

Article

Instructor–Student Mentoring: Strengths of Transformative Sustainability Learning and Its Direct Application to Impact Industry and Curricular Refinement

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Abstract: There is a growing need to educate students about the applications of environmental sustainability to current and future jobs. One method that has emerged to teach this application is transformative sustainable learning (TSL). Instructors can use TSL to understand better how to integrate sustainability topics into seemingly unrelated course topics. Thus, the purpose of this study was to explore the effectiveness of a series of TSL courses in a graduate sport management program. To this end, a collaborative reflection guided the data collection from weekly one-on-one conversations between the researchers (i.e., instructor, student). Results aligned with TSL themes (i.e., head, heart, hands) and suggested that the intentional TSL course design and scheduled conversations benefited both the instructor and student. The student experienced an in-depth experience to understand and apply course concepts. The instructor was able to gain better insights to structure the class and create assignments adapted to meet student needs through collaborative reflection during mentoring sessions.

Keywords: transformative sustainability learning; collaborative reflection; sport and the environment; sport ecology



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1. Introduction

Sport instructors educate students on past, current, and future issues within the sport sector and tangential industries. They convey how those topics relate to or mirror more significant societal problems, and they empower students to know how to leverage sport to promote positive social change [1]. Not only do these instructors reflect on the past, but they also look towards the future to equip students to address emerging issues regarding sustainability in sport—inclusive of health, social, economic, and environmental aspects [2]. Practical and hands-on learning experiences are essential to a student as she advances her career to apply course concepts in applicable settings. These opportunities can come through intentional experiential learning (i.e., the knowledge through reflection on real-world and applied work experience) [3] and, similarly related, service-learning (i.e., community service component with designed reflection opportunities) [4]. Such educational opportunities provide a student with active learning experiences, increase her confidence to identify and confront these issues, and help them develop a deeper awareness of social problems within sport [5]. Yet, more concentrated examinations are necessary to refine the applications of such learning experiences leveraging new pedagogical techniques or addressing emergent issues in the sport sector (e.g., environmental sustainability).

Despite the increased offerings of these opportunities in sport management curricula, few courses focus on sport's relation to its impact on the natural environment [6]. Sport ecology, the study of the bidirectional relationship between sport and the natural environment [7], courses increase the relevance for conceptual understanding and practical

application through transformative sustainable learning (TSL; [8,9]). Orr and colleagues proposed that TSL courses use accessible contexts (e.g., sport business) to teach complex issues (e.g., climate change, climate vulnerability, sustainable supply chain, circular economy). Moreover, TSL experiences make a lasting impression and enduring impact through hands-on practical applications of content through experiential learning and service-learning modalities [10] to engage new academic disciplines (i.e., sport) in abstract issues (i.e., climate change).

The sport ecology subdiscipline and its application to sport management pedagogy are still in their infancy [9]. Therefore, it is crucial to understand the student learning experience to develop a deeper understanding and advance sport management students' understanding of how climate change impacts sport *and* how sport impacts the natural environment. Such an understanding comes from a direct feedback loop where students' feedback helps instructors improve the curriculum and its delivery/ability to provide a rich and in-depth learning experience [11,12]. Thus, the purpose of this paper was to use collaborative reflection to evaluate the effectiveness of TSL in the classroom. This paper presents the background of this learning process by reflecting on the experiences of an instructor and a student in a sport ecology course. Collaborative reflection has been used to evaluate transformational learning experiences [13] to assess the new levels of awareness, critical thinking, and practical applications [14]. As a result, instructors can better understand how to integrate sport ecology topics into curricula and new experiential learning opportunities through TSL.

2. Literature Review

2.1. Sport Ecology and Education

There is considerable evidence of humanity's contributions to climate change [15]. This mounting evidence has led to a push within broader academic circles to educate students on the 'fixes' or solutions to alleviate institutionalized practices that result from detrimental human behavior and activities that deplete the natural environment [10] and is no different for the sport management academy. Sport ecology, or the study of the bidirectional relationship between sport and the natural environment, encompasses various focal research areas under sport management–governance, management, facility operations, and event management, among others [7]. One area that needs further exploration is integrating sport ecology topics into and across sport management curricula.

Mercado and Grady [6] found few course offerings focused on sport and its relation to the natural environment. Such curriculum includes standalone courses and modules within broader sport management courses. Despite the shortage of offerings, these classes add tremendous value to challenge and educate students on current environmental matters and promote ecological sustainability in their professional careers [16]. While researchers [16] examined whether students' environmental values increased in sport ecology standalone courses, their results were inconclusive. These researchers omitted details about the course's structure and engagement with the students, exploring sport ecology courses further. Specifically, researchers should examine the anthropocentric relationship between humans and the natural environment among current and future sport practitioners [17].

