

A Play in Three Acts: Confused, Conflicted, and Convinced (Learning to Reflect in Athletic Therapy)

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Abstract. In some fields, written reflection is commonplace whereas in others it is uncommon. While athletic therapy education aims to produce reflective practitioners, written reflection is not a typical pedagogy employed. In 2014, the athletic therapy program at our institution began the implementation of a clinical presentation (CP) approach to facilitate competency-based curriculum requirements. This innovation to pedagogy required a reimaged approach to teaching, learning, and assessment. We describe one aspect of a larger SoTL study on this transformation, inquiring into the development of reflective practice through reflective writing. Students were asked to regularly reflect on their experiences in the clinic or field as part of their program. In this qualitative component of the study, we were able to gain insight into how students perceived the reflective process, how that evolved over their program, what were enablers and barriers to their reflection, and what was the role of feedback in their learning. The characteristics of student perceptions in each year, which followed a learning arc which we describe sequentially as “confused, conflicted, and convinced,” is explored, along with implications for pedagogy in assisting students to develop reflective professional practice.

Keywords: reflection; reflective writing; professional education; qualitative research; athletic therapy.

In recent years, there has been a great deal of interest in reflection in education in medical and allied health professions. The importance of reflective practice is consistently noted as “an essential characteristic of professionally competent practice” (Wald & Weiss, 2018, abstract). Wald (2015) pointed to reflection as a “key element” to professional identity development, and this is even more important for increasingly complex patients and environments (Uygur et. al, 2019). In order to encourage reflective habits and skills, reflective writing is often the vehicle educators turn to in assigning students structured reflection. In a systematic review, Chen and Forbes (2014) noted that despite program variability in which reflective writing is used, “the review illustrated consistent, positive outcomes of self-reflection on student well-being and clinical skills” (p. 4). They also pointed out the widespread use of reflective writing across programs and that reflective writing can be used as “both intervention and metric...reflective writing can be seen as both a test that teaches and measures empathy changes” (p. 4).

Reflective writing is not a common pedagogical tool in Athletic Therapy (AT) programs. This study is a qualitative look at the implementation of reflective writing across multiple years of an AT program and students’ perceptions of their learning. The study takes a close look at 10 students who participated in interviews about the

reflective process and analyzes their final yearly reflections as a second source of data.

Backstage: Literature on Reflection

Why Reflection, and Why Reflective Writing?

The literature consistently asserts that reflective writing can be a powerful tool to teach some of the non-technical knowledge in the medical and allied health professions. For example, reflective writing is thought to improve awareness of self and others while also increasing powers of observation (Reisman et al., 2006). It is thought to help students to process difficult experiences and encourage a growth mindset. Reflective traits can be cultivated and learned with effort (Teunissen & Bok, 2013).

Research has shown a link between reflective capacity and clinical decision making as well as enhanced academic performance (Tsingos-Lucas et al., 2017). Reflection "fosters empathy and practical wisdom" and helps practitioners to live with complexity (Karkabi et al., 2014, p. 44). As Charon et al. (2016) point out, "to write is not only to report or record but also to discover" (p.4). They suggest that reflective writing and other creative activities can help students with the quality of their attention: "Teaching clinicians the skills of the close reading of literature, creative writing, and the viewing of fine arts can strengthen their habits of 'close listening' or 'slow looking,' thereby improving their quality of perceptive attention" (p. 4).

Yet Students Struggle with Reflective Writing: Why?

Students' struggles with reflection are well documented and not unique to the AT discipline (e.g., Wald, 2015), particularly in the beginning. One possible reason for this might be how they approach processing experiences and seeking feedback. For example, Teunissen and Bok (2013) describe differences in learner approaches to difficult challenges, comparing those with a learning orientation (who actively seek constructive feedback) to those with performance goal orientation (who exhibit more limited feedback seeking behaviour). Despite the challenge, the literature also supports the idea that many students find the reflection process valuable (Tsingos-Lucas et al., 2016).

