

Educating Educators: Perceptions of Preceptors and Clinical Education Coordinators Regarding Training at a Division II Athletic Training Program

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Context: Clinical experiences give the student athletic trainer the opportunity to relate and apply didactic information to a real-world setting. During these experiences student athletic trainers are supervised by certified, licensed health care providers working in a variety of settings (eg, hospital, physical therapy clinic, doctor's office). It is important to note the responsibilities these health care professionals (preceptors) take on when choosing to become a preceptor. Not only are they completing their normal, job-related tasks of patient care and administrative duties, but they are also responsible for the education and evaluation of student athletic trainers.

Objective: This case study takes an in-depth look at a National Collegiate Athletic Association (NCAA) Division II athletic training program's (ATP) preceptor training model and provides an example of how 1 program is developing its preceptors under the new Commission on Accreditation of Athletic Training Education (CAATE) policies. It is meant to lay the foundation for further research in preceptor development by providing a description of training and development practices. This case study can be used as a guide to other ATPs and compared to other institutions to identify the best practices for preceptor development. Because the policies are new and little research has been done on preceptor development, this is the first step in creating effective evidence-based practices.

Design: Ethnographic case study.

Setting: One-on-one, in-person, semistructured interviews were conducted, audio recorded, and transcribed verbatim. A review of relevant (eg, training manuals) preceptor training documents was completed. Member checks were done as necessary for accuracy.

Participants: One male, veteran off-campus preceptor, 1 female, novice on-campus preceptor, and the ATP clinical education coordinator participated. Participants were part of an NCAA Division II ATP located in Indiana.

Results and Conclusions: The findings suggested that this program's preceptor training used various pedagogical designs and provided strong support to those involved.

Key Words: Clinical education, athletic training education, preceptor training, pedagogy, continuing education

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Note: Although *preceptor* is the current nomenclature, *Approved Clinical Instructor* was the term used at the time of this investigation.

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Like other allied health professions, athletic training is growing and evolving constantly. It is of the utmost importance that the education and evaluation of undergraduate students mature at the same rate. How well are educational programs developing preceptors for these important tasks? Although a literature review identifying preceptor standards, characteristics, behaviors, and adult learning pedagogy are helpful in understanding effective preceptor training content and methods,¹⁻³ the purpose of this study was 2-fold. First, we sought to examine the experiences of those involved with preceptor training and evaluation within a National Collegiate Athletic Association (NCAA) Division II athletic training program (ATP). Secondly, we sought to provide an example of how 1 program is training and developing its preceptors under the new Commission on Accreditation of Athletic Training Education (CAATE) policies. It is meant lay the foundation for further research in preceptor development by providing a description of training and development practices. This case study may be used as a guide to other ATPs and compared to other institutions to identify the best practices for preceptor development. Because the policies are new and little research has been done on preceptor development, this paper is the first step in creating effective evidence-based practices.

PRECEPTOR STANDARDS

The CAATE sets the standards used for the development, evaluation, analysis, and maintenance of ATPs. This includes clinical education and preceptor standards. To qualify as a preceptor, the candidate (1) must be credentialed by the state in a health care profession, (2) cannot be currently enrolled in the professional ATP at the institution, and (3) must be receiving planned and ongoing education from the ATP designed to promote a constructive learning environment for the students.^{4,5} The preceptor has many responsibilities once he or she has met all the requirements and chooses to supervise students. Facilitation of clinical integration of skills, knowledge, and evidence regarding the practice of athletic training is an important role. This includes delivering opportunities for the development and the assessment of the students' clinical proficiencies, communication skills, and clinical decision-making during actual patient care. Additionally, a preceptor must demonstrate understanding of and compliance with the ATP policy and procedures.^{4,5} Regular communications must occur between the ATP and preceptor at an adequate student-to-preceptor ratio that allows effective learning and patient safety. The preceptors must provide direct supervision, which means they must be physically present and have the ability to intervene when necessary.^{4,6}

