

INTERPROFESSIONAL EDUCATION EDUCATION

Interprofessional Interviewing in Intraprofessional Athletic Training Student Pairs: A Multi-Institutional Educational Technique

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Context: The Commission on Accreditation of Athletic Training Education 2020 Standards for Professional Programs highlight the need to further incorporate interprofessional education components into the curricula for athletic training programs. Interprofessional education can be a challenging component to integrate into the curriculum on an ongoing and routine basis, especially when access, quantity, and quality of interprofessional education resources are limited at individual universities.

Objective: To promote professional socialization between athletic training students of different universities while also promoting teamwork and collaboration values and skills through the use of shared interprofessional resources.

Background: This educational technique was developed as a means to address the lack of access to interprofessional resources faced by 3 professional athletic training programs in order to help meet compliance with 2020 Commission on Accreditation of Athletic Training Education standards 8, 57, and 79.

Description: Athletic training students from 3 professional athletic training programs were paired with one athletic training student from another institution to research a nonorthopaedic, general medical condition. They were assigned a 3-part project: (1) review the existing literature for peer-reviewed articles on their assigned pathology, (2) interview a non-athletic trainer health care provider who has worked with the pathology, and (3) create an education infographic of the information to use as an educational tool for patients. The project helped to promote collaborative and team-based skills critical to interprofessional and intraprofessional success as a health care provider.

Clinical Advantage(s): Students learned with, from, and about how non-athletic trainer health care professionals manage their assigned nonorthopaedic, general medical pathologies in clinical practice.

Conclusion(s): This collaborative project allowed athletic training students to develop intraprofessional and interprofessional skills by working with both athletic training students and non-athletic training health care professionals. Informative feedback on how the students perceived their interactions was received at the conclusion of the assignments.

Key Words: Interprofessional education, collaboration, general medical

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Full Citation:

Krug RJ, Judge KS, Moffit DM, Schroeder KM. Interprofessional interviewing in intraprofessional athletic training student pairs: a multiinstitutional educational technique. Athl Train Educ J. 2023;18(3):143-148.

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KEY POINTS

- AT students' need to understand the need for IPE in their curriculum, as well as the benefits.
- When IPE is not available due to various reasons, such as rural settings or lack of caregivers, working via distance-learning is a viable option.
- Collaboration can lead to a better understanding of supporting patients.

INTRODUCTION

Interprofessional education (IPE) and interprofessional practice are an integral component of the professional training and practice of athletic training students and athletic trainers (ATs). The Commission on Accreditation of Athletic Training Education requires that athletic training students gain knowledge and experience working with, from, and about other health care students and professionals.¹ However, not all programs or clinical sites have routine, quality access to IPE, as well as practice resources and/or opportunities. This lack of quality access to IPE and interprofessional practice can result in athletic training students being ill prepared to work effectively on interprofessional teams through their inability to effectively communicate, collaborate, and understand the roles of themselves and others on interprofessional health care teams. This in turn could cause negative outcomes for patients cared for by the athletic training student.

In order to address these issues, athletic training faculty from 3 different professional athletic training programs created a multipart assignment in which students would work in teams to identify a non-AT health care provider to interview and discuss how to evaluate, treat, educate, and refer a patient with a preassigned general medical condition. This assignment allowed athletic training students to explore the concepts of teamwork, communication, networking, and IPE and interprofessional practice with peer athletic training students from other institutions, as well as with credentialed health care providers from non-athletic training specialties.

Our objective was to describe an educational technique used to promote professional socialization between athletic training students of different programs (universities) while also promoting teamwork and collaboration values and skills through the use of shared IPE resources.

BACKGROUND: VALUE OF IPE

Interprofessional experience is commonly defined as "when 2 or more health professions learn about, from, and with each other to foster effective collaboration and improve the outcomes and quality of care."² The Interprofessional Education Collaborative core competencies and subcompetencies include (1) work with individuals of other professions to maintain a climate of mutual respect and shared values (values and ethics

for interprofessional practice), (2) use the knowledge of one's own role and those of other professions to appropriately assess and address the health care needs of patients and to promote and advance the health of populations (roles and responsibilities), (3) communicate with patients, families, communities, and professionals in health and other fields in a responsive and responsible manner that supports a team approach to the promotion and maintenance of health and the prevention and treatment of disease (interprofessional communication), and (4) apply relationship-building values and the principles of team dynamics to perform effectively in different team roles to plan, deliver, and evaluate patient- or population-centered care and population health programs and policies that are safe, timely, efficient, effective, and equitable (teams and teamwork).³ The Interprofessional Education Collaborative core competencies and subcompetencies have been instrumental for programs to have a guideline to begin and develop IPE activities. Specifically used for this project were competencies 2 through 4.

