

The Professional Socialization of the Athletic Trainer Serving as a Preceptor

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Context: The role of the preceptor requires the athletic trainer to be versed in effective instructional techniques, supervisory skills, and communication skills beyond his or her competence as an athletic trainer, but many have not received formal training in educational techniques.

Objective: To gain a better understanding about the professional socialization process for the athletic trainer assuming the role of the preceptor.

Design: Qualitative study.

Setting: Athletic training education programs.

Patients or Other Participants: Twenty-four preceptors (11 men, 13 women; age = 32 ± 7 years, clinical experience = 9 ± 6 years, preceptor experience = 5 ± 3 years) employed in the collegiate ($n = 12$) or secondary school ($n = 12$) setting.

Data Collection and Analysis: We gathered data using asynchronous, in-depth interviewing via QuestionPro. We analyzed data using a general inductive approach to uncover the dominant themes. Credibility was secured by using consistency and stakeholder checks and a peer review.

Results: We identified 2 main themes by which preceptors develop in their roles as clinical instructors: *formal processes* and *informal processes*. The participants used *observations*, *previous experiences or interactions with role models*, and *self-reflection and evaluation* as informal socialization processes. Formal socialization processes included *preceptor training/workshops*, *professional development*, and *formal teacher certification*.

Conclusions: Athletic trainers who serve as preceptors learned their roles by a combination of informal and formal processes. Preceptor training sessions appeared to be effective in initially helping preceptors learn their responsibilities, whereby more informal processes seemed to help them refine their skills. Furthermore, one socialization strategy did not appear to dominate role learning; rather, a combination of several processes fostered an understanding.

Key Words: instructional techniques, mentoring, learning

Key Points

- A combination of several processes informally and formally facilitated being socialized into the role of the preceptor.
- The preceptor workshop provided the framework for the athletic trainer to gain an understanding of the role and responsibilities of a preceptor, including supervision, instructional methods, and mentoring.
- Informal processes seemed to help preceptors refine their skills and gain additional insights into the role of the preceptor.

Athletic training education programs are required to provide athletic training students (ATs) with clinical education experiences to help them develop the necessary clinical skills and behaviors required of the entry-level athletic trainer.¹ The clinical education component is regarded as the most important principle to student development, as it provides students with an authentic opportunity to apply their knowledge and skills gained didactically.² The Commission on Accreditation of Athletic Training Education (CAATE) also requires most of the clinical education experiences to be supervised by an athletic trainer who is serving as a preceptor.¹ At the core, the preceptor is charged with the instruction and evaluation of the National Athletic Trainers' Association's (NATA) *Athletic Training Educational Competencies*.³ The role of the preceptor requires the athletic trainer to be versed in effective instructional techniques, supervisory skills, and communication skills beyond his or her competence as an

athletic trainer.⁴ The 2012 CAATE *Standards for the Accreditation of Entry-Level Athletic Training Education Programs*¹ requires all athletic trainers interested in serving as preceptors to undergo an initial training session, which includes basic information on instructional methods, student evaluation techniques, mentoring skills, and the current educational competencies.

An athletic trainer minimally has to meet the basic requirements as outlined by the CAATE standards¹ to serve as a preceptor; however, many athletic trainers have not had a pedagogic focus during their entry-level or advanced educational training,^{2,4} which may influence their ability to instruct entry-level ATs. Whereas preceptors may demonstrate all professional behaviors and clinical skill sets of expert athletic trainers, they may not be expert preceptors. To understand how athletic trainers learn their roles and responsibilities, many scholars use the professional socialization framework.^{5–7} The socialization process is complex,

involving several phases, and ultimately ends with the practitioner acquiring the values, attitudes, knowledge, and skills pertaining to a specific professional subculture.⁸ In addition to gaining the foundational knowledge of a professional subculture through classroom experiences, fieldwork or clinical experience has been found to be a key component in the professional development of the novice athletic trainer.⁹ Informal learning, whereby professionals gain real-life experience while serving in their professional roles, has been found to be important in the socialization process of the athletic trainer, especially in the secondary school setting.⁵

Researchers have explored the socialization process of the ATS⁷ and the athletic training professional^{5,6}; however, we have little knowledge of the process by which the athletic trainer gains understanding of the responsibilities related to serving as a preceptor. Preceptors likely gain most of their socialization informally during the professional socialization process as they become preceptors. However, preceptors also may gain an understanding of the role through their experiences as ATSS while being mentored and during the educational training required of the program to become preceptors according to the CAATE standards.¹ Therefore, the purpose of our study was to gain a better understanding about the professional socialization process for the athletic trainer assuming the role of a preceptor. Specifically, we were concerned with how the athletic trainer serving as a preceptor gained an understanding of the responsibilities associated with this position. Acquiring information about this process can help program directors and clinical education coordinators develop more appropriate training and educational strategies to help the preceptor develop into a more effective clinical instructor.