Howe [17] posits that sport participants use nature as a means to fulfill their desire to engage in sport, recreation, and physical activity. Consistent with Howe's position, sport practitioners may see the natural environment as a means to an end rather than an invaluable and indispensable asset. This practitioner-nature gap can be exacerbated because there is more separation between practitioners and nature due to a lack of involvement and interaction with nature. This separation of sport and nature is an example of anthropocentrism within sport among participants, but it also includes practitioners. Sport practitioners' inaction also exemplifies this relationship gap to address climate-related issues in the sport sector [18,19]. Like Howe, Sartore-Baldwin, and McCullough argue that the lack of action in sport is due to the disregard for the natural environment due to anthropocentrism. There is a focus on profits over plant rather than balancing the two for

the good and wellbeing of sport to continue. Anthropocentric systems exist through institutionalized systems thinking in which human domination over the natural environment is unchallenged. To challenge this anthropocentric system, Sartore-Baldwin and McCullough called for ecocentric management within the sport sector.

Ecocentric management focuses on nature's value for nature's sake [20]. This approach encourages the health of the natural environment (sustainability/conservation) to protect and preserve it for future generations and sustain the spaces to consume sport, recreation, and physical activity. Thus, it is necessary to build off the work of Mercado and Grady [6] and Greenhalgh and colleagues [16] and improve sport ecology-focused courses and assignments to better orient our students to protect and preserve the natural environment. Furthermore, transformative sustainability learning can advance ecocentric management education by creating ambassadors among students as they engage in TSL opportunities. Moreover, sport management instructors better frame their courses and overall learning objectives with TSL to advance learning and empower their students [9].

2.2. Transformative Sustainability Learning

Transformative sustainability learning (TSL) is an elevated form of experiential learning that utilizes hands-on experiences to drive environmental or social change [10]. TSL pedagogy provides students with immersive experiences that showcase ethical reasoning related to human-nature interaction [21]. Learning objectives using this approach seek to improve skills, provide a platform to heighten knowledge of the resulting challenges of climate change, and improve favorable attitudes towards the natural environment [22,23]. Such a pedagogical approach can engage students differently within the same course [24]. Jayakumar and colleagues, for instance, found that a majority of students are visual and auditory learners. Visual learners learn through pictures, demonstrations, displays. Audio learners prefer spoken words from others. Kinesthetic learners like the physical experience or engaging in practical hands-on applications of the course material [25]. TSL offers a pedagogical approach that engages these various learning styles and has a broader reach and appeal to the student population.

TSL consists of three educational concepts (i.e., engage, enact, enable) to involve the student's head, hands, and heart [10] in critical thinking exercises and practical applications to bridge the practitioner-nature gap in sports [9]. The educational experience incorporates all three aspects as students interact with course material, concepts, assignments, and discussions. Most critically, TSL seeks to engage the heart. The emotional response to social issues, including environmental issues, significantly influences positive behavioral changes [25,26]. Students reflect on their educational experience and examine how they 'unlearned' preconceived notions (e.g., sport and the natural environment) and how their attitudes become more favorable towards social change [27].

Research focusing on experiential learning is popular within the broader sport academy [1,28]. In particular, experiential learning research within the sport for development and peace literature has received considerable attention to address sports-related social issues [29]. Despite prior researchers promoting environmental sustainability content [5] and examining the outcomes of such courses [16], TSL has received little to no attention with regard to the application to the sport academy and in the literature examining sport ecology [9]. The researchers who examined such courses did not discuss the critical components of the TSL (i.e., head, hands, heart concepts). Orr et al. [9] suggested three ways to apply TSL to sport ecology courses or special topics in other sport management courses to promote more ecocentric leadership skills within the sport management curriculum. Venue tours, green teams, and living labs are ways to engage students at various education levels in TSL and promote awareness, change environmental attitudes, and inspire action.

At a basic level, venue tours can introduce various systems and initiatives that sport organizations have implemented. These tours can explore the processes to implement environmental programs, address operational challenges, and assess ecological perfor-

mance [9]. Second, a green team allows students to gain practical experience by engaging and facilitating an environmental initiative. For example, students can assist with waste recovery efforts in a facility. This experimental activity allows students to see the processes and challenges of implementing and successfully executing an environmental initiative [30]. The third, and most advanced intervention, is a living laboratory. Students get hands-on, experimental learning opportunities to engage with current challenges to resolve environmental sustainability-related issues in sport in this experience [31]. In this real-life case study, students can take charge of a specific initiative to make a lasting change within a sport organization to pursue environmental sustainability initiatives.