PRECEPTOR CHARACTERISTICS AND BEHAVIORS

Researchers have indicated several key characteristics of a quality preceptor. Weidner and Henning⁷ identified 9 foundational behaviors within clinical education. These include (1) legal and ethical behaviors, (2) clinical competence,

(3) injury evaluation and assessment skills, (4) communication, (5) supervision, (6) instruction, (7) administration, (8) professional development, and (9) interpersonal skills. Of these 9 behaviors, Laurent and Weidner⁸ noted 7 and further suggested that preceptors who provided a model and consistency were the most helpful to students, especially when paired with these noted characteristics. When dealing with feedback, quality preceptors possess the following 6 characteristics: (1) frequent, (2) specific, (3) developmentally appropriate, (4) timely, (5) follow up with practice, and (6) positive.¹ Finally, perhaps most importantly, Ford and Velasquez¹ suggested the use of dynamic paired behaviors to promote student learning. The authors paired communication with action, demonstration with practice, and instruction with evaluation (feedback). Ferguson⁹ suggested use and reflection of linguistics, as it relates to style of supervision and interaction with the students. In addition to these paired behaviors and linguistics, Laurent and Weidner⁸ offered these teaching tips for preceptors (Table 1).

ADULT LEARNING AND PEDAGOGY

Many adult learning models may not only be applied to the clinical instruction of athletic training students, but also to the training of preceptors. Knowles¹⁰ andragogy and self-directed learning, Kolb and Fry's¹¹ experiential learning model, and transformative learning are of particular relevance to athletic training clinical education. Knowles¹⁰ reported that the lifelong learner possessed the follow skillset (Table 2). Tennant¹² also noted the assumptions adult educators had about the adult learners (Table 3).

Kolb and Fry¹¹ created an experiential learning model closely linked to learning styles the authors identified. Focusing on this model, the 4-stage cycle is initiated by a concrete experience, followed by observation and reflection on that experience. Then the learner formulates abstract concepts and generalization, and finally, tests his or her theory through practical application. In this model, 2 dimensions exist, 1 being the concrete experience and experimentation, and the other being abstract and reflective. The ideal learner is capable of operating in either dimension. Horton, Freire, and Mezirow were major contributors to the understanding of transformational learning.¹² For transformational learning to take place, the individual must partake in critical self-reflection and that of his or her environment or context in which he or she exists in.

Infinite pedagogies exist and have innovated on a daily basis to fit the needs of instructors, learners, and the contexts in which both exist. The literature¹²⁻¹⁴ provides several pedagogical examples relevant to this particular inquiry. It is important to note that, although most of these examples are used in the context of undergraduate education, they are easily transferrable to the training of preceptors, as both athletic training students and preceptors tend to share similar learning styles and characteristics, as have been noted anecdotally.

Table 1. Teaching Tips for Preceptors

Preceptor Tips
Display confidence
Manage clinical emergencies well
Demonstrate skills for students
Discuss practical application of knowledge and skills
Communicate what is expected of students
Demonstrate respect for students
Provide opportunities for students to practice both technical and problem-solving skills
Be willing to admit when you do not know something
Remain accessible to students
Listen attentively to students and athletes

Gardner et al¹³ emphasized the importance of self-concept, the need to know the utility, experience, and task maturity with the employment of the Dreyfus Model. According to the Dreyfus Model, the novice learner moves through 5 stages: (1) no experience, (2) advanced beginner, (3) competence (2–3 years), (4) proficiency (3–5 years), and (5) expert (5-plus years). Instructional strategies must advance with the learner's progression. Additionally, supervision and feedback must be balanced with the allowance of decision making and follow through. Morrisette and Gadbois¹⁴ conveyed the importance of the learning environment, a readily applicable caveat to preceptor training. They recommend outlining course objectives, expectations, and requirements, and setting appropriate boundaries. The educator needs to monitor content and student reactions, as well as be aware of any power differentials that may exist, in addition to monitoring and limiting self-disclosure. Finally, Lauber¹⁵ reported her experience with the implementation of Wiki (ie, an online learning tool within the Blackboard learning management system that allows participants to interact with each other) in the preceptor training process. Since scheduling is often an issue with preceptor training, Wiki offered a convenient means of training. Relative to the selection and use of Wiki, Lauber had 3 goals: (1) provide preceptors a variety of content related to their needs, (2) efficient training, and (3) create a learning community among ATP preceptors.