METHODS

We used a general inductive approach to study the experiences of the athletic trainer serving as a preceptor. The approach is most appropriate when trying to establish a relationship between the data generated and the research objectives of the study.¹⁰ Clinical education often is viewed as the foundation of the professional socialization process of the athletic training student, as it allows him or her to develop competence as a clinician in an authentic learning environment.⁷ Given that the learning process can be personal, with each preceptor having his or her own preferences and perceptions, a qualitative method approach was appropriate. In addition, researchers examining the professional socialization process of the athletic training preprofessional^{7,11} and professional^{5,6} have capitalized on the qualitative method paradigm.

Participants

We recruited 24 athletic trainers (11 men, 13 women; age = 32 ± 7 years, clinical experience = 9 ± 6 years, preceptor experience = 5 ± 3 years) serving as preceptors for our study from a convenience sample of approximately 40 athletic trainers. To gain access, we capitalized on professional relationships with program directors, clinical coordinators, and athletic trainers serving as preceptors as a means to recruit our cohort. We recruited via e-mail by providing a basic description of the purpose and study procedures and including the link to the questions.

The preceptors were employed in the collegiate ($n = 12$) or secondary school ($n = 12$) setting. Recruitment ceased after data saturation and an equal distribution of years of experience as a preceptor (<5 and >5 years) and employment setting (high school and collegiate) were achieved.

Participants implied that they gave informed consent by completing the questionnaire. The University of Connecticut-Storrs Institutional Review Board approved the study.

Data Collection Procedures

We used Web-based, asynchronous, in-depth interviewing with QuestionPro (QuestionPro Inc, Seattle, WA), a secure data-tracking Web site designed for research purposes. Asynchronous interviewing does not require the interviewer and interviewee to be online at the same time to facilitate interaction, which provides a favorable method for data collection due to its flexibility for completion of assignments or requests. Web-based interviewing, particularly journaling, has become a popular data-collection technique because it allows the researcher to provide volunteers with a convenient, confidential means to participate in a research study.¹² Authors^{11,13,14} of several studies in athletic training have capitalized on this method for data collection and have provided rich, valuable data. It allows the participant the flexibility to complete the interview at his or her leisure, which is important for a group of potential participants whose time is valuable because of their involvement in multiple, competing roles. Whereas this type of interviewing is void of participant and researcher interactions, it still can produce rich, insightful data because of the participant's sense of confidentiality and the extended time he or she is allotted to reflect on the question raised as opposed to having to respond immediately.¹² Moreover, although immediate follow-up is not permitted, the researchers can contact the participants with additional questions to clarify and expand on emergent themes.

We sent potential participants an e-mail containing a brief description of the study, a link to the Web-based questionnaire, and instructions for completing it. After logging onto the questionnaire, participants provided basic demographic information (eg, age, years of experience in the profession, years of experience as a preceptor, current work setting). After they completed the background questions, the participants responded to a series of open-ended questions. We instructed them to journal their responses to the questions raised in a reflective manner within the space provided. The open-ended questions were derived from previous literature on the professional socialization process (Table).^{5,6} A peer reviewed the questions for clarity, content, and flow before data collection began.

Data Analysis and Credibility

The analysis procedures followed the general inductive process, which is a common method used in health and social science research, as described by Thomas.¹⁰ We selected this method of analysis to help uncover the most dominant themes from the data as they related to the specific aims of the study. Initially, we read the transcripts in their entirety to gain a sense of the data. This holistic

Table. Interview Questions

1. Describe your first few experiences as a preceptor regarding the direct supervision of students.
2. Reflect back on your preceptor training sessions and evaluate their effectiveness in preparing you for your initial role as a preceptor.
3. Do you feel prepared to be a preceptor? Why or why not? Please explain your answer.
4. What could be done to improve your confidence as a preceptor?
5. How did you learn your role and professional responsibilities as a preceptor?
6. How would you describe your clinical instruction style?
7. What has been your greatest challenge as a preceptor, and how did you learn to deal with it?
8. What do you like best, or what are the good things about being a preceptor? Please explain your answer.
9. What aspect of your role as a preceptor do you feel least satisfied by? Please explain your answer.
10. What advice might you give to an athletic trainer just about to start as a preceptor for the first time? Why?
11. How do you continue to grow in your role as a preceptor? What measures do you take to continually improve?
12. How has the role of the preceptor evolved since you were a student?
13. How has the role of the preceptor evolved since you were a preceptor for the first time?
14. How does your program's preceptor retraining workshops continue to help you be a successful preceptor/mentor? Please explain your answer.

evaluation of the data continued multiple times, and during the second and third readings, we assigned categories (labels) to the data. Initially, the categories remained generic to explain the overall content of the responses. After assigning categories to the data, we organized them into more specific dominant themes to reduce redundancy. The research purpose guided data evaluation.

