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Exploring the Use of Trauma Informed Practices in Campus as Lab Programs: Learnings from a Workshop Series

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Abstract

With the intersectional challenges of the climate crisis, the COVID-19 pandemic, and mental health challenges in various forms, empowerment can hold a significant key to mitigating and preventing traumatic experiences at post-secondary institutions. Campus as Lab (CaL) is a growing trend in higher education whereby students, faculty, and staff use experiential learning and applied research projects to advance sustainability on their campuses. It is a unique, empowering learning methodology that can synergistically benefit academic and operational sustainability efforts at post-secondary institutions. In July 2021, a group of professionals who support or lead CaL initiatives gathered to participate in four Summer Series webinars to explore the use of trauma informed practices in CaL programs. This paper provides a high-level overview of the Summer Series webinar structure and explores how participants identified opportunities to use a trauma informed framework for future CaL initiatives. Because of the Summer Series webinars, we believe there is a need for greater familiarity of trauma informed practices on campuses and amongst sustainability staff. Future research could explore the broader application of trauma informed approaches in the various fields of sustainability within post-secondary institutions.

Introduction

Before you begin reading this paper, notice any tension in your body. Roll your shoulders back, and plant your feet gently, yet firmly, on the floor. Take a deep breath. Move your head from side to side. You have just implemented a trauma informed practice.

Trauma informed practices help support those who are coping with trauma by providing strategies for regulating emotions and building resilience. Voluntary slow deep breathing is one example of a trauma informed practice. By decreasing oxygen consumption, heart rate, and blood

pressure, deep breathing can lead to a calming effect on the mind and a sense of control of the body (Kim et al., 2014). According to the Agency for Healthcare Research and Quality, an agency within the U.S. Department of Health and Human Services, trauma informed care is “an approach to engaging people with histories of trauma that recognizes the presence of trauma symptoms and acknowledges the role that trauma has played in their lives” (n.d., para. 4). Within this paper, the terms “trauma informed care” and “trauma informed approach” are used interchangeably, while “trauma informed practices” is a term used to refer to the activities one can utilize to honor trauma informed care or approaches.

Research has shown that students in post-secondary institutions are increasingly experiencing a combination of traumatic events, mental health stressors, and climate anxiety (Reyes et al., 2021; Stewart 2021). Today, trauma informed practices are being implemented in colleges and universities to create supportive environments that promote student resilience and success (Barros-Lane et al., 2021; Davidson, 2017). This paper explores the novel use of trauma informed practices in the context of post-secondary Campus as Lab (CaL) programs.

CaL may be referred to as Campus as a Living Lab, Campus as a Learning Lab, Living Classroom, Applied Learning in Sustainability, or other terms. CaL activity can focus on a diversity of aims including cultivating sustainability leaders, demonstrating scalable sustainability impact, and harnessing academic research expertise toward global sustainability problem-solving (Haddock & Savage, 2020). For the purposes of their sustainability benchmarking system, the Association for the Advancement of Sustainability in Higher Education (AASHE) (2021) defines CaL through institutions that:

[U]tilize their infrastructure and operations as living environments for multidisciplinary learning and applied research that advances sustainability on campus. Students that actively participate in making their campuses more sustainable are well prepared to continue that work in their careers and communities after graduation. (p. 1)

CaL is a unique, empowering learning methodology that can synergistically benefit academic and operational sustainability efforts at post-secondary institutions. There is a growing body of research that suggests engaging students in experiential opportunities like CaL can help combat the negative effects of climate anxiety (Aruta & Simon, 2022; Bentz, 2020; Buchanan et al., 2021; Kelly et al., 2021). However, little research has been completed that specifically addresses CaL and its potential for reducing the effects of multiple stressors.

With the intersecting challenges of the climate crisis, the COVID-19 pandemic, and mental health challenges in various forms, empowerment can hold a significant key to mitigating and preventing traumatic experiences. We posit that CaL's applied theory-to-practice framework can empower students to have a hand in real-world climate and sustainability solutions and can serve as an effective way to integrate trauma informed care into higher education.