In particular for AT students, there may be a learning preference element. Using a multiple intelligences framework, Kutz et al. (2013) found that AT students tend to be drawn to the profession due to its kinesthetic components and scored lowest on verbal intelligence, which may contribute to their struggles with written reflection. Coker (2000) notes a learning preference in clinical settings for hands-on learning. While the "learning-style" theory has been debunked (Brown, 2014), there are still preferences in individuals that may draw them to specific professions as they prefer certain modalities, while avoiding others.

How to Support Students in Learning to Write Reflectively and to Help Them Learn from Reflection?

Various methods are proposed both in terms of structuring the writing for students and in terms of assessing it. Some programs have experimented with aesthetic responses to artistic forms, such as opera or paintings, to evoke emotion. Other programs work to create rubrics or other systematic approaches to assessing and responding to reflective writing (Wald et al., 2009). Tsingos-Lucas et al. (2017) suggest that "Perhaps the greatest pedagogical challenge for educators of health professionals is how we can help them to write reflectively" (p. 6), and Driessen et al. (2008) articulate that "students do not adopt reflective learning habits spontaneously, so teachers must help them" (p. 827). However, these kinds of reflections must be carefully structured to have the desired effect. Driessen et al. (2005) found that four conditions must be met for success: good coaching; structure and guidelines; adequate experiences and material for reflection; and summative assessment. They point out that "students simply completing reflective assignments is no guarantee that reflection will occur" (p. 1230).

In summary, reflection is a critical aspect of effective clinical practice. However, we cannot count on students intuitively knowing how to do it nor that it is intuitive for instructors to teach and assess effectively. In this study, we gained insight into how students perceive the process, how that evolves over their program, what are enablers and barriers to their reflection, and what is the role of feedback in their learning.

Setting the Stage: Context of the Study

In 2014, athletic therapy (AT) faculty members at our institution agreed to implement a clinical presentation (CP) approach to facilitate competency-based curriculum requirements (Lafave et al., 2016). This innovation to pedagogy required a reimaged approach to teaching, learning, and assessment (Yeo et al., 2017). We describe one aspect of a larger study inquiring into the development of reflective practice through reflective writing, and, thus, this SoTL study will be of interest to professional programs and disciplines beyond AT. In addition to the classroom pedagogical change in how material is presented (starting with an injury and working backwards to learning about the body's structure and function), students were asked to keep logbooks throughout their program. The logbooks contained lists of clinical presentations, and students kept track of what they were exposed to in their classes, clinical, and field placements and rated their confidence and competence in treating those injuries (Lafave & Yeo, 2019). Key for the present discussion, they were also asked to regularly reflect on their experiences in the clinic or field. This culminated in a final reflection for each year. This article focuses on what we learned about the development of student reflection across the program.

In the early phases of the implementation of the new pedagogy, instructors noticed students struggling with the reflective activity. We wondered about potential causes of this resistance, such as cognitive overload, difficulty in understanding the value

and process of reflective practice, dominant kinaesthetic orientation to learning for many AT students (Kutz, et al., 2013), affective aspects (Middendorf et al., 2015), and cultural factors within the profession of AT. In our interviews, we asked students about their reflective process and have begun to learn about their challenges. For example, participants felt unsure about what was expected from the reflective process, sometimes had difficulty identifying appropriate events to reflect about, and were challenged to dedicate time to reflection while engaged in practical learning experiences.

We noticed a clear progression in the students' responses to the reflective practice over the three years, demonstrating a learning arc over several years. We will describe this learning arc and make subsequent recommendations for practice based on these results.

Set Design: Methodology

The participants were drawn from three successive cohorts of athletic therapy students that we started following in their second-year practicum course. Ten students were included in the study because they agreed to be interviewed (in addition to providing written work as described below). In other words, it was a convenience sample—all students had equal opportunity to participate. The data was collected over three years; thus, for the first cohort, we have interview data following them to graduation (please see Table 1 for summary).

