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Leadership for Sustainability: Theoretical Foundations and Pedagogical Practices that Foster Change

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Sustainability education has a significant role to play in changing the leadership paradigm and fostering leaders who are capable of working collaboratively to address complex sustainability challenges. Leadership for sustainability denotes a new and expanded understanding of leadership that signifies taking action based on sustainability values, leading from a living processes paradigm, and creating an inclusive, collaborative and reflective leadership process. This paper examines and weaves together literature on leadership, leadership development, and sustainability education to suggest best practices in leadership development. A variety of suggested pedagogical practices that foster the development of leaders include: observation and self-awareness, reflection, the exploration of ecological and diverse perspectives, and learning experientially and in community.

In order to find solutions to the complex problems that we face as a global society, we need active citizen leaders who can collaboratively restore our sense of community and actively engage in transforming our current social, political, economic and ecological realities (Cress, 2005; Colby & Sullivan, 2009; Hepburn, 1997; Saltmarsh, 1996; Shulman, 2007). Working toward change that attempts to address the root causes of complex problems is not easy or simple (Wagner, 2009). Complex sustainability problems, such as climate change or social inequity, present adaptive challenges that can be messy and exist within multiple systems (Daloz Parks, 2005; Heifetz & Laurie, 2001). Addressing sustainability issues often involves stakeholder conflict, uncertainty, and interrelated problems, all of which points to the need for a leadership

theory and practice that is interdisciplinary and oriented toward sustainability (Shriberg & McDonald, 2013). Adaptive sustainability challenges require new values, skills, structures, and ultimately, a new understanding of leadership. Forbes (2014) observes, "leadership is a complex socially constructed phenomenon" (p. 152), that requires leaders who can work within a global context that is interdependent, ambiguous, and in a constant state of flux.   Educational institutions are increasingly responding the challenge of developing programs that foster leaders for sustainability who are prepared to work in this context (Shriberg & MacDonld, 2013).

In particular, sustainability education is emerging in higher education and adult learning as an interdisciplinary approach to help learners critically reflect on unsustainable systems, become creative problem solvers and active citizens, and to engage personally and intellectually in the tensions that stem from pressing social, ecological, economic, and political issues (Nolet, 2009; Sterling, 2002). Sustainability education seeks to prepare learners with the skills, values, and attitudes that will be required to transition toward a sustainable society (O'Riordan and Voisey, 1998) through transformational learning that has the potential to change values and shift consciousness (Sterling, 2002; Orr, 2004; Lange, 2009; Windhalm, 2011; Macy & Young Brown, 1998). Fostering leadership development is also a key element of sustainability education. Considering the complex challenges we face, sustainability has become an inextricable aspect of leadership. Sustainability work, on both large and small scales, requires committed sustainability leaders (Parkin, 2010). But how does a leader effectively *lead* today? What are the best approaches for leadership and how can this leadership be developed?

A new view of leadership is emerging that can shift consciousness and promote action for sustainability (Ferdig, 2007). This article articulates how leadership for sustainability within higher education and adult learning is currently being conceptualized and practiced. Based on this current conceptualization of leadership as inextricably connected to sustainability, this article also recommends pedagogical practices that can best foster leadership development with adult learners.

Literature Review: What is Leadership for Sustainability?

Leadership for sustainability is a relatively new idea that represents "a radically expanded understanding of leadership that includes an enlarged base of everyday leaders in all walks of life who take up power and engage in actions with others to make a sustainable difference in organizations and communities" (Ferdig, 2007, p. 33). Rather than simply applying a new lens of leadership to business as usual, leaders recognize and critique the root causes of unsustainability, seek to understand the social, cultural, economic, and ecological impacts of their work, and acknowledge and value the ecological and cultural diversity of natural systems (Foundation for deep ecology, 2012). Leadership for sustainability builds on but goes beyond transformational leadership, the dominant leadership model taught in higher education (Shriberg & MacDonald, 2013). Leadership for sustainability is related to other models of leadership such as the Social Change Model of Leadership (Astin & Astin, 1996) and the Relational Model of Leadership (Komives, Lucas, & McMahon, 1998), which highlight collaboration, inclusiveness, relationships, common purpose, and change rooted in values.