Ultimately, the process structure of TSL lends well to close interaction between the instructor and student. The immersive nature of TSL offers opportunities for the instructor to convey passion and more contextual understanding as students become more engaged in the content. This is especially true for teaching emerging subjects like sport ecology [9] because TSL requires a creative way of thinking about human–environment interactions [32]. Further, it is essential for close interactions between instructor and student because the instructor needs to understand the student's inborn beliefs and behaviors to encourage unlearning and reconstructing their understanding of the interactions between people and the environment to create new knowledge [33]. This new knowledge will necessitate the flexibility and adaptability of curriculum and content to facilitate the exchange between instructor and student.

Challenges to curricular improvement result from underdeveloped feedback points throughout the academic term to modify the spot or more intensive changes in preparation for the course or module [34,35]. For example, discussions with students can help instructors modify their classroom management, design their in-class assignments, and adapt their final projects to be more personally relevant [34]. Further, Scott and colleagues [35] found that continuous student feedback was integral to reforming curriculum design and reform. They reported that this bidirectional feedback dramatically increased student satisfaction with the curriculum and faculty satisfaction with the learning environment. One such way to receive feedback is by engaging students through collaborative projects and mentoring. This study reports on such a student-instructor relationship through a collaborative reflection [35].

3. Methods

There is a scarcity of qualitative methodologies in sport management that vary from the standard for structured research, data collection, participant communication, evaluation of data, and presentation of results [14,36]. Specifically, alternative qualitative approaches are absent from sport management pedagogy research, such as collaborative reflections [35]. This method is missing from sport management pedagogy despite the notable progress in other academic disciplines [37,38]. Sport management pedagogy research benefits from the expanded use of alternative qualitative methods to advance the sport management academic discipline in practical and educational settings [14].

Collaborative reflections were created to advance professional development among peers in various settings—including nursing, education, and engineering. Potter [13] noted that collaborative networks foster an environment for constructive reflection, and feedback advances the professional development of those involved compared to those who self-isolate. The data generated from collaborative reflection lends well to transformative learning experiences (e.g., TSL) by creating a feedback loop between group members [27], especially instructor-student, mentor-mentee. Collaborative reflections also expose the participants to varying perspectives [39] that may be challenging but result in refined approaches to specific problems and subsequent solutions. Specifically, these varied perspectives are cultivated in an encouraging environment that is open to discussion [40]. This reflection is ultimately necessary for continued professional development and a reflective approach to inspire critical thinking [41]. Thus, this approach is valuable in professional development and higher-end and personalized educational settings. Within the context of

this study, a collective reflection approach was utilized to examine the influence TSL can have on a specialized graduate educational program focusing on integrating environmental sustainability into the sport industry.

The respective institutional review boards at the researchers' institutions determined that this research did not involve human subjects as defined by Department for Health and Human Services and Food and Drug Administration regulations.

3.1. Research Context and Procedure

In this case study, we utilized a reflective collaboration based on Glazer et al.'s [39] structure and process. Glazer and colleagues recommend that reflective collaborations range from small (e.g., two members) to larger teams (e.g., more than ten), and those members should:

1. Actively participate in group's conversations;
2. Be respectful and considerate to group members;
3. Maintain the confidentiality of the group's discussions;
4. Speak from your personal experience.

This methodological approach enabled the student and instructor (i.e., researchers) to reflect on individual and collective experiences as part of a year-long series of experiential learning assignments assessed from a TSL perspective. This format was applied to each student involved in the specialized academic program. However, for this study, one student chose to participate in this reflective collaboration. The female student was selected because of her willingness to participate in the research study and her direct involvement with a sport organization to practically apply the course concepts within the industry. The courses, corresponding lessons, and assignments were designed to develop and implement an environmental sustainability strategy into a partnering sport organization (e.g., collegiate athletic department).

Intervention

Specifically, we collected data throughout the student's educational experience. Data were gathered from the student's experiences from her engagement with various sport industry stakeholders to integrate environmental sustainability into a college athletic department. Additional data were recorded from the researchers' weekly one-on-one conversations. Each week, the researchers had one-on-one discussions on the course content, ways the student could leverage TSL, and garner more support within the sport organization to advance environmental sustainability. The conversations took place over the phone due to the remote nature of the program. The discussions topics led to a productive collaborative relationship that enhanced roles and outcomes as a student and instructor.