All students were required to use a student logbook wherein they tracked their exposure to a wide range of clinical presentations, along with their confidence in handling these specific injuries in practicum courses each semester. Confidence was self-administered twice a semester, once at the start and once at the end, using a 100 millimetre visual analogue scale with "extremely confident" at one anchor and "not confident at all" at the other end. Confidence was not a focus of this study but rather was reported previously (see Lafave & Yeo, 2019).

Students, as part of their coursework, were regularly asked to reflect on their experiences and the meaning they were making of them. For example, they might reflect on an injury or treatment, they might consider elements of practice such as interprofessional communication, or they may reflect about the interaction of those two topics. Topics were often directed by where the course was placed in the curriculum so there was alignment between theory courses and the practicum course that was intended to bridge theory to practice. Based on feedback from students, the number of reflections students were required to complete were adjusted over time. Originally, students were being asked to reflect on three clinical presentations each week in clinic and field settings. This was overwhelming and, therefore, reduced to a submission of 10 clinical presentations over a 4-month span. All students were required to complete these logbooks and reflections as part of their program; only the students who consented to participate in the research component were asked to submit their logbooks for analysis. The instructors of the courses were unaware of which students participated and which did not. This

methodology was approved by Mount Royal University's Human Research Ethics Board.

The present qualitative analysis focuses specifically on the reflective element, and specifically, the student perceptions of the process. This element of the study uses a basic qualitative approach, as defined by Merriam and Tisdell (2016). It is a common approach in applied fields of practice such as education, implementing a constructivist lens. Qualitative research assumes that "individuals construct reality in interaction with their social worlds" and researchers tend to be interested in how participants "make sense of their lives and their experiences" (Merriam & Tisdell, 2016, p. 24). Quantitative results for the CP logbooks are presented elsewhere (e.g., Lafave & Yeo, 2019).

At the end of each year of data collection, participating students were invited to take part in a research interview. A smaller number of students (10 unique individuals with a total of 12 interviews) came forward for interviews then participated in the larger study; however, this data proved to be qualitatively rich. The present analysis focuses on the interview data, along with the summative written reflections produced by the students interviewed at the end of each year. The following table summarizes the interviews conducted. As shown in Table 1, two of the students were interviewed more than once. The letter codes are not personally identifying initials, rather they are codes given to participants according to an internal system to help track their year and program.

Table 1

Summary of interviews conducted

	First Cohort	Second Cohort	Third Cohort
Winter 2016	AW (2 nd year)		
Winter 2017	BB (3rd year) BH (3rd year)	CK (2nd year) CL (2nd year) CN (2nd year)	
Winter 2018	BB (4th year) BH (4th year) AN (4th year)		EL (2nd year) EQ (2nd year) ER (2nd year)
Totals	7 second-year interviews, 2 third-year interviews, 3 fourth-year interviews		

The 12 interviews were recorded and transcribed, and the researchers independently analyzed the interviews thematically and met to compare. We agreed that saturation was achieved in the interviews, indicating a sufficient qualitative data set (Merriam & Tisdell, 2016, p. 101). While initially looking for a common set of themes across all interviews, the researchers agreed once they conducted their analysis that they noticed a clear progression evident over the three years of the

students' program in terms of their perceptions of the reflective process, and their ability to reflect. The characteristics of each year, which we describe sequentially as "confused, conflicted, and convinced," along with increasing sophistication in the reflections themselves were well evident across the data, along with participants' growing sense of independence as professionals. This progression is more prominent than any consistent themes across all three years, other than one specific theme around feedback which transcended stage in program. Additionally, the final written reflections of the students interviewed were reviewed to triangulate what was said in the interview with the reflections themselves. This provided additional insight.

Students' Relationship with Reflection — A Play in Three Acts

Act I: Confusion

The students interviewed in the second year about the reflective process seemed confused overall about the intention and benefit of writing reflections and were frustrated in attempting to understand what their course instructors "wanted" in order to receive full marks for the reflection pieces. As found in the literature, students initially found this type of writing challenging (Tsingos-Lucas et al., 2017). They were uncertain about the core purpose of the logbooks and reflections, many thinking that they were primarily for research or curriculum development purposes. In fact, all students were asked to do this as a core pedagogy of the program intended to help them track and confirm their progress as well as build reflective practice.