Creswell¹⁵ suggested using at minimum 2 methods to establish credibility of the data, and following the principles of a general inductive theory, we performed 1 consistency check and 2 stakeholder checks.¹⁰ When the data analysis was complete, the first author (S.M.M.) shared the emergent themes with the second author (T.G.B.), who independently reviewed the data following the same procedures (consistency check). After the independent coding procedures, the 2 researchers were in agreement with the content of the themes but negotiated the final terminology used to label the themes. For example, the lower-order theme *teacher certification* was termed *educational background* by 1 researcher and coined *teacher training* by the other researcher. Together, the researchers agreed on *teacher certification* to describe the theme. Neither the stakeholder check nor the peer review altered the final presentation of the findings. When the 2 researchers reached full agreement, we shared the themes with 2 participants for their feedback on the presentation of the findings (stakeholder checks). In addition, we used a peer review to evaluate the data-collection procedures and results.¹⁶ An athletic training scholar and clinician (T.M.D.) with experience in qualitative methods and strong knowledge of professional socialization and clinical education completed the peer review. Our peer also had served as a preceptor. He evaluated the interview guide and data-collection procedures and then reviewed the final themes as identified by the primary researchers.

RESULTS

After the data analysis, 2 dominant themes, *informal processes* and *formal processes*, emerged and described how an athletic trainer serving as a preceptor is socialized into this position. As outlined in the professional socialization literature, the first phase of organizational socialization involves a period of induction, which can be very formal or informal.¹⁷ This induction is comparable to the experiences of athletic trainers serving as preceptors because they used both formal and informal processes to gain an appreciation for the tasks associated with clinical instruction. Informal processes of socialization often are viewed as on-the-job training, in which the employee learns by doing or trial and error, and are less structured than formal socialization tactics.¹⁸

Each dominant theme was further characterized by 3 subthemes (Figure). Preceptors can learn their roles in many ways, but this group informally gained understanding by *observing other preceptors*, *interacting with their former mentors and preceptors*, and *using student feedback*. Formally, *preceptor training/workshops* conducted by the athletic training education programs, *professional development sessions* at conferences, and previous *teacher certification* were ways the athletic trainer was socialized into the role of the preceptor. Each theme is defined, discussed, and supported by participant quotations in the Discussion section.

DISCUSSION

Informal Processes

Informally, this cohort of preceptors gained an understanding of their roles and responsibilities through *observations*, *previous experiences and/or interactions with role models*, and *self-reflections and student evaluations*. Our understanding of methods used to socialize preceptors and field supervisors is limited, but as with athletic training preceptors, other professional fields are deficient in training the practitioner to succeed as a clinical educator. Comparable with our findings, Harvey and Struzziero¹⁹ reported school psychologists commonly use informal processes, such as self-reflection, peer networks, and professional development, to learn their roles as field supervisors. Several preceptors in our study discussed watching and observing how other preceptors conducted themselves as clinical instructors to gain an understanding of the expectations. One preceptor shared: “[I] learned my role and responsibility just from being around other preceptors.” The opportunity to be surrounded by peers also serving as preceptors was a major catalyst to role inductance for this participant. Most often, the collegiate setting provided these opportunities for preceptors to be engaged by other preceptors, and observing the interactions of their colleagues as preceptors allowed them to develop their skills as preceptors. Illustrating this point was a preceptor in the college setting who discussed the benefits of peer learning and observation:

I try and learn from other preceptors whom I work with. I pick their brain for certain solutions or ideas to questions that I have or that my students have. It is very beneficial to be working with a large sports medicine staff because