 The following sections describe in more detail three key elements that best characterize this conceptualization of leadership. First, leadership signifies cultivating a way of being and acting that is embedded in sustainability values. Second, leadership is rooted in a living processes paradigm, and third, leadership is an inclusive, collaborative, and reflective process. It

should be noted that although we use the term leadership throughout this article, what we are describing could also be termed "facilitation" or "curating", as the core goal is to guide people and organizations to collaboratively create visions and take action for a more sustainable and resilient world.

A Way of Being: Taking Action Based on Values

Leaders for sustainability are committed change agents, involved in work that reflects an emerging way of being that is rooted in interconnectedness, relationships, and mindfulness. Recognizing our inherent interconnectedness with the earth and other living beings, and cultivating authentic relationships are fundamental to healing the earth and human communities. Living from this perspective requires a mindful way of being (Kabat-Zinn, 2005). The conscious choice to act and live in ways that reflect this way of being is at the heart of leadership. Leaders are people and groups committed to taking action to create the world they want, and encouraging others to do the same (Ferdig, 2007; Wheatley & Freieze, 2011). Their actions stem from a deep sense of commitment to their values. These values may include, justice, equity, love, balance, creativity, relationships, learning, flexibility, openness, diversity, humility, and community (Hawken, 2007; Macy & Young Brown, 1998; Orr, 2004). Clarifying one's values and aligning actions with values is key to leadership work (Kouzes & Posner, 2012). Developing a way of being that is rooted in sustainability values requires a focus on the inner work of sustainability, which includes reflection and contemplation, deep awareness of connections to all life, and coherence of action (Schley, 2006).

Leadership thus reflects values in action; acting from one's values to address complex sustainability challenges and to affect sustainable change. Leadership is a way of being from which to act, and this way of being is rooted in a living processes paradigm.

Rooted in a Living Processes Paradigm

Leadership for sustainability is rooted in a living processes paradigm, rather than a mechanistic paradigm based in Newtonian science. This is because complex living processes demonstrate sustainable properties and patterns and can suggest important strategies for leadership (Barlow & Stone, 2011). Qualities of living processes (how all life operates) include resiliency, adaptivity, awareness, creativity, and relationships (Wheatley, 2006). Within a postindustrial, postmodern paradigm, there is recognition that the world is constantly changing, uncertain, emergent and exists as interconnected webs of relationships (Capra, 2002; Wheatley, 2006). Considering that our world is inherently paradoxical, that multiple realities exist, and that living beings organize and adapt according to their environments, leadership must be "adaptive, flexible, self-renewing, resilient, learning, intelligent—attributes only found in living systems" (Wheatley, 2006, p.32). Traditional leadership theories, even those that recognize the importance of complexity theory, still mostly function with the inherent erroneous assumption that human organizations are systems with internal rules, that once discovered, can be controlled or predicted (Cannell, 2010). According to Stacey (2007) the focus must shift from an abstract systemic whole to "what people are actually doing in their relationships with each other in the living present" (p. 292). Organizations are made up of human beings and human relationships that constitute living processes. By observing living processes (human and more than human), leaders can better understand how creative responses emerge from complex processes of relating.

Ferdig (2007) argues that the principles of leadership that are informed by complexity science, "…offer a powerful view of leadership and human dynamics that could trigger a transformational shift in how we see and function in the world" (p. 27). For example, we can now recognize organizations as complex and responsive living processes with the capacity to self organize to sustain themselves, to respond intelligently, and to change accordingly. This view of organizations as self-organizing and creative living processes changes the need and traditional role of leadership from one of control and regulations, to a leadership with a strong set of intention and confidence in the intelligence of the organization (Wheatley, 2006). This view challenges the assumption that the future can be predicted and controlled, and that a vision can be planned and achieved (cause and effect thinking), and instead focuses on the reality of emergent relationships and complex responsive processes in organizations (Cannell, 2010; Stacey, 2007). Rather than understanding leadership as held by an individual, it must be seen as something that can be demonstrated by people and teams throughout an organization in responsive processes (Kouzes & Posner, 2012). In this sense, members of an organization communicate and share challenges and adapt their behavior to these challenges, rather than waiting for specific leaders to tell them what or how to address it (Heifetz, 1994). Leadership that is rooted in values and a living processes paradigm will thus require a dynamic leadership process.