The purpose of this paper is to:

1. Provide a high-level overview of trauma informed care and its relevance to CaL;

2. Share the learnings from the four 2021 Summer Series webinars to explain how partnership, collaboration, and opportunities for engagement can help build individual and organizational resilience to trauma; and,
3. Suggest opportunities for future research to explore the broader applications of trauma informed approaches within sustainability initiatives at post-secondary institutions.

The target audience for this paper is sustainability professionals, both faculty and support staff, who lead and support CaL activities. The literature cited within this paper on trauma informed practices in higher education does not differentiate between types of higher education professionals. In these instances, the authors use the term higher education professionals to convey the research accurately.

CaL and Trauma Informed Care

CaL is a growing trend at post-secondary institutions whereby students, faculty, and staff use experiential learning and applied research projects to advance sustainability on their campuses (Haddock & Savage, 2020). Multiple scholars have emphasized the need for these approaches in environmental education, noting that direct experience in tackling campus and community projects can help develop environmentally responsible citizens (Chawla & Cushing, 2007; Hungerford & Volk, 1990).

Need for New Approaches amidst a Convergence of Stressors

The impetus to explore trauma informed care as a framework for CaL projects stemmed from the growing acknowledgement of the negative impacts of trauma, mental health stressors, such as the COVID-19 pandemic, and the ongoing climate crisis on the students, faculty, and staff who design, implement, and participate in sustainability change efforts and CaL initiatives.

According to the Substance Abuse and Mental Health Services Administration, a branch of the U.S. Department of Health and Human Services, trauma can be defined broadly as:

The experiences that cause intense physical and psychological stress reactions. [Trauma] can refer to a single event, multiple events, or a set of circumstances that are experienced by an individual as physically and emotionally harmful or threatening and that have lasting adverse effects on the individual's physical, social, emotional, or spiritual well-being. (2014b, p. xix)

Today, trauma is widespread. The Centers for Disease Control and Prevention (2019) indicate that adverse childhood experiences, or ACEs, are potentially traumatic events that occur in childhood (zero-17 years). Further, ACEs can include 1) experiencing violence, abuse, or neglect; 2) witnessing violence in the home or community; and 3) having a family member attempt or die by suicide. ACEs are quite common, even among a middle-class population, and there is a powerful, persistent correlation between the more ACEs experienced and the greater the chance of poor outcomes later in life (Center on the Developing Child - Harvard University, 2022). The Centers for Disease Control and Prevention (2019) reported that 61% of adults have had at least one adverse childhood experience (ACE), and 16% have had four or more types of ACEs.

In a 2019 study, 70% of freshmen entering college reported experiencing at least one potentially traumatic event, and 34.4% of the trauma-exposed individuals met criteria for probable post-traumatic stress disorder (Cusack et al., 2019). Particular sub-groups of students, including first generation college students, Indigenous students, LGBTQ+ students, and student veterans, may have additional mental health concerns, which could make them more vulnerable to experiencing symptoms of PTSD, depression and anxiety (Davidson, 2017; House et al., 2020; Morissette et al., 2021; Travers et al., 2020). Refugee students may have experienced trauma because of war, civil unrest and family disunity (Erisman & Looney, 2007). Students entering post-secondary institutions after aging-out of the foster care system may also have experienced trauma; rates of post-traumatic stress disorder were twice as high for youth aging-out of care compared to the American war veteran population (Gomez et al., 2015).

The threat of climate change can lead students to experience apocalyptic fears of annihilation and extinction as well as pre-traumatic stress (Dodds, 2021; Panu, 2020). A recent study revealed that students felt “overwhelmed,” “angry,” and “ashamed” when asked how they felt about climate change (Hiser & Lynch, 2021). Student responses to climate anxiety have included outright denial, manic defense behaviors, and burnout (Dodds, 2021). The mental health and climate crises are pervasive, compounding issues that require attention and investment (Romeu, 2021).

The COVID-19 pandemic has increased student stress, particularly related to academic workloads, separation from school, and fears of contagion (Yang et al., 2021). The COVID-19 pandemic exacerbates the impact of stress and trauma on individuals, organizations, and institutions

(Bridgland et al., 2021). These and other types of collective trauma require focus and action by higher education institutions; indeed, the “...combination of medical, economic, racial and climate-based catastrophes highlights the need for attention to the meaning and implications of cumulative, compounding trauma exposure” (Silver et al., 2020).