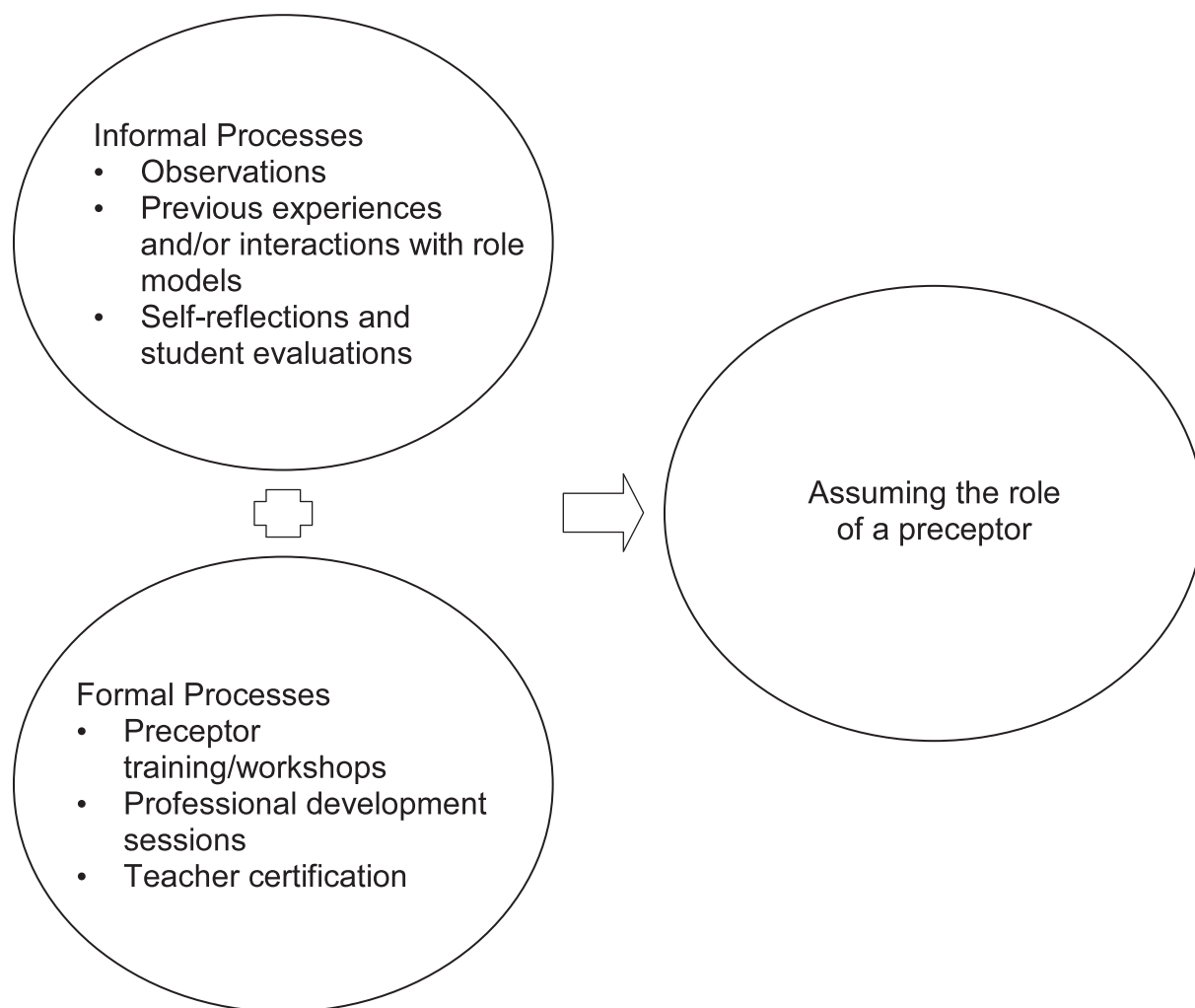


Figure. Formal and informal processes involved in assuming the role of the preceptor.

I can get a constant flow of ideas to help guide me, which I wouldn't be getting if I started working at a high school right out of college.

Another preceptor offered similar comments: "I learned my role and professional responsibilities through watching and observing other preceptors." The use of observation to gain induction into a professional role has been described by Pitney⁵ in the context of organizational socialization of an athletic trainer into the secondary school setting. As did the participants in that study,⁵ our preceptors used informal learning to develop their skills as preceptors. Furthermore, the informal learning our participants demonstrated illustrated the basic adult learning principles outlined by Knowles,²⁰ who suggested adults learn when the activities are self-directed and meaningful to their current professional situations.

As part of this informal learning that is viewed as incidental because it is unintentional and unplanned, the preceptors engaged in casual conversations with other preceptors as a means of observation to help them develop as preceptors. One responded how she prepared for the role by sharing: "I ask for quite a bit of feedback from colleagues who have had more experience than me. This helps me put things into perspective." Several of the less experienced

preceptors used personal dialogue with other preceptors to develop their skills as preceptors. For example, 1 preceptor wrote: "I continue to talk and ask for advice from peers and past preceptors." The solicitation of feedback, advice, and mentorship by these preceptors further highlights another principle of adults learning new roles in which self-direction can be effective particularly because it occurs in a socioprofessional setting.²¹ In this case, the athletic trainer engaged with other athletic trainers serving in the same role to gain a better perspective, to expand on his abilities, and to learn new ways to stimulate learning for his ATSS. In essence, the preceptor solicited mentoring to gain induction into the role and continued to consult with role models and mentors to persevere in that role.⁶