Table 2. Lifelong Learner Skillset

Lifelong Learner Skillset
1. The ability to develop and be in touch with curiosities (to engage in divergent thinking)
2. The ability to identify the data required to answer the various kinds of questions
3. The ability to select and use the most efficient means for collecting the required data from the appropriate sources
4. The ability to generalize, apply, and communicate the answers to the questions raised
5. The ability to formulate question. . . that are answerable through inquiry (to engage in convergent or inductive-deductive reasoning)
6. The ability to locate the most relevant and reliable sources of data
7. The ability to organize, analyze, and evaluate the data so as to get valid answers

Table 3. Assumptions Regarding Adult Learners

Assumptions Regarding Adult Learners
1. Adults need to know why they need to learn something before commencing their learning.
2. Adults have accumulated experiences, and theses can be a rich resource for learning.
3. Children have a (conditioned) subject-centered orientation to learning, where as adults have a problem-centered orientation to learning.
4. Adults have a psychological need to be treated by others as capable of self-direction.
5. In children, readiness to learn is a function of biological development and academic pressure. In adults, readiness to learn is a function of the need to perform social roles.
6. For adults, the more potent motivators are internal.

METHODS

Theoretical Perspective

The intrinsic case study was a logical approach for this particular inquiry. We chose a single ATP preceptor training model to describe. Given that athletic training is an allied health profession where multiple perceptions must be taken into consideration, we used a qualitative research approach. Although much is written about pedagogy, educational program structure, and educator characteristics and behaviors, little is known about preceptor training and retraining specifically.¹⁶

Participants

An NCAA Division II ATP from Indiana was selected based upon the following criteria: (1) undergraduate program, (2) currently holding appropriate CAATE accreditation, and (3) currently developing both on- and off-campus preceptors. This educational program has been in existence for 10 years, and has 38 on- and off-campus trained preceptors who provide clinical experiences for 36 undergraduate student athletic trainers (sophomore through senior). The program expects to admit an additional 12 to 16 freshman applicants at the end of the fall semester.

To better understand the details and contexts of this preceptor training program, it was our intent to interview the clinical education coordinator (CEC) and 2 preceptors, each possessing 2 of the following traits: (1) either being a novice (0 to 5 years of preceptor experience) or veteran (10-plus years of preceptor experience) preceptor and (2) either practicing on or off campus. The CEC (Participant 1) was chosen on the basis that she conducted the ATP preceptor training. Table 4 illustrates each participant's role, years of experience, and level of education.

To receive the best data for preceptor development and training, some exclusions did apply to both the program and the participants. Program exclusion criteria included not holding current CAATE accreditation, not retaining both on- and off-campus preceptors, and not possessing both veteran and novice preceptors. Preceptor exclusion hinged upon the veteran or novice status of the preceptor, the completion of

Table 4. Participant Demographics

Pseudonym	Role	Years in Position	Previous/Current Education
Participant 1	Clinical education coordinator, faculty member, athletic trainer for track and field	12	Doctorate in education
Participant 2	Athletic trainer for women's soccer and softball (on-campus preceptor)	2	In-progress master's in sport administration
Participant 3	High school athletic trainer, instructor (off-campus preceptor)	29	In-progress master's learning design and technology

the latest preceptor training session, and whether the athletic training student had recently been assigned to them.

Data Collection

Purposeful, information-orientated sampling was used to identify the program and participants.¹⁷ Direct contact was made with the program director and CEC via e-mail to ensure the ATP's participation within this study. Each preceptor was invited to participate in the same manner. Written informed consent was obtained at the first in-person interview. Other relevant documents and materials related to preceptor training were also obtained. This included but was not limited to training materials and PowerPoint presentations (Microsoft, Redmond, WA). Analytical memos and member checks were done as needed throughout the study. Data collection continued until themes and relevant information became repetitive.