After each week's phone conversation, the researchers reflected individually through notetaking. The following week's dialogue started with a discussion on the reflections from these notes, which addressed any lingering questions, concerns, or dilemmas after the period of reflection. The process continued for the entirety of the program. Upon completing the year-long assignment, both the student and instructor reflected upon their experiences. The heightened reflexive practice of reflective collaborations enhanced the student's professional preparation and improved the instructor's delivery of the curriculum's TSL.

3.2. Data Analysis

Data were gathered from the student and instructor's weekly meetings based on their reflections of conversational topics specific to coursework, assignments, and general professional orientation to advance environmental sustainability efforts within the sport sector. This shared direction between the researchers allows for a rich discussion to promote the foundational curriculum and corresponding experiential learning experiences to enhance student learning. Conversely, the student navigated the challenges of applying

these concepts in a practical setting and advancing the environmental efforts within a specific sport organization.

After completing the program, the researchers used a constant comparison method to explore the similarities and differences of the program's individual experiences as instructor and student [42]. As the researchers analyzed their past experiences and conversations through a series of hour-long phone conversations, they discussed, examined, and assessed varying viewpoints to establish authenticity and verify the emerging themes a priori with the themes outlined in TSL (i.e., engage, enact, enable).

3.3. Research Quality

Additional steps were taken to ensure the trustworthiness and credibility of the data presented in this study [43]. First, the researchers (i.e., student and instructor) provided their reflections but worked together to ensure trustworthiness and rigor through member checking. Data from these conversations and personal thoughts were then categorized based on these preset themes individually by the researcher and then verified together to member check and discussed any discrepancies [44]. That is to say that the researchers emphasized their interpretations as the role of instructor or student with feedback from their counterparts. This feedback is consistent with reflective collaborations to strengthen and advance one's skills within their role [39]. Second, the data were then coded using a priori content-specific categories [45] specific to TSL [10]—the head (i.e., engage), hands (i.e., enact), and heart (i.e., enable). These themes are discussed in the following section from the instructor and student's perspective in keeping with previous collaborative reflection research [5]. In the space below, the data are presented according to the tenets of TSL from the instructor and student's perspective.

4. Results

4.1. Head (Engage)

4.1.1. Instructor

There is a growing research focus examining the bidirectional relationship between sport and the natural environment. Sport organizations also need to adapt to the changes in climate to stay relevant and financially viable. Still, sport managers must also be aware of and reduce the environmental impact of their organization. To address these emerging issues in the sport academy and best prepare a student for the problems they will confront in her future career, I developed a curriculum that focused on managing environmental efforts within the business of sport. Following trends in industry practice and trends among students to protect the natural environment, I believed the program would have broad appeal. Therefore, recruitment focused on students with sport management or environmental sustainability backgrounds.

The curriculum's intentional design covered foundational aspects to demonstrate to sport management students how to integrate environmental sustainability into the business of sport. Conversely, the curriculum-oriented students with environmental sustainability backgrounds to the business of sport. Thus, the program itself (instruction, assignments, and projects) bridged these two academic disciplines into one to enable future graduates to immediately and meaningfully advance the environmental movement within the sport sector.

These types of students were recruited because of their initial passion for sport and the natural environment. While formal education may focus on one discipline over the other (i.e., sport management vs. environmental sustainability), students were captivated and motivated to engage in the intellectual exercises of merging these two disciplines. This way, the students would have familiarity with one aspect of the curriculum and contribute to the broader classroom discussions. To this end, the program fully leveraged these passions and taught students to apply the course concepts through assignments and projects.

The curriculum was designed from scratch because no other academic programs and scant resources applied environmental sustainability concepts in the sport sector. There-

fore, when applicable, sport-specific research studies were used. However, most of the theoretical foundations used across the curriculum originated from industrial engineering, organizational behavior, marketing, policy, and economics informed a majority of the coursework.

The academic program was exclusively online. To address these challenges and ensure that the students had the proper foundation, I worked with our campus's online teaching academy and our Center for Teaching Excellence. These campus resources encouraged intentional reflections on the purpose of each aspect of the student experience to promote deep learning. Specifically, students drew upon experiences and related those experiences to course concepts. First, course lectures and discussions translated the theoretical frameworks, ideas, and research into practical applications that the students could later experiment with (or experience) in real-time by enacting them through smaller assignments. Then, larger course projects sought to advance the environmental sustainability culture and initiatives within a self-selected sport organization.

Throughout this process, direct feedback from the students was significant. The course's modality offered the opportunity to change the structure of assignments immediately, add/or delete content to make the course concepts relevant to the students, and engage with the specific course's core tenets. In addition, the online format required regular and meaningful conversations with the students, developed through regular phone calls and video chats. This close mentorship helped me develop these new courses to see gaps in the course content's progression or remove content that was irrelevant to its objectives. Her feedback was information that I never received from other classes or teaching feedback mechanisms (e.g., instructor evaluations).