Several participants also mentioned modeling the behaviors and characteristics of preceptors from their educational experiences to gain socialization into the role. Informal learning from experiences or interactions with athletic trainers engaged as preceptors was helpful, particularly in the secondary school setting where collaboration may not be available because often only 1 athletic trainer is employed. Preceptors employed in both settings discussed modeling, but it appeared to be more prevalent for those without peer groups in the work setting on which to draw. For example, a preceptor shared: "I have had some great

and bad preceptors, and I tried to emulate what the great ones did.” Another preceptor corroborated this statement when discussing why he believed he was prepared to be a preceptor: “I had an excellent preceptor/mentor while I was at [institution name].” Mentorship often is recognized as a powerful socialization tactic and obviously for this group of preceptors was beneficial in inspiring an appreciation for the attitudes and skills necessary to become a preceptor in an athletic training program. To continue capitalizing on this socialization strategy, programs are encouraged to pair younger preceptors or clinical instructors with preceptors who have more experience to facilitate demonstration of an expert preceptor. Creating a peer-mentor program for the preceptor can improve the novice preceptor’s experience, which can positively influence student experiences in the clinical education experience. Peer-assisted learning, as described by Henning et al,²² aids the student in learning and, thus, supports our suggestion to develop a peer-mentor program to help the preceptor grow and mature as an expert preceptor. Students often seek advice and feedback from their peers when learning to be athletic trainers, and our participants revealed that consulting with their peers for guidance, support, and feedback was helpful in learning to be preceptors. Similarly, peer groups have been advocated for developing a coherent educational experience for students, and membership can assist with developing skills associated with the role the student is learning.²³

Many preceptors used self-reflections and student evaluations to gain a better understanding of the expectations associated with the role of the preceptor. Reflection has been suggested as a critical step in the learning process²⁴ and often has been used by the self-directed learner to facilitate learning.²⁵ In the medical literature, reflection is necessary for the practitioner to develop mastery as a clinician; therefore, reflection can foster mastery as a preceptor.²⁶ Within athletic training, Dodge et al²³ suggested that clinical education settings, as guided by the preceptor and athletic training faculty, should promote time for student reflection on information gained, skills learned, and performance. For instance, 1 preceptor wrote: “[S]elf-reflection, there is always something that I need to refresh my memory on or a student who has particular needs that are unique.” Another preceptor used a similar strategy: “I also try to see others working in that capacity [as a preceptor] to see if I am measuring up.” One preceptor used both personal and student evaluations to promote professional growth, saying he continues to improve as a preceptor by “self-reflection, professional reflection, and preceptor evaluations.” As outlined by Weidner and Henning,²⁷ the 7 standards for being an effective clinical instructor include clinical skills and knowledge, evaluation and performance, supervisory and administrative skills, instructional skills, interpersonal relationships, communication skills, and legal and ethical behaviors. Weidner and Henning⁴ suggested that, of the 7 standards, those involving legal and ethical behavior, communication skills, interpersonal relationships, and clinical skills and knowledge must be considered the most important, relevant, and fundamental. Researchers²⁸ also have indicated a preceptor must be confident, display professional behaviors, be respectful, and model appropriate professional actions and skills and must allow for the student to integrate those modeled behaviors. Using student feedback, many preceptors in our study

further developed and adapted to the learning and supervision needs of their ATs. Their digestion and integration of student feedback allowed them to grow and learn how to meet the needs of their ATs, which is an important element in facilitating clinical education experiences for the ATs and a critical skill set for the preceptor.^{27,28} For example, 1 preceptor shared:

I read through all my student evaluations fully and decide how to adapt. I provide plenty of opportunity for the students to express how they are feeling and how they like or dislike feedback to be presented.

Another preceptor also valued student input as a means to facilitate professional growth as a preceptor: “I personally ask [my] students how to improve [on their experience]. [I ask] my athletes. Both often give the most candid feedback.” A similar sentiment arose as a preceptor agreed: “I also take the feedback I get from evaluations and use the constructive criticism to become more well-rounded and effective at my job.” Programs often use student evaluations to provide feedback for skill or performance improvement; however, a preceptor is not obligated to use that feedback. This cohort of preceptors viewed the opportunity to use the student evaluations as a means to evolve into their roles, demonstrating a more informal socialization process.