One semistructured interview, lasting anywhere from 40 to 90 minutes, was conducted with each participant regarding the participants' perceptions of preceptor training. During the course of the interviews, a standardized script containing 15 open-ended questions allowing for follow-up inquiries was followed.¹⁸ Confidentiality was maintained through the use of pseudonyms for all participants and identifiable people and places referred to within the interviews and documents. No identifiable data was collected from the participants.

Data Analysis Methods

Each interview was transcribed verbatim. Data were analyzed via open-coding techniques. To complete the open-coding process, the transcripts were read on several occasions to identify specific codes unique to this study and program. Codes such as the setting and context, the participants' perspectives, process, activity, and methods were reflected upon.¹⁷

The codes and themes were cross-referenced with other gathered ATP clinical education preceptor training documents and existing literature in an effort to create triangulation, trustworthiness, and a deeper understanding of the contexts in which this program is situated.¹⁹ Preceptor training documents included a 35-page manual (or binder) created by the CEC and 3 prereading articles with corresponding questions, also created by the CEC.

RESULTS

The results indicated 4 main themes: (1) training methods, (2) frequency and details of training sessions, (3) ATP unique-

ness, and (4) novice versus veteran preceptor perceptions. Each theme described a different and important aspect to preceptor training.

Training Methods

Many different training methods (eg, multimedia, critical thinking questions, group discussion) are used by the clinical coordinator, indicating the use of the various adult learning and pedagogies identified in the review of literature. This is noted in the following detailed description of the training methods:

I've developed a manual that I give the participants the day of the training, but I e-mail them. . . what I consider to be about 2 hours of prereading. That's 3 articles they have to read, and to answer questions based upon those articles, also helps to jump start some of our discussion. One article is on learning over time, the other article is on effective clinical teaching, and the other article is kind of on teaching/learning techniques. . . When we get to those various aspects of ACI [approved clinical instructor] training, we pull out those questions and talk about those questions and their answers. So it's primarily manual based. I do not have a PowerPoint. I've developed a DVD several years ago of students doing clinical skills. So when we get into the evaluation piece on how to evaluate our students doing clinical skills, we're able to talk about the evaluation forms and rubrics, and they watch the DVDs, score them, and we discuss the scores as a group. So it's a lot of going through the manual, discussions, questions. That would be the 3 hours on site.

There is no difference in the training between on- and off-campus preceptors. Despite the same training methods, on- and off-campus preceptors perceive a difference in the delivery of the students' clinical education. Participant 2 attributes the difference to the variance in the stakes of the ATP.

Well, I guess they wouldn't take it as seriously because it's not their student. You know what I mean? Like, here, it's our responsibility for the kids in our program. You go off campus, and it's someone who works in a different setting. They are there for them to follow them around; not that they don't care about it, but it's just not their student doing things.

Participant 3 attributes the difference to the decreased amount or frequency of contact off-campus preceptors have with those on campus.

I think that the advantage they have is that, because they are there with the classroom instructors, I think there's definitely a tie-in where everybody's on the same philosophy and everybody's going down the same path, and it's a collective group effort to educate those groups of students that they

have with them on a yearly basis. I think there's an advantage that they have just being on campus because they understand that philosophy because they live it on a daily basis.

Frequency and Details of Training Sessions

Training in this ATP takes place on a biannual basis. To accommodate an urgent need for a preceptor, a small session may be added throughout the year. In an effort to promote compliance and comradery, a meal and continuing education units are usually offered with the training sessions. The CEC stated:

I try to get a group together. I would like at least a group of 3 because what I like about my training is that preceptors/ACIs, based upon their experience, can talk amongst each other. I will do individualized training if it's a staff member here that we need trained quickly so they can start to work with our students. Usually, I'll do training July/August to start the fall. We hear of people being interested in being ACIs/preceptors throughout the fall and then do one sometime in the winter, before spring semester.