Students expressed consternation about the marks they received, and much of their response to interview questions focused on the assessment aspect of the interviews. They saw a disconnect between what they understood they were being asked to do and how they perceived that they were evaluated. They saw the reflections as highly subjective and wondered if it was fair to be "marked" on a personal experience. CN expressed the following:

I would say some of the reflections can be good, but, even then, it is hard when you are getting marked on a personal experience, like, to be marked on your opinions and your thoughts and whatnot, and you have a grade put on top of that. It is frustrating, I guess, because you are not sure if...eventually you just start putting down what they want to hear, not as much as like, just what you are seeing or your thoughts and feelings of the situation is. I think it can be a bit difficult in that sense.

At this stage of the reflective process, students interviewed often used the term "frustrating" to describe their reflective experience. Several students talked about trying to "figure out" or "put down" what "they" [their instructors] wanted to hear. This observation supports the contention in the literature that "...reflection is not necessarily intuitive, and educational interventions are warranted" (Wald & Reis, 2010, p. 747). We discuss this further in the section regarding feedback and assessment.

Because the course utilized the reflection journal in the second year related to “soft” skills (for example effective communication, contrasting with the “hard” skills of assessing and treating injuries), students also expressed annoyance at having to focus exclusively on soft skills for reflection purposes. There was a sense that this was not where the “real” athletic therapy happened. They found the restriction to soft skills challenging, seeing these skills as peripheral (EQ, CL). They would make a general acknowledgement that soft skills were “important,” yet seemed anxious to turn their attention to what seemed more exciting to them—the hard skills. They often expressed that they had difficulty choosing something “meaningful” (the assignment direction). They expressed that they were often “making stuff up” (CL)—stretching an event to write about it and trying to make things meaningful that were not really meaningful to them. At times, this seemed related to frustration at their placements, because as novices, they were often expected to “stand around” since they did not have sufficient skill yet to treat. They perceived that the “reflection is more for you guys, but also us,” demonstrating their general confusion regarding the purpose of the reflections.

In some interviews, contradictory statements were made. They were beginning to acknowledge the potential benefit of reflection, however housed within frustration:

Oh, I think so, yeah, definitely. Whether it was in the fact it made me reflect on my experiences or whether it was because you guys now had something to maybe work to improve the program on, either way I think it definitely does help our learning... Sometimes you are writing these reflections and you are just like, “Oh, this is so stupid, why do I have to do this?” but really it did make us think really deeply about what we learnt from that experience and... it really made me realize what I still have to learn, definitely. And it also made me recognize how important those soft skills are in this career, because I know I went into it being like, “Oh practicum? I am going to learn how to do all this cool stuff,” like the hard skills, and it was totally more soft skills that were the big takeaway. (CL)

In this quote we can see the kind of circular statement that was typical in the second-year cohort interviews—confusion about the purpose of the reflections, expressions of frustration, but also acknowledgement of value.

Students described getting “the hang” of writing the reflections over the semester, particularly those that paid close attention to feedback and were motivated to improve their mark on the reflections. Those that took the time to meet with the instructor seemed to have breakthrough insights in terms of what was being asked, for example, providing more detail and making connections to course material. The reflections themselves in the second-year cohort are characterized by direct observations and thoughts about what was correct or incorrect but little in terms of self-aware reflections about themselves.

Finally, this phase is marked by a lack of agency over their own learning by the students. The emphasis was on “what the instructors want” and how clearly that

was communicated, rather than on the students' ability to see reflection as part of the learning itself and as a process by which they would become reflective practitioners and come to their own insights about their experiences.

Act 2: Conflicted

The third-year interviews were characterized by a sense of internal conflict. Students contradicted themselves frequently—first expressing frustration with the reflective process and then, sometimes in the same statement, acknowledging its value. In this sense, the third year seemed a transitional phase between “confused” and “convinced,” with students rocking back and forth between the two.