4.1.2. Student

A professor forwarded an email alerting me to Sustainable Sport Leadership Certificate at Seattle University. My heart leaped with excitement. Finally, was there an academic program out there that combined my love and my passion? Before receiving this email, I followed my passion for the sport by earning my sport management degree, found a passion for environmental sustainability, and pursued a LEED (Leadership in Energy and Environmental Design) Green Associate certification. However, I was having difficulty finding educational opportunities that provided knowledge and experience in sport ecology. So I immediately called Dr. McCullough (even though I was still a year from entering the program) to find more information. Dr. McCullough spent time explaining how he designed the course and why and the learning outcomes for the student.

Additionally, he spent time getting to know me and understanding my future goals in sport ecology. Finally, Dr. McCullough would check in to see how I was doing until I could apply for the program and offered his assistance in answering any questions I had about higher education programs. This initial interaction set a positive tone and foundation for relationship building and trust as I entered the program.

Looking back, as a newer student in this graduate program, I would have described myself as nervous and full of self-doubt, and I may have felt as if the practical requirements of the program may have been beyond my abilities. Yet, through my conversations with Dr. McCullough, I knew that he provided the tools to glean the necessary knowledge to succeed in the program. For example, each course offered ample class materials (i.e., lectures, readings, videos) needed to learn the necessary concepts and theories to succeed in the program.

The curriculum was provided in proper order so that a student could absorb and understand the essential materials. With my familiarity with sustainability and thirst for more knowledge, I quickly comprehended the concepts. To challenge and engage the students further, Dr. McCullough provided an abundance of additional resources for each course to expand the student's knowledge base further. The more materials shared with me, the more intrigued and engaged I became as I wanted to learn and absorb as much as possible. The program, which included formal (i.e., in-class readings, lectures,

discussions) and informal (i.e., conversations and mentoring) education components, was the foundation for the experiential aspect of engaging and working with a sport organization to make a positive impact on its environmental sustainability efforts.

Completing the formal educational components and frequent and consistent conversations with Dr. McCullough helped prepare me for the “personal and unique” practical application portion. In addition, Dr. McCullough was there to field all of my questions and mentor me throughout the entire work with my organization of choice. These practical experiences differed from the traditional question/answer format in a classroom instead of general or hypothetical questions.

Dr. McCullough was able to help me navigate my way through the program by discussing the issues which were exclusive to the organization for which I consulted. In addition, we discussed what challenges I might face as I guided my way through the new experience of working with an organization. Topics included my plans for each TSL component, the progress of the programs, breakthroughs, obstacles of working with departments that were not of the ecocentric mindset in operations, my epiphanies, and various concerns. Through each of these conversations, the relationship between professor and student became more assertive with a greater trust, which allowed for more engaged and heightened conversations between us because I was now comfortable asking questions that I may not have asked in the classroom.

4.2. *Hands (Enact)*

4.2.1. Instructor

Course assignments and projects helped students connect these concepts to practical applications. The overarching project was to address environmental sustainability issues within a sport organization identified by the student. The student essentially served as a consultant to provide evidence-based consultancy to resolve self- or organizational identified issues concerning environmental sustainability efforts specific to the course content. Designing the projects in such a way allowed for flexibility depending on the degree to which their respective sport organizations engaged in environmental sustainability. Some sport organizations have deep environmental commitments but need improvement in some areas (e.g., fan engagement, organizational culture, formal policies), while others have no initiatives.

These state of the organization’s environmental sustainability efforts were the focus of the instructor-student weekly phone conversations. During these conversations, I assisted the student with the various difficulties she confronted that week to advance the sustainability initiatives or get deeper buy-in from her contacts within her targeted sport organization. I would remind the student of course concepts from the current or previous courses at play in a given instance or discuss theoretical concepts’ limitations in practical settings. Through these conversations, it became apparent how a student could think more abstractly and apply course concepts to achieve specific objectives related to the assignments while helping their respective organizations. As the student’s knowledge deepened, I spoke less and listened more during our conversations. It was clear that she gained more confidence in processing information from the course content and her practical experiences to find a solution independently. She would use me as a sounding board to talk through her decision-making processes, which became more efficient and streamlined as she progressed through the program.