Prolonged student exposure to the COVID-19 pandemic and the climate crisis represents a new challenge for higher education support staff and faculty members. Sustainability professionals at post-secondary institutions are positioned to address these interrelated challenges. Those who work within sustainability can directly address issues relating to climate change and involve students in local solutions to overwhelming global challenges. Sustainability professionals can re-focus feelings of hopelessness and apathy and transform them into action by facilitating experiential learning opportunities, such as CaL (Roysen & Cruz, 2020).

Using trauma informed approaches is one way that higher education professionals can better support students who have been impacted by trauma. For example, a 2021 study found that when trauma informed care interventions were incorporated into higher education COVID-19 response, the interventions fostered a sense of safety, encouraged students’ empowerment, and created opportunities for connection and support (Barros-Lane et al., 2021). However, there is a dearth of previous studies on the use of trauma informed practices to advance sustainability in higher education. Trauma informed approaches have been discussed in relation to living labs in the context of child protection and domestic and family violence sectors (Wendt et al., 2021); however, a keyword search of “living lab” and “trauma” yielded no results relevant to higher education.

Climate anxiety can also negatively affect the well-being of higher education staff and faculty members (Gilford et al., 2019). Therefore, sustainability professionals should have cursory knowledge of the concepts, theories, and practices of trauma informed care so that they can empower others while remaining responsive to their own mental health needs. Sustainability professionals should look to these practices when engaging in change-making efforts, especially those that are not guaranteed success, to maintain healthy boundaries, develop realistic expectations, and facilitate positive experiences for all involved.

Trauma informed care, trauma informed principles, and trauma informed practices

Trauma informed care operates according to six basic trauma informed principles, which are outlined in

Table 1. These are safety, trustworthiness and transparency, collaboration and mutuality, empowerment and choice, peer support and mutual self-help, and cultural, historical, and gender issues (National Child Traumatic Stress Network, n.d.).

Table 1

The six trauma informed principles and brief descriptions

Principles of Trauma Informed Care	Description
Safety	Physical and psychological safety
Trustworthiness and transparency	Clear tasks, consistency, and appropriate boundaries
Collaboration and mutuality	Partnering and leveling of power differences
Empowerment, voice, and choice	Recognizing, building, and validating skills; strengthening the experience of choice; recognizing that every person requires an individualized approach
Peer support and mutual self-help	Valuing lived expertise
Cultural, historical, and gender issues	Moving past cultural stereotypes and biases

Note: Reprinted from “SAMHSA’s Concept of Trauma and Guidance for a Trauma-Informed Approach”, by Substance Abuse and Mental Health Services Administration, 2014, HHS Publication No. (SMA) 14- 4884, 11.

A trauma informed approach and the principles outlined above can be instituted at any level and by any type of organization (Raja et al., 2015). According to Menschner and Maul (2016), a trauma informed approach shifts the focus from “What’s wrong with you?” to “What happened to you?” by:

- Realizing the prevalence of traumatic events and the widespread impact of trauma;
- Recognizing the signs and symptoms of trauma;
- Responding by integrating knowledge about trauma into policies, procedures, and practices; and
- Seeking to actively resist re-traumatization. (p. 2)

Structure and Learnings from the 2021 Summer Series Webinars

The 2021 Summer Series webinars were a set of four consecutive online workshops. Sustainability professionals

were the primary audience for the series, and each workshop featured a different topic related to overcoming the challenges of a COVID-19-impacted environment. Participants included both faculty members and support staff who identify as sustainability professionals at higher education institutions in both Canada and the United States. The majority of the participants were members of the CaL Community of Practice (CoP). The aim of the CaL CoP is to advance experiential learning and applied research at university and college campuses to address sustainability challenges. Founded in 2016, the CoP provides a foundation for experimenting cross-institutionally on novel approaches to engaging in CaL efforts.