An Inclusive, Collaborative, and Reflective Process

Leadership for sustainability differs from a traditional understanding of leadership, which often relies on traits, behaviors and situations to explain leadership. Traditional leadership studies focuses too narrowly on the leader, while overlooking other relevant elements of leadership (Avolio, 2007). Leadership literature and language also tends to reflect an assumption that a leader fulfills a designated role (Ferdig, 2007). The accepted and strived for version of a leader is often conceptualized ideally as one who can come forward with vision, direction, and an almost enlightened view of how to manage a given situation. People look to leaders at the top to provide "guidance, direction and answers and are often comforted by the sense of stability and predictability" (Ferdig, 2007, p. 30). However, this ideal of a leader who can wisely guide followers through linear, organized solutions is based in an individualistic and non-systemic worldview; one that assumes that there is one correct answer to a problem that can be arrived at with scientific objectivity. This model of leadership arose in an industrial era where goals were primarily viewed as efficiency and predictability (Komives, Lucas, & McMahon, 1998). Leadership has also been traditionally viewed in a mostly hierarchical context in which there is one main (usually male) leader (usually someone with multiple privileges) at the top (Parkin, 2010).

These common views of leadership are problematic in several ways. First, they are fragmented and specialized while the world's problems are complex and interconnected. Second, in addition to being increasingly ineffective, traditional models of leadership are disempowering, as the role of leader as authoritative expert is naturally exclusive. By defining leadership as a specific role or skill set, fewer people are likely to see themselves as capable of being leaders or making change.

In contrast, leadership for sustainability identifies and empowers the leader that inherently exists in each person, and fosters strong, healthy, sustainable, and just change through collaborative and creative means (Ferdig, 2007). This perspective assumes that everyone has the

capacity for leadership; that a leader's role is not to lead over others, but rather to lead *with* them. It acknowledges that today's challenges are complicated, interconnected, and will need everyone to work towards creating a more sustainable future. Thus leaders, rather than providing a solution, "create opportunities for people to come together and generate their own answers" (Ferdig, 2007, p. 31). Leaders not only bring people together and encourage creative participation, but help people to embrace a relationship with uncertainty, chaos, and emergence (Wheatley, 2006). Working together to solve problems, even when values are shared, can be a difficult process. Leaders understand that the tension, conflict and uncertainty that come from differences provide great potential for creative emergence of viable solutions (Ferdig, 2007).

This collaborative practice necessitates both individual and collective reflection in order to be effective. Leaders take opportunities to "get on the balcony" (Heifetz & Laurie, 2001, p. 6) to observe and reflect on their activities. Effective leadership requires an inner process, in which a leader must first be grounded in an understanding of self and a relational view of the world, in order to effectively work with others to make change (Heifetz, Grashow, & Linsky, 2009). Additionally, reflection is a process of "understanding one's own skills, knowledge and values within the context of community groups" (Cress, Yamashita, Duarte, & Burns, 2010, p. 233). This reflective process allows for feedback loops, and cycles of growth and change.

Leadership can therefore be understood as an inclusive, collaborative, and reflective process, rooted in values and a living processes paradigm. Based on this understanding, the following pedagogical strategies are offered for fostering leadership development in higher education and other adult learning settings.

Fostering Leadership for Sustainability: Pedagogical strategies

Fostering leadership involves helping learners to come to see themselves as leaders. Seeing oneself as a leader, with the capacity to enact change and positively influence the world with others, can be a transformational process. Leadership development can be based in sustainability education, which involves shifting to holistic, systemic, connective and ecological ways of thinking and learning (Sterling, 2002) and is focused on transformational rather than transmissive learning processes (Burns, 2011). Transformational learning is foundational to sustainability education and to fostering leadership because it signifies "a deep cultural shift in the basic premises of thought, feeling that action…that dramatically and permanently alters our being in the world" (O'Sullivan, Morrell, & O'Connor, 2002, p. xvii). This shift can alter our understanding of ourselves, our relationships with the earth, our power relationships, our body awareness, our vision, sense of possibilities for social justice, different ways of living, and personal joy. (O'Sullivan, Morrell, & O'Connor, 2002).