Formal Processes

Formal processes of socialization often are very structured and systematic, including orientation sessions, formal meetings with supervisors, or computer-based or video-based training sessions.¹⁸ Formally, athletic trainers learn about their professional responsibilities related to the role of the preceptor via *preceptor training/workshops*, *professional development sessions*, and previous *teacher certification*. The preceptor training workshops, comparable with orientation sessions in the corporate workplace,¹⁸ appeared to be beneficial in familiarizing the preceptor to the roles and expectations as outlined in the CAATE standards and to the policies and procedures of the individual program. One preceptor stated:

I love the preceptor training sessions. They get me motivated to teach and mentor our athletic training students. It’s great to share experiences and learn from other preceptors, especially those in the high schools who deal with different situations. Reviewing the expectations and requirements is always helpful with clarification. I enjoy them and they are extremely beneficial to me as a preceptor.

Another preceptor shared:

Reflecting back on my preceptor training session, I can honestly say it effectively prepared [me] more than I expected. Furthermore, my preceptor training session motivated me to want to be a good preceptor.

A different preceptor discussed the long-term influence of the training sessions and the importance of the retraining sessions:

My preceptor retraining workshops continue to help me be a successful preceptor/mentor because it [sic] engages my intellectual curiosity. While at a retraining workshop, I may hear about a certain situation somebody else had and how they handled it. From that, I am able to explain to a student how I would like them to handle a similar situation, if it were to arise.

Finally, 1 participant explained how the preceptor workshop she attended helped her have a clear understanding of the expectations for a preceptor: "Preceptor training provides us with a better understanding of the clinical competencies and what the clinical [education] expectations are." The preceptor training workshops were a means to gain formal training for the role. Similarly, Pitney et al⁶ described the importance of formal training when athletic trainers are learning their roles in the college setting. A more formal means of introducing the practitioner to the role of instructor or field supervisor has been used for school psychologists who agree to supervise interns.¹⁹ The coursework or workshops in supervision include discussions on the learning needs of students and techniques to foster learning and evaluation of performance, which are all aspects necessary to succeed in the role. As our participants described, the workshops, which were similar to those used to prepare the school psychologist field supervisor, provided the foundational knowledge necessary to perform the responsibilities and tasks associated with clinical supervision and instruction before actualization of the role. Furthermore, the initial training provided a basic understanding of the expectations associated with the role as outlined by CAATE¹ and the individual educational program. Programs also should consider using retraining sessions to present and discuss instructional techniques to continue to improve the experiences of ATSS. For example, topics may include the use of critical reflection,²⁶ strategic clinical questioning,²⁹ or structured autonomy.³⁰

Critical reflection involves providing rationale behind decision making and can empower learners to take control of their decisions. A peer or mentor (such as the preceptor) can be a strong ally in the reflection process and gives the student the opportunity to be engaged in practical learning that allows for discourse between the preceptor and learner. The preceptor needs to ask questions that encourage reflection and further thought into his or her decision making and simply require asking "why" or "what if."²⁶ Strategic clinical questioning is a specific type of clinical questioning that involves patterned sequencing of questions, including "what," "so what," and "now what" questions.²⁹ The first 2 types of questions evaluate knowledge level and cognitive comprehension, whereas the final type promotes critical thinking. All types of questions are important, but the latter 2 types of questioning require thought and planning by the preceptor and benefit the student who is more experienced. Structured autonomy can be viewed as amalgamating direct supervision and mentoring.³⁰ The preceptor should be encouraged to engage in critical observation of the student and provide guidance and support while demonstrating critical application of his or her knowledge and skills. The preceptor should be reminded that the ability of each student depends on academic standing and educational experiences at the point of instruction.

Many preceptors also learned about their roles as preceptors through professional development. The athletic trainer often uses formal continuing education experiences when trying to gain more knowledge in a particular area, and this helps explain why the athletic trainer who is a preceptor may seek learning opportunities at professional conferences and workshops.³¹ When asked how she continues to grow in her role as preceptor, a participant responded: "Just like the measures I take to stay current in athletic training and teaching, I try to stay up to date on current research, attend meetings and seminars on education." Another preceptor stated: "I also try to stay up on changing learning styles by attending workshops. . . ." Armstrong and Weidner³¹ found that engaging in formal continuing education activities positively influences the clinical practice of the athletic trainer. Therefore, more continuing education opportunities should be offered within the topic areas of clinical instruction and supervision to continue to promote and enhance the abilities of the preceptor.