Structure of the 2021 Summer Series Webinars

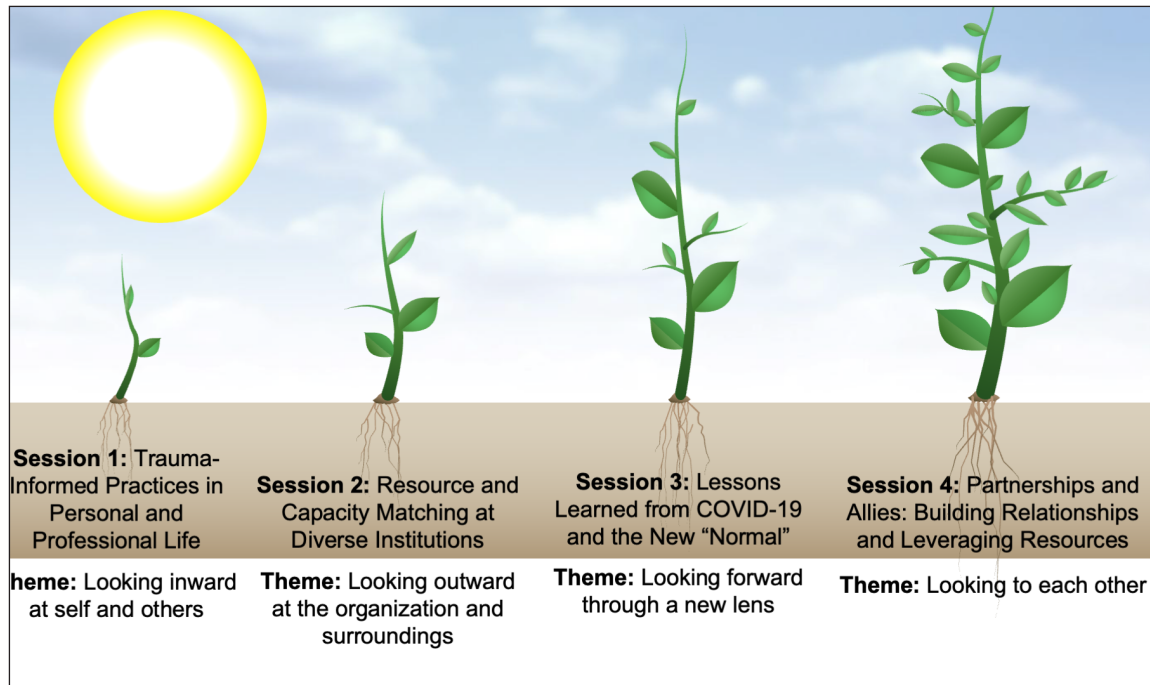
Over the course of four webinars, organizers used a progressive narrative arc (Figure 1.) to help participants develop a shared terminology, define challenges in their institutional contexts, learn from best practices, and explore potential partnerships. Throughout the webinars, participants learned about trauma on a variety of scales, moving from personal impacts of the COVID-19 pandemic to institutional actions and partnerships that can help address the ongoing trauma of climate change.

The main goal of the Summer Series webinars was to demonstrate to participants how trauma informed practices could be integrated into their work. To achieve this goal, organizers designed the webinars to incorporate and model the principles of trauma informed care in the following ways:

- **Safety:** Organizers established workshop norms, including the norm of confidentiality, to provide emotional safety for participants.
- **Trustworthiness:** Each webinar began with a clear outline and stated objectives to develop trust.
- **Collaboration:** Organizers shared power by integrating participant feedback into future webinar designs.
- **Choice:** Whenever possible, participants were provided with multiple ways to move forward in a webinar. For example, organizers gave participants many opportunities to take a break, share feedback in the chat, or work in small groups. Organizers also prioritized tangible skills, such as applications of the principles of trauma informed care, to empower participants to utilize knowledge gained from the webinars.
- **Peer Support:** Working in small breakout rooms, participants had an opportunity to engage peer-to-peer to generate ideas and develop trauma informed approaches to sustainability challenges.

Figure 1

The Summer Series Webinars narrative arc transitioned from exploring personal trauma to addressing organizational opportunities to address trauma.



- Cultural, Historical, and Gender Issues: Organizers began each webinar with a land acknowledgement to bring issues of justice, equity, diversity, and inclusion (JEDI) to the forefront of each workshop.