Research indicates that interprofessional collaborative relationships improve the functioning of the team and team-based activities, such as faster decision-making; however, a direct link to improved patient outcomes is difficult to attain.⁴ In order to achieve an interprofessional practice environment that improves patient and population outcomes, health care providers must be trained in skills such as interprofessional communication and teamwork before entering the workforce.⁵ Studies reviewing the longevity of IPE over the course of 3 years have proven an increase in IPE activities and relationships within programs housed in similar academic units.⁶

Athletic trainers have been collaborating with physicians since the inception of the profession.⁷ As interprofessional experiences are a new standard for athletic training education, it is also a requirement in health care professions with which ATs collaborate on a regular basis. Several professions have accreditation standards related to IPE, including athletic training, dentistry, nursing, occupational therapy, pharmacy, and physical therapy.^{1,8–13} There are specific new standards that require programs to incorporate IPE into the curriculum that was developed by the Commission on Accreditation of Athletic Training Education¹ 2020 standards, specifically standards 8, 57, and 79. These standards have proven challenging for some programs while also allowing other programs to be creative to meet this standard. There have been research studies that demonstrate the positive effect IPE has on attitudes, teamwork, and knowledge of others.^{14,15}

The IPE activity in this research study assisted the programs in meeting some of the accreditation standards. The athletic training student collaborating with a professional in the area of the disease or disorder who is not an AT helps develop the collaboration skills needed as they move into their professional career.

Figure 1. Article rubric.

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Abstract hubric			
	Exceeds Standard (2 points)	Meets Standard (I point)	Working Toward Standard (0 points)
What was the problem, topic, or question? <u>Background</u>	The purpose/topic of the activity or the question being summarized is clearly and cleverly stated.	The purpose/topic is clearly stated.	The purpose/topic of the activity or question being summarized is included, but the explanation is vague.
What happened? Summary of results / data gathered	The abstract includes an accurate, well-explained and eloquent summary of the information AND uses specific data / evidence to back up summary of results.	The abstract includes an accurate summary of the information AND uses specific data / evidence to back up summary of results.	The abstract includes a summary of the information gathered, but does not quote specific data / evidence to back up summary of results.
What was learned? How does this connect to? <u>Conclusion</u>	The abstract makes appropriate connections between the results / information gathered and what is being discussed in class. The connections are thoroughly explained in detail .	The abstract makes clear and appropriate connections between results / information gathered and what is being discussed in class.	The abstract makes connections between results / information gathered and what is being discussed in class. The connections may lack clarity or may not be accurate.
What's the big deal? Real world application	The abstract shows how the topic can be applied to a significant "real world" situation. The explanation is thorough and eloquent . How did it affect you? Did it change your mind? Will it change your behavior?	The abstract shows how the topic is connected to a "real world" situation. The explanation is well done.	The abstract somewhat shows how the topic is connected to a "real world" situation, but the explanation needs more work or does not venture very far from the activity itself.
Grammar, Usage, Mechanics	Abstract has been edited until it is free of GUM and spelling errors.	Abstract has been edited until it is nearly free of GUM and spelling errors.	Abstract contains some GUM and spelling errors that may distract or confuse a reader.

Name:

Score: / 10

DESCRIPTION

Four faculty members from 3 different professional athletic training programs initially met to discuss the idea of introducing their students to an IPE learning assignment that focused on nonsport patients seen in a nontraditional setting (eg, physician practice, industrial, military). Students were preassigned to a partner from a peer institution and each of the 10 pairs was given an assigned pathology that was to be the focus of their project. Each student was connected to their partner via email and was given a list of 3 assignments with due dates. Assignments 2 and 3 were due 6 and 10 weeks, respectively, after assignment 1. Students were provided feedback after each assignment to ensure students were gaining the intended knowledge and experience from each assignment before moving forward with the next assignment. According to the institutions where the educational technique was completed, this project did not need research ethics approval following the 2019 requirements of the Common Rule and the federal definition of research.