Several participants had formal teacher certifications or training through their undergraduate or graduate studies. Many of them had full-time athletic training positions at high schools where they were required to maintain a current teaching license. When asked why she believed she was prepared to be a preceptor, 1 such preceptor stated: "[I]t may help that I have a teaching degree, as well as the [certified athletic trainer] credential." Another participant in her first year as a preceptor stated she was confident in her ability to be a quality preceptor because her role was "very similar to being a teacher." She had been teaching at a high school for 10 years while performing athletic training services before mentoring ATSS for the first time. A different preceptor who worked at a small college with teaching responsibilities wrote: "I have been an educator for 22 years and felt very comfortable with teaching and setting goals and objectives with my students." Based on these responses, the previous experiences as educators helped these preceptors feel comfortable teaching athletic training skills to ATSS because they had knowledge of pedagogy and effective instructional strategies, as well as experience in this area. An interesting finding was that many athletic trainers, especially those who engage primarily in patient care and secondarily in supervision, often were deficient in training related to instructional techniques or educational practices. The results related to teacher certification and experience highlight the need for and possibly the importance of understanding student learning styles, instructional methods, and ways to mentor; all of these components can benefit an athletic trainer in the role of preceptor.

Limitations

One limitation of our study was that we used a Web-based medium for data collection. Although it is a reputable form of data collection in the qualitative paradigm and capable of producing rich data, the medium limits the opportunity for follow-up by the researcher with the participant. Our data were robust and provided insights into the socialization process for the athletic trainer becoming a preceptor; however, future inquiries may include multiple modes of data collection or use the

traditional means of interviewing to allow for dialogue between the participant and the researcher. Another limitation was that our participants represented only a small portion of the educational programs in the United States. Given program autonomy and varying personal experiences with becoming a preceptor, the results presented may not reflect the perceptions of all preceptors. However, our participants did represent a balanced and diverse demographic, leading us to believe our results are plausible and transferable. Preceptors are critical because they are the mentors for future athletic training professionals; therefore, researchers need to investigate on a larger scale how they are being trained to be effective.

CONCLUSIONS

Several processes informally and formally facilitate being socialized into the role of the preceptor. The preceptor workshop provides the framework for the athletic trainer to gain an understanding of the role and responsibilities of a preceptor, including supervision, instructional methods, and mentoring. Programs should continue to use this medium to prepare the athletic trainer, who typically lacks formal educational training, to implement the most appropriate strategies to foster an effective learning environment for the student. Preceptors should consider the 3 topics discussed—critical reflection,²⁶ strategic questioning,²⁹ and structured autonomy³⁰—to help the ATS learn in the clinical education setting.

The use of preceptor training and retraining sessions also may benefit the preceptor by providing opportunities to engage with others serving in a similar capacity. Peers served as important facilitators in the socialization process; therefore, athletic training administrators should attempt to encourage interactions between them during training workshops. This can be accomplished in many ways, but it can be done simply by placing students into groups to work through case studies and scenarios as they relate to the workshop topic. Taking time for reflection and using student feedback also helped preceptors gain a better understanding of their roles; therefore, preceptor training may provide another platform to encourage preceptors to do this. Instructing the preceptor to reflect on his or her performance during the current year and then describe his or her strengths, areas for improvement, and goals for the next year in a journal also may facilitate critical reflection. Some preceptors may be willing to share their thoughts and reflections with the group, which is another way to facilitate peer mentoring and learning.

Many preceptors actively sought professional development activities to continue to promote learning about clinical instruction and supervision. Recognizing this, program administrators should offer continuing education opportunities through both formal workshops, to gain continuing education units, and informal means, such as providing access to current publications on clinical education or tips or pearls for clinical instruction. Student feedback on the clinical education experience also helped spark role continuance for this group of preceptors. Therefore, preceptors are encouraged to take feedback seriously as a way of understanding the expectations associated with the role. In addition, programs need to educate the student on the importance of providing

constructive, honest feedback to help the preceptor continue to develop into an effective instructor. Possessing a teacher certification or having classroom experience helped many participants have confidence as preceptors. Despite this finding, many preceptors do not have formal training due to the limited time in many athletic training curriculums to spend on content beyond the domains of practice. Potentially, however, graduate programs or senior seminar courses in undergraduate programs may spend time discussing effective instructional methods and ways to improve clinical education. Doing so not only can help the preceptor gain confidence in his or her role but also could plausibly increase his or her competence as a clinical instructor.