 The following pedagogical strategies for leadership development are consistent with the core elements of transformational learning, which include: experience, critical reflection, dialogue, a holistic orientation, awareness of context, and authentic relationships (Taylor, 2009). Although not a comprehensive discussion of pedagogical strategies that could foster transformational learning for leadership, the following are key strategies based on experience and research (Burns, 2013). The following pedagogical strategies aim to foster: 1) a sustainable way of being through observation, self-awareness and reflection; 2) a living processes paradigm through the inclusion of ecological and diverse perspectives; and 3) inclusive collaborative leaders through experiential learning in community.

Observation and Self-Awareness

Creating space for observation can help learners to cultivate increased awareness, both about themselves, their own values, and important issues in their communities and lives. Slowing down, learning to see and listen, and sharpening observational skills will allow emerging leaders to learn more, both from other people and from ecological systems. By taking time and considering how to make the least amount of change with the largest amount of impact, leaders and learners can become more effective change agents in their communities (Starhawk, 2004). Starting with careful observation, leaders reduce the risk of rushing in and making careless mistakes. Sustainability problems occurring in industrialized civilization often result from a lack of intentional design (Orr, 2004). By taking time to start with observation – of place, of people, and of oneself – learners and leaders will be better prepared to act authentically, sustainably, and effectively. Activities such as asset mapping, reflective writing, autobiographical essays, or sit spots, in which learners return many times to the same place to just sit and observe, can help learners to slow down and observe.

Observation and self-awareness can lead to a stronger sense of leadership identity including strengths, passions, and other important aspects of identity (Komives, Owen, Longerbean, Mainella, & Osteen, 2005). To create a leadership identity, learners need to increase their sense of self-awareness from a more general or diffuse sense to a clearer identification of strengths, passions, and other important aspects of identity such as race, gender, or ethnicity (Komives et al., 2005). By creating space for learners to identify and articulate their values and beliefs, they can begin to develop "personal leadership principles" (Eriksen, 2009, p. 750). Posing question about values, beliefs, and criteria in effective leadership, learners can begin to not only identify the kind of human beings they want to be, but also the kind of leaders they might become. Self-authorship and authentic leadership requires that the development of leadership principles be based on one's lived experience rather than simply adopting someone else's principles (Eriksen, 2009).

Understanding the interconnected and interdependent nature of our world also contributes to developing learners' self-understanding. According to Capra (2009) "When the concept of the human spirit is understood as the mode of consciousness in which the individual feels a sense of belonging, of connectedness, to the cosmos as a whole, it becomes clear that ecological awareness is spiritual in its deepest essence" (p. 27). Thus deep ecological, or spiritual, awareness is imperative for students to strengthen their understanding of self, and is necessary for leadership development, as it provokes a felt understanding of cosmological connectedness. Integrating outdoor and embodied experiences should be prioritized in order to honor and teach interconnectedness. By introducing these elements, learners will be prompted to think outside of their headspace and enter ecological or spiritual awareness. Providing opportunities for retreats, or activities that focus on deepening ecological self-understanding through connection to place, may be a way to integrate this ecological awareness. Learners need to be able to observe, understand themselves, define their own values, and develop ecological connections if they are going to authentically take action as leaders for sustainability.

Reflection

Closely tied to observation and self-awareness, a reflective practice is also important for leadership development. Reflective learning activities are important elements in leadership

development pedagogy because they require students to critically consider their experiences, integrate them with past knowledge, and identify how they as individuals connect to the experience (Collier & Williams, 2005). A learning experience might begin with learners observing their ideas or attitudes about leadership. With awareness, learners can begin to question and reflect on why things are the way they are, what has caused certain thought patterns or attitudes, and whether or not these patterns are useful in their lives. Once learners become aware of currently held beliefs or worldviews, they can begin to question more deeply where those views came from and whether they are relevant and useful. Reflection helps learners make meaning from their experiences, and is a key element in many pedagogies including service-learning (Eyler & Giles, 1999; Toole & Toole, 2001), transformational learning (Cranton, 2002; Mezirow, 2000), and experiential education (Kolb, 1984).