The 5-hour training is split between a 2-hour online preparation and a 3-hour in-person group session. All preceptors are required to retrain every year regardless of when their initial training took place. "So you could receive initial training in January and would be required to participate in a retraining session [in June]," according to the CEC.

During the training session, there seems to be a combination of novice and veteran and on- and off-campus preceptors. The CEC elaborates on 1 of the most recent training sessions:

I think the last 1 was 4 preceptors and myself with varying experiences, varying ages, varying genders, and I thought it was a great. I think that probably, out of my last several trainings, this 1 was my best because the preceptors really wanted to do this. They were really engaged, and they talked amongst [themselves] quite a bit. I just let them talk. One preceptor we had used even before I got here. As a clinical site, we haven't used that site in 12 years, so he was always talking about what he used to do when our students were there. We had 1 preceptor from Wyoming, bringing in some her experiences from a different area of the country. I think it was just really rich. We had some folks that were relatively new graduates, have been out in the field for maybe about 4 years, and they still remember their undergraduate days and their ACIs. So I think their experiences as a student, not so long ago, really helped inform our discussions as well.

An extensive amount of information is delivered to the preceptors during training. In addition to a 35-page manual, 3 articles cover the topics of learning over time, effective clinical teaching, and teaching and learning. The manual outlines the purpose of preceptor training, the role of the preceptor at this particular institution, the evolution of clinical education within athletic training, relevant ATP policies and procedures, and the athletic training student clinical educational progression through the program, including what skills the students should be capable of doing at each level within their clinical experiences. A moderately in-depth look at various teaching and learning methods, skills, and characteristics is also contained in the manual.

When asked if a large amount of correction was done during the retraining sessions, the CEC stated:

What I do find is a lot of reinforcing. I think sometimes that they're unsure about this role. They're a little nervous about the role, especially if they've never really worked with a student, never really taught, and they don't sometimes have a lot of confidence in [themselves]. I have to say, "Hey, your idea's great, what you're doing is great, that feedback would be great." I think once I start to reinforce rather than correct, they come out of their shells a little bit more.

Participant 3 shared a similar thought:

. . . reminded me of things, it's helped me instruct and be with students, but I think it's done not a whole lot more than just dust off of the previous training that I've had and refocused some of my thoughts and some of the things that we're going through.

When asked about the effectiveness, what they liked and disliked about the training, and what they would change in regards to preceptor training, the CEC stated the need for better follow up after the training session, while Participant 2 (novice preceptor) indicated a need for administrative task development and conflict management. Finally, Participant 3 (off-campus preceptor) reported a significant challenge in scheduling the training sessions.

Athletic Training Program Uniqueness

The participants identified a few unique qualities within this ATP. The CEC pointed out that her role and responsibilities are different than other ATPs.

. . . my role as clinical coordinator here is a little bit different than [many] clinical coordinators elsewhere. Our program director still really does the initial contacts, the contracts, the initial meetings rather than the clinical coordinator. I think that part of that is because [of] my role with athletics. Once I'm with my athletic team, that really pulls me out of this role quite a bit as clinical coordinator.

It is not that the CEC does not enjoy or want to have the required responsibilities, but rather other roles and obligations within the department and program pull her away.

Participant 3 found the amount of hands-on opportunities and early involvement of students within the clinical education portion of the program to be a unique feature, in addition to the comradery of the students, as a whole.

The uniqueness (pause) that I think I see in [the institution] is, I think, 1 of the things that I really like is that there is a connection within the student groups between the seniors, juniors, and sophomores. I understand the freshmen are in a weed-out phase. They feel. . . what I see among those groups is that they feel a bond, and they've all bought into 1 philosophy. Things are really open. I think the other thing that the [institution] students have a little bit of an advantage over the Big 10 school students is, I think, they get an opportunity to do [hands on] much quicker. I think it's even faster at the Division III level.

Other observations regarding the program's uniqueness are the recruitment of preceptors and the cultural context in which the program is situated. Most of the preceptors associated with this program either approach program

administrators with interest in becoming a preceptor, or the program administrators are referred to the potential preceptor by existing preceptors. The CEC briefly discussed this during our interaction.