Learnings from the 2021 Summer Series Webinars

The four Summer Series webinars were held in July 2021. There were 26 unique participants over the course of the series. A full list of webinar objectives is provided in Table 2 and the following section details each webinar's structure and learnings.

Webinar One: Trauma Informed Practices in Personal and Professional Life.

In webinar one, a county Clinical Services Manager specializing in trauma informed systems advancement led 24 participants through a presentation on trauma informed practices and their application in different environments.

The guest speaker connected trauma informed practices to sustainability through a discussion on the impacts of prolonged uncertainty and stress, which can be caused by climate anxiety and the specific risk factors of college-age students. Finally, participants explored practices that they could apply in interactions in the workplace and in their personal lives. For example, as a self-care practice,

participants were challenged to identify: 1) "What are your flags that something is wrong?" 2) "What soothes you?" and 3) "Who are you going to talk to?" Given that this webinar was focused on establishing a common understanding of the basics of trauma informed practices, there are no specific outcomes to share.

Webinar Two: Resource and Capacity Matching at Diverse Institutions.

In webinar two, 21 participants reviewed case studies of resource and capacity matching at post-secondary institutions. Guest speakers from an environmental education nonprofit led participants through a series of small group discussions. These conversations focused on both the changing institutional environment after the COVID-19 pandemic and how professionals could leverage changes to advance sustainability through CaL initiatives.

The small group discussions explored how sustainability professionals could take advantage of current risks to introduce new, resilient responses to challenges. Participants collaborated in small groups to brainstorm around the topics of "Focus," "Vision," and "Change," which are the precursors to action, and shared their ideas using a Google Jamboard.

"Focus" challenged participants to examine the way the COVID-19 pandemic has recalibrated institutional

priorities, and participants noted changing attitudes towards equity, diversity, and inclusion, as well as change and uncertainty. “Vision” asked participants to examine what the higher education landscape might look like in the future. Participants saw opportunities in environmental justice and human-centered programs, an alignment of institutional priorities with sustainability, and utilizing new tools for engagement, such as online collaboration. Finally, “change” asked participants to reflect on skills or resources that were needed in order for their desired visions to take place. Participants identified momentum, intentionality, and inclusivity as important values moving forward.

Table 2
2021 Summer Series webinar titles and objectives

Webinar	Objectives
Webinar One: Trauma Informed Practices in Personal and Professional Life	Participants will understand the principles and concepts of trauma informed practices and explore how they can be applied to their personal and professional life.
Webinar Two: Resource and Capacity Matching at Diverse Institutions	Participants will explore the ways COVID-19 has recalibrated institutional priorities. Participants will understand the concepts of resource and capacity matching and how they can be used to overcome barriers.
Webinar Three: Lessons Learned from the COVID-19 Pandemic and the New “Normal”	Participants will share lessons learned from the COVID-19 pandemic and explore ways they can preserve and cultivate the positive aspects of the new “normal” and practice self-care.
Webinar Four: Partnerships and Allies: Building Relationships and Leveraging Resources	Participants will explore how to build and strengthen relationships and share resources across institutions.

Webinar Three: Lessons Learned from the COVID-19 Pandemic and the New “Normal.”

In webinar three, 21 participants shared lessons learned from the COVID-19 pandemic and explored best practices moving forward. During the webinar, participants reflected

on the ways the COVID-19 pandemic had changed cultural norms and workplace expectations, dividing their experiences into practices they would like to “keep” and practices they would prefer to “throw away.”

Participants shared that they would like to “keep” the flexibility, partnerships, and collaboration that they experienced during the COVID-19 pandemic. They also emphasized the importance of empathy and the new focus on justice, equity, diversity, and inclusion. However, participants noted that they would prefer to “throw away” anxiety and burnout from the pandemic. They also shared that during the COVID-19 pandemic, sustainability was often deprioritized, and progress was hampered by uncertainty and lack of guidance.

Next, participants built upon the ideas generated in webinar two and took initial steps to operationalize them. Working in small groups, participants generated action items for four different scenarios, including The Activist Student, New Tools for Engagement, a Human-Centered Approach, and Alignment with Organizational Priorities. Participants applied a trauma informed lens to each case study, which served as an opportunity to apply their learnings across the webinars.