For the first assignment, student pairs were required to locate, read, and review 2 peer-reviewed articles related to their assigned pathology (Figure 1). Assigned pathologies and conditions included Addison disease, hypertension, type 1 diabetes, type 2 diabetes, Parkinson disease, myocarditis, obesity, osteoarthritis, Alzheimer disease, and Cushing syndrome. Upon review, the students were required to write a brief summary of each article. Students were instructed to review the writing in their pairs to ensure clarity in writing, proofreading, and reading comprehension, in addition to sparking conversation around the pathology and how to approach care from the AT's perspective. The conversation was also intended to invite conversation around what type or types of non-AT health care providers would be best to discuss the pathology with, as this would set the pair up to be successful in the second assignment in the project.

Once the articles were reviewed successfully, the pairs were asked to identify a non-AT health care professional (locally or abroad) who had experience treating patients with the assigned pathology and request an interview with the provider. Interviews were conducted between the student pairs and the non-AT health care provider using videoconferencing platforms (eg, Zoom). The objectives of the interview included learning about the nature of the provider's profession and their scope of practice, identifying ways that Ats can collaborate with providers of the profession, and learning more about and discussing how to best evaluate and treat the assigned pathology. Students were asked to create a list of questions to ask the provider and were required to take notes so they could provide a written account of the interview. In addition to writing their own questions or asking questions as conversations organically developed during the interview, students were instructed to ask the following:

- Have you seen this case before? Prevalence in your practice?
- How did it affect the patient's job function and/or activities of daily living?
- How did the patient(s) present? Any unique findings?

- Typical medications they are taking and/or that you prescribe?
- Challenges or difficulties treating this patient or pathology? Follow-up? Prognosis?
- Did you collaborate with any other health care professionals (professions) to treat this patient? What did the communication look like?
- Were there any limitations in your scope of practice that prevented you from doing all you are able to do for these patients? How did you address these limitations?
- How do you see yourself as a(n) <insert their health profession here> working with athletic trainers when treating these types of patients?
- How can an athletic trainer better collaborate with a(n) <insert their health profession here> in order to provide patient care?

The third component of the project was to create an infographic that could be shared with other health care providers or patients detailing the assigned pathology (Figure 2). The infographic needed to disseminate the information the pairs gathered from the review of the literature and their interview with the non-AT health care provider. Students were allowed to include whatever information they deemed important or necessary, but had to include, at a minimum, the following:

- The assigned condition
- Signs, symptoms, and cause for referral
- Prevalence, epidemiology, and how social determinants of health play a role
- Strategies to mitigate the risk for long-term health concerns across the lifespan
- · Considerations of health literacy of the patients
- · Citations formatted using AMA style

Infographics are a way for information to be displayed in a visually appealing form when content is personal or more challenging to understand.^{16–18} This method has been around for many years in forms of maps and other illustrations.¹⁹ The infographic has been a helpful tool when trying to educate others on particular topics or content. By incorporating an infographic as part of the educational technique, the programs were able to address standards 8, 57, and 79. The infographic can then also be used on populations as an educational tool. Visuals are known to assist in the improving the content and retention of the information.²⁰ In addition, they tell a story in a 1-page visual display.²⁰ Students were given a link ("7 Tips on How to Make a Good Infographic") that assisted them in creating their infographic. The final component of the project was a postlearning survey used to assess the individual student's thoughts and opinions on the project as a learning opportunity to learn about patients seen in advanced practice settings from an interprofessional lens. The information gathered from the survey helped the faculty gain perspective on how well the project captured students' ability to learn in an interprofessional context from other non-AT health care providers.