4.2.2. Student

Throughout the program, I worked with multiple departments at the educational institution. Each TSL assignment within the program allowed me to work with various athletics departments and those associated with athletics. I met and built relationships with the faculty and staff in the sustainability office, the athletic department, facilities and maintenance, and the university’s sport management department. During this time, I also gathered information about the current sustainable state, including values and

norms of environmental sustainability around the university but with significant emphasis on the athletic department. The fact-finding portion of the process was extraordinarily enlightening. While the program's formal educational components provided me the foundation to work competently in the field, it was not until I was experiencing these concepts and ideas in a practical setting that I fully understood the magnitude of the challenges to overcome to bring sustainable thinking into athletics. I began to comprehend the obstacles that the sustainability office faced in trying to "break into" the athletic department due to the daily challenges the athletic director dealt with. It appeared that the situation was one big stalemate. I specifically remember there being a time when my conversations with Dr. McCullough were more critical than ever. I found myself becoming emotionally vested in the situation at the university. I needed his guidance in overcoming the barriers before me. I began to brainstorm ideas to help two departments reach a mutually agreed-upon sustainability goal when they looked at environmental sustainability from a different perspective, anthropogenic versus ecocentric.

While the sustainability office has the job of making the entire campus as sustainable as possible, the athletic department's task was to win as many games as possible while staying within budget. The athletic department was operating with an anthropocentrism management style. Interestingly, the athletic director understood the importance of environmental sustainability in athletics, but he did not have the resources to make sustainability a priority. So, the athletic director was supportive of the sustainability office efforts in athletics. Once I understood each stakeholder's perspective and resource constraints, I started thinking about a solution to bridge the gaps between them. I can honestly say that the sustainable ideas might not have emerged if I did not have the educational foundation in the classroom setting, followed by the "boots on the ground" presence.

I was able to connect the sustainability office to various stakeholders within the athletic department. A meeting ensued between all parties, the first big step toward a more sustainable, ecocentric future. In addition, I facilitated an introduction between the sustainability office and an alum who raised bees and wanted to bring them to campus in the gardens. This project's culmination and what I am most proud of was creating a sport ecology apprenticeship position. In a collaboration between the sport management department, the office of sustainability, and athletics, I engineered an apprenticeship program for sport management students to work with the recycling director to help with sustainability projects in the athletic department. This project supplied a required degree component while allowing future sport professionals to gain valuable knowledge and experience to take to future positions. Additionally, it provided athletics and the sustainability office with additional resources to implement more sustainable initiatives.

These ideas and ensuing actions would not have been possible for the program's careful design and mentoring of Dr. McCullough. Specifically, while reflecting on the practical, sustainable accomplishments during the program, I realize they may not have been possible without the consistent conversations between myself and Dr. McCullough. During these conversations, mentoring was the main factor of my success because it enabled me to brainstorm with Dr. McCullough as I worked through the program's various stages. In addition, the immediate feedback was invaluable to me as I navigated through my organization's sustainable roadblocks.

4.3. Heart (Enable)

4.3.1. Instructor

The sport ecology-focused course was intended for a diverse pool of prospective students, mainly those with a sport or environmental sustainability or studies background. This recruiting strategy intentionally attracted students passionate about the two content areas (sport and ecological sustainability) bridged through the curriculum. The curriculum enabled students to use those passions by using course content to teach how to use tools (i.e., head) to engage the sport industry in a practical and meaningful way (hand). Through this process and often through the student's challenges in her practical experience, her

passion (i.e., heart) became further enabled. At the program's start, the student's ecological passions may have been more ideological than practical to encourage meaningful change.

This is not to say that her *romanticized* views were unattainable, but rather the student lacked the context and valuable tools to achieve her goals. The experience throughout the program (e.g., 12 months) increased her confidence in each conversation. You could see the impact and change in her reflection assignments and her progression towards the final project. It was clear that the student experienced a transformation that converted her passions into purpose.

The built-in aspect of one-on-one conversations helped refine and advance the content delivery and, in turn, deepened student learning and propelled her quality of work. Subsequent cohorts saw her peers' achievements. This baseline understanding of the course content applications in practical settings increased the student's quality of work and the creativity to embark on new initiatives within sport ecology. The feedback and examples served as proofs of concept that the educational process worked, albeit with ongoing and proactive modifications to improve the learning experience and its direct applications to industry practice.

4.3.2. Student

Before entering and completing the course, I pursued my love and passion for sport and environmental sustainability. However, I treated them as two, separate entities and I was aimlessly trying to figure out how to merge them. This program allowed me to learn about sport ecology as a unique genre far greater than the sum of its parts. Additionally, it allowed me to learn about the concepts and theories applied to sport ecology and how they differ from traditional sport management applications.