Specifically, in the Activist Student Scenario, participants were asked, “How can we protect and promote student interests without placing the burden of action solely upon them?” Participants noted that it would be important to prevent overtaxing students while also supporting student-driven initiatives that focus on issues students care about. Applying a trauma informed lens to their proposed solutions, participants noted that they could share power by collaborating with different equity groups, offer students choice in their roles and tasks, and promote student-driven peer mentorship.

In the New Tools for Engagement scenario, participants were asked, “How do we ensure that we use new tools of engagement in an equitable and inclusive way?” Participants suggested using virtual platforms to reach wider audiences, keeping information in a virtual space, and working with stakeholders to tailor programs to their needs and wants. Taking a trauma informed approach, participants noted they could hold events in spaces that are accessible to everyone, keep virtual events limited to a set amount of time to reduce burnout, and set clear outcomes and expectations for each event.

In the Human-Centered Approach scenario, participants were asked, “What steps and actions can sustainability teams/leaders take to include and encourage diversity in sustainability

Table 3*Actions and trauma informed approaches for four scenarios*

Scenario	Actions	Trauma Informed Approaches
The Activist Student: “How can we protect and promote student interests without placing the burden of action solely upon them?”	<ol style="list-style-type: none"> 1. Engage freshmen as quickly as possible with sustainability initiatives 2. Supporting intersectionality and connecting with equity groups 3. Connecting with alumni 4. Trying to prevent overtaxing students 5. Student-driven and focusing on what they care about 6. Peer mentorship 7. Connecting with faculty advisors 	<ol style="list-style-type: none"> 1. Spreading out tasks to offer students choice in their roles 2. Sharing of power by collaborating with different equity groups 3. Include people with differing abilities through Zoom meetings and closed captioning 4. Provide a balanced approach to discussing large issues of sustainability 5. Student-driven peer mentorship needs to be empowering 6. Empowering everyone and taking into account histories
New Tools for Engagement: “How do we ensure that we use new tools of engagement in an equitable and inclusive way?”	<ol style="list-style-type: none"> 1. Utilize virtual platforms to reach wider audience (e.g., live streaming events) 2. Keeping information in a digital space for record keeping, transparency, and accessibility 3. Working with stakeholders to tailor programs to their needs and wants 4. Tie health and wellbeing into sustainability 	<ol style="list-style-type: none"> 1. Keep bio/wellness breaks 2. Asynchronous options for flexibility 3. Choosing spaces that are Americans with Disabilities Act-approved and accessible to everyone 4. Setting clear outcomes and expectations, offering the opportunity before the event to give opinion on what should be included 5. Choosing food options for everyone, keeping in mind cultural and religious backgrounds 6. Gender-neutral restrooms 7. Keeping virtual events limited to a certain amount of time to avoid Zoom burnout
Justice, Equity, Diversity, and Inclusion (JEDI) and Taking a Human-Centered Approach: “What steps and actions can sustainability teams/leaders take to include and encourage diversity in sustainability efforts?”	<ol style="list-style-type: none"> 1. Expand from environmental sustainability to include cultural/social sustainability 2. Collaborating with student organizations/affinity groups on campus 3. Provide space/platform for diverse perspectives on sustainability 4. Naming JEDI as a priority 5. Film screenings 6. Amplifying and elevate other voices: not assuming we are the experts 7. Incorporating JEDI & partnership building into onboarding practices 	<ol style="list-style-type: none"> 1. Continuing to check-in; acknowledging ongoing crises 2. Approaching these issues with humility 3. Referring to more knowledgeable/specific resources 4. Setting clear expectations for projects/events, naming how one can go about interrupting/taking a pause/excusing oneself as needed 5. Using shared trauma (COVID- 19/natural disasters) as a shared experience from which to empathize with more culturally/community-specific trauma
Alignment with Organizational Goals: “How do we ensure that we use new tools of engagement in an equitable and inclusive way?”	<ol style="list-style-type: none"> 1. Get students involved - student action is one of the most effective ways to get university leadership onboard 2. Take advantage of restructuring/strategic planning processes 3. Use the celebration of being back on campus to encourage CaL exercises 4. Collaborate with diverse groups on campus for fresh perspectives and input - more voices equals more change 5. Influential to have a member of facilities/academia/office of sustainability/etc. working together to align and complete sustainability projects 6. Universities motivated by United Nations Sustainable Development Goals and rankings 	<ol style="list-style-type: none"> 1. Providing multiple choices of sustainability projects 2. Provide project ideas with phasing/timeline 3. Safe space: health is a primary concern for administration; show CaL/sustainability efforts for their connection to mental and physical health 4. Trustworthiness can come from setting boundaries of timeliness and clear tasks and goals