ADVANTAGES

Students have the opportunity to collaborate with students from other institutions, which can help build professional

	Exceeds Standard (4-5 Points)	Meets Standard (3 Points)	Working Towards Standard (0-2 Points)
Main Idea	Topic and messages of infographic are clear and easy to understand	Topic and messages of infographic are mostly clear and easy to understand	Topic and messages of infographic lack clarity and/or are absent
Details	Details (including labels) support the main idea without distracting or cluttering	Detail is added to support each main idea with minimal clutter	More is needed for understand and/or some details are distracting, unclear or irrelevant
Content Accuracy (Weighted x2)	Appropriate, factual ideas/concepts are displayed in the infographic	There is a good number of factual ideas/concepts being displayed but could use more	There are an insufficient number of ideas/concepts being displayed
Graphics – Relevancy	Graphics used represent information appropriately	Most graphics represent information appropriate	Few or no graphics represent the information
Graphics – Visual Appeal	Color, shape, size, and arrangement of graphics contribute to the meaning of the overall message	Color, shape, size, and arrangement of graphics mostly contribute to the meaning of the overall message with some distraction	Overall color, shape, size, and arrangement of graphics are distracting or misleading of the overall message
Design/Layout	The layout/design is neat, clear, and visually appealing	Is attractive in terms of design, layout and neatness	Is distracting, messy, unattractive or very poorly designed
Mechanics	Capitalization and punctuation are correct throughout	There is 1 error in capitalization or punctuation.	There is more than 1 error in capitalization or punctuation.
Grammar	No grammatical errors present	There is 1 grammatical error present	There is more than 1 grammatical error present
Citations	Citations are complete and in AMA style.	Citations are partially complete and/or not completely in AMA style	Citations are inaccurate and/or not in AMA style.

Score: ___ / 50

Comments:

relationships while also establishing a working method of communication within the team. Skills and learning incorporate those beyond the health care focused, including time management, communication, and teamwork. The students

Figure 2. Infographic rubric.

must work together to develop a strategy and interview clinicians regarding their role for that specific condition. They must then work together to develop an infographic to educate the general public. The 3 universities that participated in this collaborative project were able to share interprofessional resources that would not have been accessible otherwise. As a result, students learned with, from, and about how non-AT health care professionals manage their assigned nonorthopaedic, general medical pathologies in clinical practice. This new knowledge about a nonorthopaedic condition along with the practitioner's management methods provides insight into a new branch of health care. When students were asked about their favorite part of the assignment, there were 3 common answers: (1) hearing different perspectives from different professionals, (2) meeting someone from another program, and (3) making an infographic. This met the objectives of the project while adding some creativity to the mix.

This project was not without suggestions for improvements, however. When students were asked what they could have done to have a better outcome, 2 comments were valuable and necessary for future work in athletic training: better communication and better planning. Students realized they needed to rely on more than just email for communication. Additionally, they realized they needed to create an outline and prepare before collaborating because they were having to trust someone other than themselves.

Improvements will be needed for future assignments. Though the students were reaching out to health care providers of different professions to learn more about the general medical condition they were assigned, the students took advantage of the situation in some cases (eg, one student had a physician assistant brother whom they interviewed for hypertension), rather than interviewing a specialist for the condition. Future assignments will include a specialist who will need to be interviewed; additionally, each student will have to have one of a different specialty or field. Because of scheduling, the students did not always interview the provider together, so in the future, each student will have to do their own interview. In this case, the students will be required to have different providers to compare approaches of the providers. Part of the impetus for the assignment is the rurality of the AT programs; assuming that a virtual meeting would be advantageous for reaching other professions was not as simple as the students wanted it to be. The directions need to be much more explicit. In addition, students should fulfill the purpose of IPE, which includes reciprocity with the other health care professional, learning about their profession as well as educating them about ATs and why these conditions are important for ATs to know.

At the conclusion of the 3 assignments, students were asked to anonymously rate their learning and collaborative experiences using a 5-point Likert scale. When asked to rate the collaborative experience, the average was 3.6 of 5.0, whereas they rated their partner as 4.1 of 5.0, which may be because they felt the partner did more of the collaboration than themselves. In one program, students were required to share their infographics, as well as teach the condition, describe the longterm effects, and describe how to mitigate the condition throughout the lifespan. The classmates had to create a 1page outline of the condition, so using the infographic and listening to the presentation, they were able to better understand that condition.