Sometimes it is a bit of a pain, but I think it was a good thing to be able to do that so that you can really learn from what you did, and learn from things that you might have missed. Did you miss it because you just simply missed it, or you are already taking those steps into, “Okay, I don’t have to do this because I know this already”? So it kind of gets more feedback to yourself as to how you are learning through the year. (BB)

In these interviews, there was less of a focus on what the instructor “wanted” but still not a fully internalized sense of agency in learning. The focus seemed to shift to the rubric rather than the inside of the instructor’s mind.

It is just hard to...like, the reflections are real life—or they should be based off real life—and the rubric is structured. I get why and I understand what they want, but it is hard for you to grab each one of those points out of the rubric out of each experience. Sometimes you have to think back, like, “Maybe I was thinking this?” or, “Maybe this is why I did this?” “Maybe I know this from class because...” like some things don’t go through your head when you are doing things, and you don’t get the marks from the rubric. (BH)

This same student, however, who continued to struggle with identifying what was most meaningful, also spoke about how the reflections can help with the learning process:

I think every once in a while, yes, some things just, like, it just clicks. I felt like especially early on you could think back when you did something and it was completely wrong, or you felt something and you were like, “I don’t know what that was, that was weird,” and then two months down the road you are like, “Oh, that is what that was!”(BH)

BB made a very similar statement:

Well sometimes there was stuff I didn’t really understand maybe as I was writing it, but as we learned it in class material, putting those pieces together that I didn’t know before made it a lot easier to understand why that was happening...it is good to be able to look back at that and be like, “Okay, I didn’t know that then, but I might know it now.” (BB)

This student also made a comment that reflecting became a useful record for later, a kind of way to jog learning that had occurred earlier but was submerged and not easily accessible, and realized, "Okay I do know this... this is something I might have forgot, and this probably one of the more important things you are supposed to do!" This comment speaks to the importance of having a structured mechanism for having students go back and review their own reflections to help consolidate the learning.

A final aspect of the "conflicted" nature of this stage was that while students valued the feedback they received, they commented that it was difficult to know how to apply it. They started to realize the importance of including theoretical components from class, rather than making their reflections purely observational. For example, BB wrote in reflecting about assessing a shoulder injury:

In our discussion...it was evident that I had selected some good tests, my performance however wasn't always top notch. This doesn't come as a surprise for me, I haven't seen many shoulder injuries, and have thus not practiced as much as I should be. I am definitely going to make this a goal (if I haven't already) for this semester to improve on. Note to self: do not fear the shoulder, embrace it openly.

In these reflections, wonderings about the ramifications around professional decision-making were more apparent:

This was the first time I had felt what I thought was a positive meniscus test, which was cool to see and feel, but was surprised that I could not produce a positive valgus test. This was also the first time I had had to decide whether or not someone was alright to wrestle during a competition, and I am always very cautious to put them back in, but especially for wrestling because of the way their joints get torqued on. I was quite happy that he was fine during his match, but wonder if anything would have changed if I found the positive meniscus test earlier. (BH)

This was an example of a melding of the description of what was done and felt by the student, including their excitement of feeling something they hadn't been exposed to before, with the weight of responsibility of deciding whether an athlete can play or not. While the students themselves may feel conflicted about the value of the reflections, in reading them from an educational perspective, their value is clearly apparent. As pointed out by Tsingos-Lucas et al. (2017), "research has shown that fostering reflective skills in health professional education can assist students to improve their clinical decision-making skills and enhance academic performance...The ability to reflect on a deeper level is a desirable attribute for all health professionals" (p. 1). The value is not only for the student to articulate and deepen their understandings but to provide a window into their learning for the instructor as the basis for a conversation.

Act 3: Convinced

Fourth-year interviews have a different tone and character with students appearing to have crossed through the liminal space to practitioner. While still aware of their early career status, they seem to think about their own learning as something under their own agency and think about how to continue to progress regardless of external expectations. There seems to be a full realization of the purpose of the reflection process:

Interviewer: Seeing the benefits from this, do you think it might be something to carry forward, that reflective practice into professional practice?