efforts?” Participants suggested amplifying and elevating other voices, providing a platform for diverse perspectives on sustainability, and expanding to include cultural and social sustainability topics. The participants suggested that certain trauma informed approaches could enhance these efforts, for example, continuing to check-in with their communities, making room for conversations around inequalities, and referring to other resources.

In the Alignment with Organizational Priorities scenario, participants were asked, “How do we surface inconvenient truths and ask for change while the organization and the people within it are still enduring trauma?” Participants suggested getting students involved, promoting CaL initiatives, and taking advantage of restructuring or strategic planning processes. Using a trauma informed approach, participants noted that it was important to set boundaries, provide project ideas with specific timelines, and provide multiple choices in sustainability projects. Table 3 provides a summary of the actions and trauma informed approaches generated for each scenario by participants.

Webinar Four: Partnerships and Allies - Building Relationships and Leveraging Resources

In webinar four, 16 participants explored ways that their institutions could engage with external partners to work together on climate solutions. The webinar emphasized the importance of trauma informed approaches in CaL initiatives, specifically the sharing of power through collaboration with different equity groups. A guest speaker from a climate solutions nonprofit highlighted resources and case studies related to successful sustainability interventions in a variety of fields. Participants were challenged to reflect individually on community resources, professional skills, and institutional needs in order to identify areas for future sustainability work. Finally, participants were invited to contemplate actions and potential collaborations they would pursue following the conclusion of the Summer Series webinars.

Key Takeaways

After the conclusion of the 2021 Summer Series webinars, the authors arrived at several key takeaways. Engagement in the webinars represented a substantial commitment of time and energy for participants and demonstrated that there was an appetite for trauma informed practices amongst sustainability professionals. It is important to continue to support this interest in trauma informed practices by using support networks, such as the CaL CoP or AASHE, in which sustainability professionals can share best practices, challenges, and learnings.

Participants were already using some trauma informed practices prior to the Summer Series webinars although they may not have identified them as such. The practice of creating a safe and supportive learning environment is one example of a trauma-informed practice that is employed by sustainability professionals. Other simple things that can help alleviate fear, anxiety, and stress over discussing and acting on issues as pervasive and complex as the climate crisis include: connecting students to the academic community; providing students with opportunities to practice their skills, embrace teamwork, and participate in shared leadership; and anticipating and adapting to the changing needs of students and the community (Hoch et al., 2015).

The 2021 Summer Series webinars revealed a lack of resources related to trauma informed practices and their application specific to experiential learning and sustainability in higher education. There are many resources broadly related to trauma informed care in colleges and universities, however the authors of this paper were unable to find specific academic papers, applied examples, or case studies of trauma informed practices being applied in CaL-like scenarios.

There is a need for more training provided by subject matter experts in trauma informed care for sustainability professionals focused on implementing trauma informed practices in CaL. The 2021 Summer Series webinars introduced the topic of trauma informed care; however, the organizers were not experts in trauma informed care and could not provide a complete and comprehensive education on the topic. It can be challenging for sustainability professionals, and likely higher education professionals in general, to apply or teach content if they are not experts. Further, additional training in trauma informed care for sustainability professionals is necessary to ensure implementation of trauma informed practices in a way that does not unintentionally re-traumatize or exclude some students.

Finally, the 2021 Summer Series webinars highlighted the cumulative benefits of trauma informed practices. By more intentionally implementing these practices, sustainability professionals have the potential to have a greater positive impact on student participants in CaL programs through creating safe environments in the face of growing climate uncertainty, student trauma, and other ongoing mental health stressors.