Moreover, the mentoring and personalized conversations allowed me to understand the knowledge I had learned in the classroom setting through the practical application and experience working with a sport organization. This program's experience transformed me into a more confident individual and opened my eyes to the reality of sport organizations' sustainable situation. I could not have fully understood this with only a textbook. Additionally, I realized that achieving positive, sustainable change within an organization takes more than just passion. It also takes knowledge, understanding an organization's view of sustainability (ecocentric or anthropocentric), perseverance, and determination to make positive change. The mentoring and TSL components were necessary to help me achieve this realization and a deeper understanding of the concepts and my future role in sustainable athletics.

In retrospect, I am proud of what I could accomplish in this program because I made a difference. I graduated from the program with an increased opinion of my abilities and confidence that I did not have before I started. The experience was invaluable, and it had transformed me personally. I had always been a good student, but I never left a class with a feeling of accomplishment like I did after this program. Instead, after this program, I went with a sense of empowerment to pursue my passion in either industry or academia.

I wish I had more opportunities for these experiences throughout my undergraduate sport management degree. Many of my classes touched upon sustainability in the classroom. Still, it was the experience of "doing" to see my actions' impact on the environment and gaining practical that I can now share with others. TSL had the most significant impact on me as a student. As I transition into my role as a teacher, I will aim to incorporate as many TSL opportunities as possible into my classroom. The knowledge and tools I acquired during my time as a student in this program continue to influence me today in all aspects of my life positively.

5. Discussion

5.1. Collaborative Reflection as an Educational Tool

The process of collaborative reflection was new to both researchers in this study. However, this approach complements the instructor-student relationship well—especially

in specialized content programs [5]. Both the student and instructor benefitted from their weekly feedback conversations. That is, the student and instructor noted that trust deepened through their discussions and allowed for richer conversations about strategies and a willingness to be vulnerable to ask questions that they may not otherwise ask in a formal classroom setting. This deep trust advances the student and instructor's professional development, whether preparing for a professional career in sport or becoming a better educator [27]. For example, a student may be hesitant to ask specific questions. From an instructor's perspective, the relationship between student and instructor would improve if the student knew that the instructor was deeply invested in her educational development. The open and regular dialogue allowed the student to delve into more granular topics that helped refine her learning given the nuanced contexts she encountered with her sport organization.

The instructor conveyed the course's objectives and accepted constructive criticisms to improve the class. The instructor also benefited by adjusting and aligning assignments to the individual student's learning needs and career aspirations by providing support (e.g., additional content) to enhance the student's learning based on her responses to question the effectiveness of curricular activities or modules. Specifically, the student reflected on the benefits of TSL throughout her educational process. The collaborative reflection was critical before the student started the capstone project to build her confidence to implement environmental initiatives within the organization.

Her confidence and fresh perspective from these reflective conversations were welcomed by the various stakeholders associated with the athletic department, which shaped new relationships and a platform for positive, sustainable change. The student reported a profound sense of accomplishment, personal growth, and a renewed vitality for learning due to the transformative learning opportunity and the unique relationship between her and the instructor [46,47]. The instructor focused on creating a deep connection with the student to facilitate a better educational experience. The collaborative reflection helped the instructor understand the student's background based on immediate and regular feedback throughout her educational experience. Moreover, the connection with the student informed the instructor on how to best mentor and advise the student through the challenges of working on a client-directed TSL experience.

5.2. TSL and Collaborative Reflection

Reflection is a significant component of an instructor's teaching philosophy. For example, this approach concentrates and encourages a student to reflect on her past experiences, new material learned during the term, and various aspects of prior perceptions that were 'unlearned' due to the course [27]. These results are not fully addressed in Orr et al.'s [9] application of TSL to sport courses. However, it should be noted, and the point stressed, that the educational process of unlearning is critical to a TSL pedagogical approach. Critical reflection and encouraging students to understand the epistemology of her sport and environmental sustainability knowledge and unpack those rationalizations is essential to cultivate critical thinking skills. This collective reflection highlighted that TSL enriched the theoretical understanding of the concepts and processes related to integrating sustainability in an applied context (i.e., collegiate athletic department). While the results from this study are not generalizable and are limited to the perspectives and interactions between the instructor and student, instructors may benefit from these findings to use them in their courses or sport ecology courses.

Nevertheless, the TSL experience for the student resulted in tangible outcomes that benefitted the sport organization, as exemplified here [10]. This student's work produced a substantial environmental sustainability strategy, two funded internships for students, and a case study [31]. The student conveyed a sense of accomplishment when the course concepts were successfully and practically implemented into the athletic department's operations. She demonstrated her knowledge by resolving the department's sustainability

issue rather than simply testing her knowledge in an exam or mastering theoretical frames in a paper or hypothetical proposal.