REFERENCES

1. Commission on Accreditation of Athletic Training Education. Standards for the accreditation of entry-level athletic training education programs. <http://caate.net/>. Accessed June 20, 2013.
2. Weidner TG, Henning JM. Being an effective clinical instructor. *Athl Ther Today*. 2002;7(5):6–11.
3. National Athletic Trainers' Association. *Athletic Training Education Competencies*. 5th ed. Dallas, TX: National Athletic Trainers' Association; 2011.
4. Weidner TG, Henning JM. Importance and applicability of Approved Clinical Instructors standards and criteria to certified athletic trainers in different clinical education settings. *J Athl Train*. 2005;40(4):326–332.
5. Pitney WA. The professional socialization of certified athletic trainers in high school settings: a grounded theory investigation. *J Athl Train*. 2002;37(3):286–292.
6. Pitney WA, Ilsley P, Rintala J. The professional socialization of certified athletic trainers in the National Collegiate Athletic Division I context. *J Athl Train*. 2002;37(1):63–70.
7. Klossner J. The role of legitimation in the professional socialization of second-year undergraduate athletic training students. *J Athl Train*. 2008;43(4):379–385.
8. Clark PG. Values in health care professional socialization: implications for geriatric education in interdisciplinary teamwork. *Gerontologist*. 1997;37(4):441–451.
9. Dunn SV, Ehrich L, Mylonas A, Hansford BC. Students' perceptions of field experiences in professional development: a comparative study. *J Nurs Educ*. 2000;39(9):393–400.
10. Thomas DR. A general inductive approach for qualitative data analysis. *Am J Eval*. 2006;27(2):237–246.
11. Mazerolle SM, Gavin KE, Pitney WA, Casa DJ, Burton L. Undergraduate athletic training students' influences on career decisions after graduation. *J Athl Train*. 2012;46(7):679–693.
12. Meho LI. E-mail interviewing in qualitative research: a methodological discussion. *J Am Soc Info Sci Tech*. 2006;57(10):1284–1295.
13. Mazerolle SM, Pitney WA, Casa DJ, Pagnotta KD. Assessing strategies to manage work and life balance of athletic trainers working in the National Collegiate Athletic Association Division I setting. *J Athl Train*. 2011;46(2):194–205.
14. Pitney WA, Mazerolle SM, Pagnotta KD. Work–family conflict among the secondary high school athletic trainer. *J Athl Train*. 2011;46(2):185–193.
15. Creswell JW. *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*. 2nd ed. Thousand Oaks, CA: Sage; 2007.
16. Pitney WA, Parker J. *Qualitative Research in Physical Activity and the Health Professions*. Champaign, IL: Human Kinetics; 2009:42, 45, 63.
17. Teimey WG, Rhodes RA. *Faculty Socialization as a Cultural Process: A Mirror of Institutional Commitment*. Washington, DC:

- George Washington University, School of Education and Human Development; 1993. ASHE-ERIC Higher Education Report 93–96.
18. Bauer TN, Erdogan B. Organizational socialization: the effective onboarding of new employees. In: Zedeck S, ed. *Maintaining, Expanding, and Contracting the Organization*. Washington, DC: American Psychological Association; 2011:51–64. *APA Handbook of Industrial and Organizational Psychology*; vol 3.
 19. Harvey VS, Struzziero JA. *Professional Development and Supervision of School Psychologist: From Intern to Expert*. 2nd ed. Thousand Oaks, CA: Sage; 2008:25–26.
 20. Knowles M. *The Adult Learner: A Neglected Species*. Houston, TX: Gulf Publishing; 1984.
 21. Kathrein MA. Continuing nursing education: a perspective. *J Contin Educ Nurs*. 1990;21(5):216–218.
 22. Henning JM, Weidner TG, Jones J. Peer-assisted learning in the athletic training clinical setting. *J Athl Train*. 2006;41(1):102–108.
 23. Dodge TM, Walker SE, Laursen RM. Promoting coherence in athletic training education programs. *Athl Train Educ J*. 2009;4(2):46–51.
 24. Redding JC. *The Strategic Learning Handbook*. Naperville, IL: Institute for Strategic Learning; 1996:5–15.
 25. Pitney WA. Continuing education in athletic training: an alternative approach based on adult learning theory. *J Athl Train*. 1998;33(1):72–76.
 26. Sandars J. The use of reflection in medical education: AMEE Guide No. 44. *Med Teach*. 2009;31(8):685–695.
 27. Weidner TG, Henning JM. Development of standards and criteria for the selection, training, and evaluation of athletic training Approved Clinical Instructors. *J Athl Train*. 2004;39(4):335–343.
 28. Laurent T, Weidner TG. Clinical instructors' and student athletic trainers' perceptions of helpful clinical instructor characteristics. *J Athl Train*. 2001;36(1):58–61.
 29. Barnum MG, Guyer MS, Levy LS, et al. Questioning and feedback in athletic training clinical education. *Athl Train Educ J*. 2009;4(1):23–27.
 30. Seegmiller JG. A model for clinical education in athletic training. *Internet J Allied Health Sci Pract*. 2003;1(1):1–4.
 31. Armstrong KJ, Weidner TG. Formal and informal continuing education activities and athletic training professional practice. *J Athl Train*. 2010;45(3):279–286.

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