      Reflection can also offer an opportunity for renewal, a chance for individuals to reconnect with themselves, their goals, and their communities, in order to move forward from a place of calm rather than a place of confusion or stress (Komives, Lucas, & McMahon, 1998). In a learning experience, "when group members have time to reflect, they can see more clearly what is essential in themselves and others" (Heider, 1985, p. 23). Reflection can take myriad forms. Journaling, discussion, art, and meditation, as well as dialogue with a mentor or group, are some reflective practices that can be used. In particular, critical self-reflection is useful in nurturing students' self-understanding and leadership because it invites students to consider, analyze, and evaluate different parts of their identities, their values, beliefs, and their connection with others. In order to support effective critical self-reflection, educators need to ensure that personal experiences, emotive elements, and spiritual space are present and honored in reflection exercises (Collier & Williams, 2005).

      To move beyond the default intellectual capacities called forward in typical reflective activities, educators and leaders can look to reflections with four characteristics that researchers have identified as essential: *Continuous, challenging, connected and contextualized* (Collier & Williams, 2005). *Continuous* reflection requires a longitudinal approach because the process of self –knowing takes time. As a process of lifelong learning, self-understanding will not occur through a single act of critical self-reflection. Creating a reflection portfolio can serves as a living history of learners' engagement, and records the emergent process of self-understanding. *Challenging* reflections should push learners to not only think in new ways, but to find new ways of expressing themselves. Written reflection, the common medium for exploring self-understanding, is limited in its ability to provide a holistic space for self-expression. Different mediums for reflection can provide new insights into the self by pushing students outside their normative means of expression. Encouraging reflection through poetry, art, movement, or metaphor are some ways to challenge learners and provide an opportunity for expanding their self-awareness. *Connected* reflections should connect learners' past experiences, their future dreams, and their relationships with others. The more connected reflections are for learners, the more whole their reflective self-understanding becomes. *Contextualized* reflections require activities to provide learners with the opportunity to frame their experiences within the place, time, and space in which they occurred. In addition to the external contexts, it is important for reflections to address their own internal contexts. This is where the emotive element and affective elements of reflection can be integrated. Reflections that acknowledge both internal and external contexts provide a holistic contextual picture for learners' self-understanding and leadership development.

      Educators can provide opportunities for students to begin to reflect on how to live a life

in which they can play a leadership role in creating positive change. Opportunities for reflective practice offer growth in self-awareness and the skills needed to be able to work collaboratively with others. Pedagogical practices that promote observation, self-awareness, and reflection all serve to help learners identify and nurture a sustainable way of being as a leader.

Exploring Ecological and Diverse Perspectives

Emerging leaders can also be introduced to a variety of diverse perspectives, including ecological perspectives, so that they might begin to understand leadership from a living processes paradigm. Learning from ecological processes is valuable because these processes demonstrate sustainable properties and patterns (Barlow & Stone, 2011). Ecological perspectives may be explored through the study and stories of permaculture, which highlights ecological principles, design, and interconnectedness (Holmgren, 2004).

Including a variety of diverse perspectives also involves questioning and reflecting on dominant ways of seeing the world. Doing so requires reflection on the systemic causes of unsustainable systems and practices (Cortese, 2005). By questioning and examining dominant ways of seeing the world and of leadership, and introducing alternative perspectives such as a living systems paradigm, learners can begin to expand their understanding of leadership. Oftentimes learners have either consciously or unconsciously been taught that leadership looks like *this* or *that*, and in not seeing themselves in one particular version, are hesitant to see themselves in a role that doesn't fit who they are. Proposing diverse views of leadership provides learners with opportunities to expand their definitions of leadership and find a vision that is inclusive. An assignment that requires learners to interview a leader or group who they think demonstrates leadership for sustainability could be one way to incorporate diverse perspectives and examples of leadership. Similarly, a project in which learners trace a commodity or product from earth to consumption can highlight dominant and unsustainable ecological and economic practices, and provide opportunities for learners to research and propose alternatives.

Learning from diverse perspectives can also highlight ways of knowing that arise from socially marginalized positions. Learners should have opportunities to question their own experience with power and privilege, and their encounters with the realities of racism, sexism, classism, heterosexism, and anthropocentrism. By understanding power relationships and systems of oppression, learners also understand how personal feelings related to sustainability issues, such as despair and conflict, are shaped by historical and cultural dynamics (Fenwick, 2000). By bringing new and diverse ideas into a learning community, learners can both practice awareness of and compassion for difference while continuing to refine their own understanding of leadership. Opportunities to share their own lived experiences and perspectives within a learning community can be a powerful way to make sure that multiple perspectives are included in learning. Being exposed to hopeful perspectives is also extremely important to leadership development (Burns, 2013). Hopeful and creative perspectives allow learners to find ways to be involved in sustainable solutions, rather than being mired in despair.