Opportunities and Limitations for Future Research

There is a growing body of scholarship on the opportunities for sustainability-focused experiential learning (Favaloro et al., 2019; Gunnels et al., 2021; Rogers et al., 2021;

Rukspollmuang et al., 2022). However, there is little existing research demonstrating how CaL projects can harness trauma informed practices to relieve student stress and anxiety.

Summer Series webinar participants indicated a need for further study on trauma informed care related to climate disasters and requested more examples of how sustainability professionals could interact with students related to climate anxiety. Addressing these knowledge gaps could help sustainability professionals prepare the next generation of sustainability leaders while supporting their own mental health. Drawing a clearer connection between the empowerment of individuals, including students, staff, faculty, and community members, and CaL initiatives is a critical next step.

There is an opportunity to study the effectiveness of the 2021 Summer Series webinars as an instructional method. Future research could track the longitudinal effects of participation in the workshop series. Researchers could explore topics such as: 1) did the webinar series change participants' approach to their work over time; and 2) what is the impact of using trauma informed approaches for CaL initiatives from various perspectives, including students, staff, and faculty members? Additional research could explore the potential to scale-up trauma informed practices in sustainability across post-secondary institutions through additional offerings of a similar workshop.

There are several limitations to addressing the effectiveness of a series of webinars as an instructional method. One limitation is future participation in online workshops. Having a larger group of participants can enable perspectives that are more diverse and enrich webinar learnings. However, the 2021 Summer Series webinars participants acknowledged that interest in online webinars might decrease as higher education institutions shift back to in-person experiences at this point in the COVID-19 pandemic.

A further limitation is participant engagement after the series of webinars. In order to assess the 2021 Summer Series webinars' effectiveness, it would be ideal to check if participants have utilized their learnings. However, it can be difficult to maintain communication with participants following the conclusion of an online educational series. After the 2021 Summer Series webinars, there was no follow-up to check if participants had incorporated trauma informed practices into their work. As a result, the authors cannot stipulate if the workshop series enabled sustainability professionals to use the practices or if the professionals found the practices to be helpful within the context of advancing sustainability in higher education.

Conclusion

The 2021 Summer Series webinars provided an opportunity to explore ways of incorporating trauma informed care into CaL efforts to address the intersecting challenges of climate change, mental health, and trauma. Beyond what participants individually gained from each of the four webinars, the collaborative project demonstrated that there is an appetite for trauma informed care training for sustainability professionals and a need for further research on this topic. This paper highlights the potential for this approach and provides a replicable framework that can be utilized by others to explore the application of trauma informed approaches to sustainability. While this paper focuses on sustainability professionals, the findings presented here are applicable to higher education professionals in general. The efforts described here represent a first attempt to explore this intersection and highlights avenues that can be expanded upon through future work.

CaL programs should empower students in a safe environment (Rogers et al., 2021). Furthermore, safety in experiential learning should include both physical and psychological health (Pickens & Tschopp, 2017). To enhance participant safety in programs like CaL, sustainability professionals should be familiar with trauma informed practices and understand how to apply them in their work. Furthermore, sustainability professionals should view these practices as beneficial to other goals, such as behavior change. Research suggests that collaborative approaches, including trauma informed care, make it more likely that participants will accept discussions around behavior change and active engagement (Raja et al., 2015). Because many sustainability challenges involve behavior change, sustainability professionals may be more motivated to become early adopters and promoters of trauma informed practices.

As sustainability professionals continue to explore how these techniques can be applied in their daily work, it is important that they be given sufficient resources to ensure sensitive implementation of trauma informed approaches. Resources could include funding for appropriate training sessions, access to materials created by subject matter experts, and the staff time required to attend training sessions and review materials. It is also important that sustainability professionals engage with experts in trauma informed care to share best practices and discuss challenges. Organizations such as the CaL CoP and AASHE could provide a forum for sustainability professionals to continue to collaborate on this topic through work groups, webinars, and conference sessions.

Utilizing trauma informed approaches is an important way that sustainability professionals can work to ensure that CaL participants remain safe and are not re-traumatized through their campus experiences. While the topic of trauma informed care might seem daunting, sustainability professionals are encouraged to approach the topic one opportunity or—empathetic inquiry—at a time.

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