet Journal of Allied Health Sciences and Practice*, 2007;5:1-9.

Reviewed by David Diers, Governors State University

Professionalism is an abstract and ambiguous concept. Most faculty will agree that they think it's important but are unsure if it should be or even can be taught in a health professions curriculum. This article defines what professionalism is by its components and details why it is important and ways it can be included in a curricula. The article cites a study where the number of unprofessional behaviors noted in students enrolled in medical school strongly correlates with the number of disciplinary actions against these students by medical boards. If these behaviors can be modified while still in school, more effective clinicians will graduate. In response to this data, the article presents two models on how professionalism can be effectively implemented into didactic and clinical education. Assessment tools for the models include peer review, reflective papers, and stated expectations in the didactic portion and patient evaluation, preceptor modeling, and stated expectations in the clinical portion.

Cognitive intelligence (inherited intelligence and acquired intelligence) is not the only quality of a good clinician. Emotional intelligence is another quality described in the article. This is "the ability to monitor own's and other's feelings and emotions, to discriminate between them, and to use the information to guide one's thinking and action." The tools described in this article, the Baron and Goleman instruments, can measure this and help the faculty to assess and modify poor professionalism behaviors.

This article provides good concrete information concerning why professionalism is important as well as how to assess it and easily implement corrective strategies in health professions education.

Banning M. The think aloud approach as an educational tool to develop and assess clinical reasoning in undergraduate students. *Nurse Education Today*. 2007;28:8-14. Reviewed by Michele Monaco, Eastern University

The think aloud approach has been demonstrated as a successful tool for nursing students in their clinical rotations. The think aloud technique combines the reasoning process with reflective thinking that allows the students and the teachers to gain access to the complete thought process of clinical applications. This process oriented teaching strategy allows for a student-centered classroom that integrates group interaction, active participation, and verbal prompting from didactic course work. The main concepts of the think aloud approach is to gain access to students' thought processes when investigating a subject. The process also provides insight to questions being asked, the ability to make connections of core concepts and peripheral subjects, and the use of prior knowledge and experiences. The benefit of using the think aloud approach is that errors in the reasoning process can be corrected immediately by the class or the educator. Integrating the think aloud approach enhances student-centered learning, reflection, and critical thinking. For a more detailed explanation of the think aloud approach, go to: <http://www.sciencedirect.com/science/journal/02606917>