P: It would be a really good idea! I know for sure, the first little while, I won't do it because like, I had a love/hate relationship with those reflections, but it would be a useful thing, for sure...I might not be getting feedback...but reflecting on it, for sure, helped me learn. Like even as I am writing I would say, like, yeah this is what I found and this is what I did, and then I would be like, oh, wait a second, why didn't I do this? And then halfway through the reflection, like ninety percent of the time, I would say, "Upon reflection I realize I should have..." blah, blah, blah and so that is just me learning on my own, which is probably exactly what it is designed to do. (AN)

AN reflected in multiple statements in his interview about how far he had come in his learning. He makes the statement that in terms of his practice, "I feel confident in anything that walks through the door." Students could see their own growth when they went back over their reflections to write cumulative statements. AN shared, "I actually spent time trying to reflect and learn something from it." There is a sense that they are surprised by their own growth and surprised that, despite the frustrations, they could, in hindsight, see the value of the reflective process.

In these interviews, we can see a leap in terms of students' sense of agency and responsibility. While appreciating positive feedback and guidance from mentors and instructors, there is a distinct looking inward for answers, even if it's not perfect. BH comments:

I know we are not amazing right now, but we are not supposed to be, and it still seems like there is so much we don't know. But at this point we have done everything and practiced everything at least a little bit, yeah, like we can probably do most things, just not amazing. It is just practice, experience, time...

BB wrote in the final reflection both about this growing sense of agency and excitement at becoming more independent while, at the same time, continuing to ask for guidance when needed from mentors and peers:

I plan on writing [the Canadian Athletic Therapists Association certification exam] in June, I am excited to have this opportunity and hope to pass so that I can get out in the real world and really start practicing on my own. This does

somewhat terrify me because I won't have someone to relay my information to and have them okay it or challenge me to dig deeper. However, I think that contributes to the thrill of it all. I can't say that I will never have help again because let's face it throughout this program I believe I have been exposed to many great mentors that I'm sure will help with guiding me should I ask for it in the future. Even in our peers, I can always bounce ideas off of them so long as some of us stay in contact and can meet or even just communicate regularly. Which, I am more than sure we will.

This student demonstrated the sense of having become convinced of the value of reflection when asked for advice to students coming in to the fourth year:

Keep doing them. You might not like it, but keep doing it. Well it is always hard because you don't want to write about the same thing every time so it is figuring out the one thing that was different in that week...don't be afraid to be jumping on a spine because that is the only way you are going to learn how to do it, and you have to write about it anyways, so don't be afraid of it. You might not like it, you might get confused all the time, but you will figure it out!

In this sense, the written reflections can act as a prompt for action rather than as a post-learning from action taken. Students throughout the interviews mention how knowing they will have to reflect on certain things acts as an incentive for observation—focusing their attention in particular directions. In this sense, reflective assignments can become a powerful pedagogical tool. As Charon et al. (2016) point out, "To write is not only to report or record but also to discover." (p. 4)

Another aspect that was visible in AN's final written reflection was the meta-level learning of pattern recognition and how that led to the confidence expressed above: "I feel confident in anything that walks through the door." In his reflection, AN writes the following:

Each week as I have gone through the list of CP's [clinical presentations] in my logbook checking off what I've been exposed to, I've seen myself not only get exposure to more and more of the CP's, but grow in confidence in each one. One of the biggest things that has grown my confidence is the fact that many rehabilitation techniques and strategies are common/relevant for a wide range of assessment findings. As I've been exposed to more and more real-life CP's, I have realized that I have enough tools, strategies, confidence, and skills to handle any combination/presentation of the CP's I've learned about over the past two years...

Thus, over the three years, we argue that the reflections have immediate value in deepening the learning in the moment, making visible the growing meta-cognitive learning and agency, and, finally, acting as a prompt to seek out and observe learning opportunities. There is a real sense in which reflecting both is a measure and instigator of learning.