... but if somebody calls us and [says], "Hey, you know I would love to do this," and we have knowledge of them, also, other ACIs might call us and say, "Hey, you need to talk to so and so. They are the new athletic trainer here. I think they'd be great because I've known them, I've seen them, I've talked to them about my role, and they are really interested."

"Sounds like you've got a great recruiting method."

"Oh, we do!"

"A lot of referrals and all those people coming to you, so I'm sure that's really helpful for you. . ."

The cultural context is defined as the geographic location and opportunity for clinical education setting variability. The ATP program is located in central Indiana near the hustle and bustle of the big city and industry. This offers the opportunity to expose students to both traditional (eg, collegiate, high school) and nontraditional (eg, industrial, performing arts) athletic training settings.

Novice and Veteran Preceptor Perceptions

Existing literature has much in common with these participants. Ford and Velasquez¹ noted some inhibiting influences on a novice preceptor's teaching abilities: (1) competing tasks of student instruction and patient care, (2) the lack of formal athletic training pedagogy, and (3) the lack of awareness of learning opportunities and preoccupation with self-development. Pircher et al⁵ noted that an emphasis on supervision increased the graduate assistant's responsibilities as a preceptor. This increase places even greater strain on a novice professional adjusting to new work demands and setting. Additionally, the novice's initial experiences lack knowledge, skills, and abilities to facilitate student behavior. Participant 2's thoughts regarding her anxiety about becoming a preceptor support these authors' beliefs.

... and the person training me, or whatever, and we went through it, had long conversations about certain topics that I would encounter being an ACI this year, since it was my first year. It's my first time being an ACI, so I have lots of questions about some things. I was kind of nervous about being an ACI this year. (Laughingly) Just because it's just a whole other role and that is something that has really changed from this year to last year. I just feel like I have a lot more responsibility with that, even though my responsibilities here haven't changed, but as an ACI, being an ACI had definitely changed things. More people need things. (Laughter) That's for sure.

I think I was nervous, since I am a young professional. This is my second year out of being certified and everything. I was definitely worried that I wouldn't know exactly what to say to the student. I think that was my biggest thing. Like, not knowing myself [referring to not knowing the environment or setting rather than sense of self], even if they had a question, I was like, "Ahhhh?" (Laughter) I think that was the biggest fear, and as that's come along, it's just been small road blocks. I don't think that has been a huge thing I've had to deal with, which I was surprised. We've just talked through things. I learned a lot, even it only being October. Working

with students, so (Participant giggling) I don't know. It's been kind of weird, but. . .

Although Burningham et al²⁰ were looking at didactic educators, the traits they discuss could easily translate to clinical instructors, especially those with the educational background of Participant 3. The student's and educator's active listening and dialog during communication was the foundation of mentorship, in addition to the educator being personable and professional, and avoiding being condescending and discontent when responding to students. The educator also needed to facilitate critical thinking and responsiveness via accessibility, approachability, and taking time to address student needs. Participant 3's experiences, as preceptor for a number of years, coincide with these qualities.

Look to see how the athletic trainer interacts with the high school student, the coach, and the parent, and see how that all works together. I see my role as an opportunity for the [institution] students or any college student that comes to me to have an opportunity to judge the philosophy that they were brought up in. Try and test it out in a real world situation without their college professors looking over their shoulder. It also gives them an opportunity to look at the philosophy that I use. Start to balance between what they've learned and what they've done and what I've done to see what the similarities are, what the differences are, and starting to make decisions for their own careers. That's kind of how I see my role. . .

Hopefully, foster more interest and be able to answer some questions for that next generation. To me, that's [the] next thing that's important is where that next generation of athletics is going to come from and going to look like, and what's their responsibility level going to be, and what's their loyalty level going to be to a certain school. . .

The 2 preceptors involved in this study have very different educational backgrounds, needs, and focus of concern in relation to preceptor training and clinical education. The CEC does an excellent job summing up the guiding forces behind their teaching.