CONCLUSIONS

Interprofessional collaboration among institutions can strengthen all programs by including a variety of teaching and learning methods. Institutions in rural settings can work together to share professional resources while still gaining benefits of a variety of specialty clinical providers. Even in a single encounter, ATs and other providers should discuss how to work together for optimal patient care, bringing the interprofessional collaboration full circle. Students need to have exposure to different specialties; this activity provides the opportunity to move beyond their comfort zone, with the input of a second student's perspective.

REFERENCES

- Commission on Accreditation of Athletic Training Education. Standards for the accreditation of entry-level athletic training education programs. Commission on Accreditation of Athletic Training Education; 2020. https://caate.net/Portals/0/Standards_and_Procedures_ Professional_Programs.pdf?ver=451hjjb4hBwN3vKguwEQMw% 3d%3d. Accessed March 13, 2023.
- 2. World Health Organization. *Framework for Action on Interprofessional Education and Collaborative Practice*. World Health Organization; 2010.
- 3. Interprofessional Education Collaborative. Core competencies for interprofessional collaborative practice: 2016 update. Interprofessional Education Collaborative; 2016. https://ipec.memberclicks.net/assets/2016-Update.pdf. Accessed: March 14, 2023.
- 4. Schot E, Tummers L, Noordegraaf M. Working on working together. a systematic review on how healthcare professionals contribute to interprofessional collaboration. *J Interprof Care*. 2020;34(3):332–342.
- 5. Cox M. Committee on measuring the impact of interprofessional education on collaborative practice and patient outcomes. National Academies Press; 2015. https://doi.org/10.17226/21726.
- 6. Breitbach AP, Eliot K, Cuppett M, Wilson M, Chushak M. The progress and promise of interprofessional education in athletic training programs. *Athl Train Educ J*. 2018;13(1):57–66.
- 7. Rizzo CS, Breitbach AP, Richardson R. Athletic trainers have a place in interprofessional education and practice. *J Interprof Care*. 2015;29(3):256–257.
- American Occupational Therapy Association. Standards of practice for occupational therapy. *Am J Occup Ther*. 2021;75(suppl 3): 7513410030.
- Accreditation Council for Pharmacy Education. Accreditation standards and key elements for the professional program in pharmacy leading to the doctor of pharmacy degree: standards 2016. Accessed March 13, 2023. https://www.acpe-accredit.org/ pdf/Standards2016FINAL.pdf
- 10. American Dental Association. Competencies for the new general dentist. *J Dent Educ*. 72(2):823–826.
- 11. Commission on Accreditation in Physical Therapy Education. Program aggregate data, archive D (2009). Commission on Accreditation in Physical Therapy Education; 2017. https://www. capteonline.org/globalassets/capte-docs/capte-pt-standards-requiredelements.pdf. Accessed: March 13, 2023.
- 12. Cronenwett L, Sherwood G, Barnsteiner J, et al. Quality and safety education for nurses. *Nurs Outlook*. 2007;55(3):122–131.

- Cronenwett L, Sherwood G, Pohl J, et al. Quality and safety education for advanced nursing practice. *Nurs Outlook*. 2009;57(6):338–348.
- Darlow B, Coleman K, McKinlay E, et al. The positive impact of interprofessional education: a controlled trial to evaluate a programme for health professional students. *BMC Med Educ.* 2015;15(1):1–9.
- 15. Barr H, Koppel I, Reeves S, Hammick M, Freeth DS. *Effective* Interprofessional Education: Argument, Assumption and Evidence (Promoting Partnership for Health). John Wiley & Sons; 2008.
- Lamb G, Polman JL, Newman A, Smith CG. Science news infographics. *Sci Teach*. 2014;81(3):25–30.
- 17. Smiciklas M. The Power of Infographics: Using Pictures to Communicate and Connect with Your Audiences. Que Publishing; 2012.
- Vanichvasin P. Enhancing the quality of learning through the use of infographics as visual communication tool and learning tool. In: 2013:135.
- 19. Marcel F. Infographics and data visualization tools to engage your language learners. *Contact.* 2014;40(1):44–50.
- Dunlap JC, Lowenthal PR. Getting graphic about infographics: design lessons learned from popular infographics. J Vis Lit. 2016;35(1):42–59.