Theme Through All Acts: Feedback and Assessment

Throughout all three years, an overarching theme from the interviews with students was the role of feedback and assessment of their reflections. For these students, the motivation to complete the written reflections was the mark that they received. For many, improving the mark was a high priority for them—they were not satisfied with a mediocre grade. They struggled to understand what the instructors were looking for and struggled to align experience with the rubric. They felt frustrated that subjective personal experience and opinion was subject to a mark. It was clear that good assessment practices, such as timely, detailed, constructive feedback was critical. Those students who took the initiative to meet with the course instructor regarding their reflections seemed to gain a lot of understanding from oral feedback. Students seemed to need prompting to go back and review their own previous reflections, such as through an end-of-year summative reflection. Providing helpful feedback on assessment is challenging for instructors, and they can use development in this process so they can become, in Karkabi et al.'s (2014) terms, more effective "reflective coaches" (p. 44). As they point out, "reflection is not necessarily intuitive for learners or teachers" (p. 44).

Our data agrees with the four conditions discussed in the literature review found by Driessen et al. (2005) for effective reflection: good coaching; structure and guidelines; adequate experiences and material for reflection; and summative assessment. The students struggled most when they did not feel they had experiences that warranted reflection. Since the students were always in clinic or field experiences, with events happening all the time, it also may be that they needed practice in identifying what experiences might be interesting to write about and observing in a particular way. Developing professionals need practice in reflection, but they also hone their ability to observe in a meaningful way—to quote the fictional character Sherlock Holmes, "seeing" is not the same as "observing." In the data, the feedback component was key as was the students' willingness to engage with the feedback and seek further direction if unclear. There sometimes also appears a disconnect between the feedback provided and the students' ability to take it in and make meaning of it. This too, appears to be part of the "learning to reflect" process that takes months and years to hone, not the weeks comprising a typical university course.

All the World's a Stage: Implications for Practice

We learned through this qualitative examination of interview data, and related student written reflections, that reflective practice is a process not learned overnight. In the case of these students, it took three years of regular, guided reflection to make meaning of the process and understand the value as they moved through identifiable stages. Students progressed through states of confusion and conflict, finally becoming convinced of the value of narrative reflection. In reviewing the reflections, the value of the reflective process in terms of learning was visible as was the students' developing ability to meaningfully delve into their experiences by the final year in the program. It is apparent that part of the learning process is reflection, but additionally students need to learn to observe and interpret

experiences in a reflective way—in other words, they need to “see” as a reflective practitioner as well as write about it.

Clearly, there is an important role for instructors in teaching developing practitioners to reflect on their learning. Our results underline the value of reflective writing in contributing to the development of reflective practitioners but not in a vacuum. Instructors need to be present in the process, providing structure and regular, detailed, and timely feedback. As demonstrated, athletic therapy students expressed a lot of frustration at the beginning. It may help to set an expectation for students for a long-term learning trajectory; on the other hand, it may not be possible to circumvent the frustration they feel in the beginning. Indeed, it is possible that the frustration is a predictable part of the process that may even be integral to the learning arc. In this regard, instructors need to be patient and expect that it will take time far beyond the scope of one course for students to become proficient at the process.

We recommend that reflective writing become a coordinated process throughout a professional program. While this qualitative study took place in a specific context, the benefits of reflective writing are demonstrated consistently enough to warrant serious consideration by any program, especially when considered in the context of the literature which supports these benefits despite differences between programs (Chen & Forbes, 2014).

Future Directions

In the students’ journals, a transformative process is evident, with students crossing a liminal space from “student” to “professional.” This transformation, as evidenced in the journals, is worth further investigation and mapping. It would be worth repeating a similar study in other athletic therapy programs, or other professional programs altogether, and further incorporating reflection as a formal learning process and one method of assessing students’ development. Finally, further work is required to determine the most effective reflective writing structures, practices, and interventions for students in professional programs.

Conflicts of Interest

The authors declare that there are no conflicts of interest regarding the publication of this article.

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