... the new preceptors really draw on their experiences as students, and being a student, and how their preceptor was towards them, and what they learned from their preceptors and that mentoring, and that socialization into the profession. I think the veteran folks bring in a lot more life experience and conflict management and communication skills and those types of things.

DISCUSSION

It is important to understand that the ATP not only plays a huge part in but also is obligated to provide adequate training and support to its preceptors. This ATP's yearly retraining not only meets, but exceeds the CAATE established guidelines.⁴ The information delivered during the training and placed within the training documents appears synchronistic with current and relevant literature. The repetition of the specific preceptor characteristics and behaviors (eg, confidence, communication, demonstration, feedback) is consistently noted throughout the literature and is routinely addressed in this preceptor training model. Levy et al²¹ links preceptor characteristics to the ATPs and across professions by encouraging clinical education programs to identify strengths and weaknesses, as this leads to the

improvement of preceptor performance. The identification of program strengths and weaknesses can assist educators in filling gaps in student learning and better support the needs of the preceptors.

Preceptors who possess many of the qualities, characteristics, and behaviors of effective clinical educator often become mentors to athletic training students, whether it is intended or not. As Burningham et al²⁰ pointed out, personable and professional aspects of the student-educator communication and relationship are often developed outside the classroom. What better place to foster these than a clinical experience? Johnson et al²² define mentoring in an excellent way.

Mentoring is a teaching opportunity to guide students as they explore their nonacademic interests and their values. Mentors with insights about the joys and the challenges in health profession are well positioned to help students evaluate their choices and understand the far-reaching consequences of those choices. The mentor does not give all the answers but instead helps students begin to pose all the questions.

Their accessibility and observation of the student's decision-making processes allows preceptors to make important suggestions to the student as he or she embarks on job searches or further educational opportunities. Mentors can have a profound effect on the student's work beyond academic advising through the encouragement of preprofessional activities and community service.²¹

Implications

Preceptor training and development may have effects on multiple areas of the ATP and those associated with the program. Reflecting on the ATP itself, the lack of effective and quality preceptor training may jeopardize the program's accreditation. A program that fails to meet the standards established by CAATE may be placed on probation or even have its accreditation revoked. The loss of accreditation leaves students empty handed and unable to progress within the profession. A strong preceptor training model can lead to a high-quality clinical education program, thus influencing the ATP's reputation and graduate placement. These 2 qualities (reputation and graduate placement) can have even greater effects, such as funding, new student recruitment, and the like.

Clearly, preceptor training has a direct effect on the preceptors. The training may influence their decision to become a preceptor in the first place or their willingness to work with students or the program. The information presented to preceptors may also affect their ability to balance the many roles placed on them at any given time. Additionally, the training sessions at this institution allow preceptors to network with each other and build strong, collegial relationships with other professionals.

Other members of the ATP directly affected by the preceptor training model are the athletic training students. This group's educational outcomes and skills (or lack thereof) ultimately affect job placement and career opportunities. Preceptors also have an influence on students' adult development and progression toward lifelong learning.

Overall, the frequency, training methods, and components or information presented within preceptor training sessions have an effect on the process and proliferation of the clinical educational program. It indirectly affects patient care through the development of the ability to balance multiple roles and responsibilities and facilitation of athletic training student development. Finally, this research can assist other athletic training and allied health programs with challenges they may be facing.

Limitations

This case study highlights a single ATP; therefore, the results may not be generalizable to other programs. Due to the focus on preceptor development and emphasis on preceptor training, the influences of gender and culture on experiences, student-preceptor relationships and the student learning experience were not developed and may be influential to the success of the ATP and its clinical education. Although interviews were conducted and relevant training documents and standards were collected, the observation of a training session and analysis of reflection journals would have added additional layers of data and richness.