Moreover, building off the benefits of TSL, as highlighted by Orr et al. [9], an ambassador network can develop because of students' impact on the industry because of their immersive educational experience. Students who are positively impacted through TSL and become empowered to promote social change in and through sport organizations can then influence others to deeply integrate these values within individual organizations and across the sport sector. In this instance, the student created a program that will have an immediate and sustained impact because of her involvement with the athletic department. That will then impact subsequent students involved in her established internships focused on advancing environmental sustainability in the athletic department.

Overall, this process conveys the importance of TSL and engages students' heads, hearts, and hands [10]. Throughout the curriculum, the student was able to apply for their work with a sport organization immediately. Implementing these concepts and new environmental initiatives validate the student's abilities and the value of their educational foundations. The confirmation increased the student's confidence consistent with other TSL literature [5,9,10]. In addition, the student's validation deepened her passion for sport and the natural environment by seeing that sport organizations can engage in meaningful change and improve their environmental performance [9].

5.3. Practical Applications

The qualitative approach of this student in our data collection (i.e., collective reflection) and analysis limit the generalizability of these findings to the context of this study and academic program. However, there are takeaways that instructors can glean and implement within their courses. This implementation should be done with caution, knowing that the outcomes may vary from the experiences and results presented in this study.

TSL allowed the instructor to gain valuable insights from all students on their experiences as they worked with various sport organizations to launch or enhance their environmental sustainability initiatives. As mentioned in the previous section, the instructor improved his mentor students by working with sport organizations. However, the instructor also learned how to apply and enhance the ever-developing course content in this area. This reflection will lead to the improvement of the curricula at this institution. This gap was able to be bridged more rapidly because of the feedback loops integrated into the curriculum.

Adjustments were made more quickly to tailor assignments and equip students with the knowledge to combat challenges they encountered with their sport organization to implement environmental sustainability initiatives. The feedback loop also enhanced the lessons and discussions that the instructor could have with other students. It provided opportunities for students to connect to present personal challenges and crowdsource solutions from others in the class. This created a strong network among the students as a result of such discussions.

Moreover, the instructor-student conversations and the nature of the TSL course design allowed for the quick adaptation of assignments to the individual student's needs and circumstances. These modifications could align with the student's learning style, whether audio, visual, or kinesthetic learners [25]. This adaptation helped the instructor and student find mutually agreeable ways to fulfill the course requirements and ensured that the individual student was engaged in content to be an active participant in the educational process rather than a passive learner.

Further, these insights give credence to the identified gaps that sport practitioners have with the natural environment resulting in inaction [17]. The concepts and application of ecocentric management techniques [18] taught throughout the curriculum bridged this gap. However, these concepts can be stronger emphasized in the curriculum to increase student confidence. While the generalizability of this data is limited to this program, sport management educators can use this information to design their sport ecology courses.

Additionally, teaching sport management students about climate change, how it will impact the sport industry [30,48], and how the sector contributes to and addresses climate change to differentiate sport management students from others without TSL experiences. This differentiation creates a competitive advantage over other applicants for internships and full-time employment opportunities. That is, sport management programs should teach the past and current trends in the industry, but as instructors, we should prepare our students for emerging and future issues within the sport industry.

6. Conclusions

From this examination, we discussed three areas of value to sport education. First, the qualitative approach used in this study builds upon the calls from Edwards [35] to use collaborative reflection methods to reflect upon our interactions with students to advance learning. Instructors can use this case as a basis to determine whether or not this approach can be helpful in their classrooms to promote understanding and to encourage deeper reflection and acclimate students to direct feedback from the instructor and their peers.

To that end, the second benefit we discussed was the value and importance of collaborative reflections of TSL from both a student and instructor's perspective and advance our understanding of integrating environmental sustainability into sport management lesson plans, courses, and curricula [5]. Students may not fully grasp how to navigate the industry or workplace to advance specific tasks or projects. Reflective collaborations can help provide immediate feedback that the student can implement into their immersive projects.

Third, the collaborative reflection of this transformative sustainability learning exercise can build upon previous research, exploring the process of designing more robust courses to advance environmental sustainability in sport disciplines. As the sport academy continues to mature and refine itself to address current issues and industry practices, this research line can enhance teaching pedagogies, in general, to advance student learning and content-specific courses like sustainable development and sport ecology, specifically. Through this process, instructors should be encouraged and embrace collaborative reflection. This experience may prove more fruitful and valuable at improving one's course and instruction methods than data from student evaluations or peer evaluations. We recommend future research should examine how collaborative reflection can be incorporated and enhance teaching pedagogies and learning processes. Moreover, researchers can study the change in environmental attitudes and the students' confidence to confront such issues in the students' current and future careers.

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