Learning Experientially and in Community

Strengthening learners' sense of community and deepening their sense of connectedness is needed for developing effective leaders who are inclusive and collaborative. While it is important to know who we are as individuals, ultimately we must come to know ourselves as

interrelated and interdependent beings. As Widhalm (2011) explains, "we need to re-learn identity formation as a process of radical interdependence" (p. 8). Because nothing can exist outside of its relationships with others, to truly understand our existence and our purpose, we need to understand our interconnectedness and interdependency. Strengthening learners' sense of community, and deepening their sense of connectedness, will facilitate the development of collaboration. Effective leaders bring people together to collaboratively create a shared vision and strategies for change.

To develop leadership skills, learners need opportunities to create environments of collaboration instead of competition. Collectively building an authentic, trusting, learning community is one way to strengthen connectedness and encourage collaboration. This learning community should provide learners the opportunity to articulate their values and beliefs. Forging relationships within a learning community also requires individuals to reflect on how they relate to other individuals and the community as a whole. By engaging in collaborative projects, learners have the opportunity to make new relationships, to relate to and appreciate those different from themselves, and to practice communication skills. Creating supportive and connected communities is crucial for enhancing learners' ability to explore their own leadership.

Building trust within a learning community is essential for learners to feel comfortable expressing themselves authentically. One challenge in teaching or facilitating this aspect of self-authorship and leadership development in traditional settings is that many learning environments emphasize independence and individual achievement. Educators who want to encourage learners to identify as leaders need to promote and provide more opportunities for them to collaborate with others and reflect on their perspectives and values within a group. Creating group norms, opportunities to get to know and support one another personally, storytelling, and mindfulness practices are ways to promote trust building.

Having the opportunity to practice leading and acting from a place of authenticity is essential to leadership development. By practicing leadership in a meaningful context, learners have the opportunity to support others while also experiencing personal growth (Komives et al., 2005). Facilitating experiences that are engaging and relevant to learners' lives will create a more receptive and positive environment for shifts in ways of thought (Fenwick, 2000). Working with learners to identify topics they are passionate about or where they see themselves having opportunities to work for change can help them to take ownership of their experiences and ultimately connect more deeply with the idea of themselves as leaders. Experiential leadership development can also strengthen learners' connection to place. By participating in experiential learning, learners have the opportunity to explore and interact meaningfully with local communities and ecosystems. Opportunities for learners to engage in problem solving and project work that meets a true community need in both small and large groups allows for meaningful experiential learning and leadership development.

Conclusion

Leadership development takes time. Depending on where learners are starting from, coming to see themselves as leaders for sustainability could be a complete shift in worldview. Allowing for observation and awareness of values is an important initial element of leadership development. Facilitating a shift to an understanding of the world as living processes is another important aspect of leadership development that can be fostered through an exploration of ecological systems and diverse perspectives. Cultivating collaborative and experiential learning

opportunities allow for building the necessary skills for inclusive leadership.

Thousands of individuals, groups, and communities are already working together and taking action toward a more sustainable future. They are doing this through decentralized and non-hierarchical leadership, by stressing innovation and creativity while focusing on issues they care about (Hawken, 2007). Educational institutions have a responsibility and an important role in empowering leaders to see themselves as part of the collective sustainable change that is already happening. Indeed, a wide variety of leadership programs for sustainability exist, and the number is growing. These programs commonly focus on practices such as experiential learning, building community, and focusing on systems thinking to foster leadership (Shriberg & MacDonald, 2013).

Intentional pedagogical design can clearly foster opportunities for leadership development, and this requires a shift away from a transmissive, banking model of education (Freire, 2000). Learning must be seen as more than content to be gained, and instead understood as a transformational reflective process, in which understanding is co-created, personal values are examined, participation and collaboration are valued, and multiple perspectives are encouraged (Burns, 2013). Learning in this way can be an empowering process that strengthens learners' connection to place and communities, and inspires the ability to live by one's values and to collaboratively seek sustainable change. Leadership development can and must become a priority. It is more important than ever to provide transformational learning opportunities that empower all learners to become leaders for sustainability.

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