Future Research

Suggestions for future research include a cross-comparative study that explores other programs of varying size and location and draws comparisons between institutions. Programs can offer greater support to novice and veteran preceptors through further identification of specific needs, characteristics, and effective training methods relevant to these subpopulations of preceptors. As previously mentioned, the observation of training sessions and analysis of reflection journals would greatly enhance the potential data. Another suggestion for future research lies in the timing of the training sessions—identifying optimal timeframes for delivering preceptor training will enhance information recall and program delivery. Further inquiry into influences of gender and culture on experiences can also prove to be valuable to preceptor development. Finally, understanding the students' perceptions of preceptor training may offer important insight into training and pedagogical effectiveness. This can be explored through student learning experiences and student-preceptor relationships.

REFERENCES

1. Ford PD, Velasquez B. Dynamic paired-behaviors in effective clinical instruction. *Athl Train Educ J*. 2010;5(1):32–37.
2. Levy LS, Gardner G, Barnum MG, et al. Situational supervision for athletic training clinical education. *Athl Train Educ J*. 2009;4(2):19–22.
3. Dodge TM, Walker SE, Laursen R. Promoting coherence in athletic training education programs. *Athl Train Educ J*. 2009;4(2):46–51.
4. 2012 CAATE standards with glossary. Commission on Accreditation of Athletic Training Education Web site. <http://www.caate.net>. Accessed September 25, 2012.
5. Pircher CM, Sandrey MA, Erickson M. Perceived preparedness of graduate assistant approved clinical instructors for supervi-

- sion of undergraduate athletic training students in professional programs. *Athl Train Educ J*. 2010;5(2):61–70.
6. Scriber K, Trowbridge C. Is direct supervision in clinical education for athletic training students always necessary to enhance student learning? *Athl Train Educ J*. 2009;4(1):32–37.
 7. Weidner TG, Henning JM. Being an effective athletic training clinical instructor. *Athletic Therapy Today*. 2002;5:6–11.
 8. Laurent T, Weidner T. Clinical instructors' and student athletic trainers' perception of helpful clinical instructor characteristics. *J Athl Train*. 2001;36(1):58–61.
 9. Ferguson A. Appraisal in student-supervisor conferencing: a linguistic analysis. *Int J Lang Commun Disord*. 2010;45(2):215–229.
 10. Knowles MS. *The Adult Learner: A Neglected Species*. 3rd ed. Houston, TX: Gulf; 1984.
 11. Kolb D, Fry R. Towards an applied theory of experiential learning. In: Cooper C, ed. *Theories of Group Processes*. London, UK: Wiley; 1975.
 12. Tennant M. *Psychology and Adult Learning*. 3rd ed. New York, NY: Routledge, Taylor & Francis Group; 2006.
 13. Gardner G, Sexton P, Guyer MS, et al. Clinical instruction for professional practice. *Athl Train Educ J*. 2009;4(1):28–31.
 14. Morrisette PJ, Gadbois S. Ethical consideration of counselor education teaching strategies. *Couns Values*. 2006;50:131–141.
 15. Lauber C. Using a wiki for approved clinical instructor training. *Athl Ther Today*. 2009;6:25–28.
 16. Creswell JW. *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*. 3rd ed. Los Angeles, CA: SAGE Publications, Inc; 2013.
 17. Denzin N, Lincoln YS. *The Sage Handbook of Qualitative Research*. Thousand Oaks, CA: SAGE Publications, Inc; 2011.
 18. Patton MQ. *Qualitative Evaluation Methods*. Thousand Oaks, CA: SAGE Publications, Inc; 1980.
 19. Bogdan RC, Biklen SK. *Qualitative Research for Education: An Introduction to Theories and Methods*. 5th ed. Boston, MA: Pearson; 2007.
 20. Burningham DS, Deru L, Berry DC. Teaching and learning: what traits make for an effective athletic training educator and mentor? *Athl Train Educ J*. 2010;5(4):183–186.
 21. Levy LS, Sexton P, Willeford KS, et al. Clinical instructor characteristics, behaviors, and skills in allied healthcare settings: a literature review. *Athl Train Educ J*. 2009;4(1):8–13.
 22. Johnson TRB, Settimi PD, Rogers JC. Mentoring for the health professions. *New Direct Teach Learn*. 2001;85:25–34.