

State of the Field of Systems Education

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Abstract

The article explores the critical role of systems education in steering sustainability transformations, as discussed in a “State of the Field” panel at the Transformations 2023 conference. Experienced educators emphasized the need for fresh perspectives and practices on how to create supportive learning environments for transformation practitioners, educators, and students. A significant emphasis was on personal growth, promoting introspection, and developing active and reflective listening skills to better empower students to be change agents in the world. The panelists also tackled the challenges faced by systems educators, including institutional resistance and the emotional toll of transformative learning, while remaining optimistic about its growing strength. They explored innovative strategies to subtly integrate systems education within traditional institutions and urged the Transformations Community to provide platforms for discussion, knowledge-sharing, and skill development to drive sustainability transformations forward.

Introduction

Systems education is crucial for driving sustainability transformations. The rapid and profound changes happening today require new perspectives and practices, which rely on a fundamental shift in our educational systems. Systems-informed approaches are critical to enable sustainability practitioners to tackle the complexities of contemporary challenges. Both professional development and higher education programs play a crucial role in developing systems thinking competencies to drive sustainability transformations (Gill et al., 2022).

Systems education practitioners are engaged in a lively debate about which capacities and skills they should nurture and which approaches are most effective. In a panel at the Transformations 2023 conference moderated by community lead weaver Bruce Goldstein, three experienced

educators and program designers - Debbi Brock, Jayne Bryant, and Marilyn Mehlmann - shared insights on how to design and support effective learning opportunities for transformative researchers and practitioners.

The Panel

Debbi D. Brock, an internationally recognized expert in social entrepreneurship, serves as the Systems Learning and Development Facilitator at Catalyst 2030, an international network dedicated to altering power dynamics, embedded social structures, and mindsets that impede systems change. Debbi has held multiple positions in higher education, as Associate Professor of Entrepreneurship at Wingate University, Berea College Kay Moore Professor of Entrepreneurship, and Director of the Entrepreneurial Resource Lab at Miami University.

Jayne Bryant is a researcher, program designer, and educator in sustainability leadership and community change. She is a lecturer on leadership for sustainability in Australia and the Co-Director of the Master's in Strategic Leadership toward Sustainability (MSLS) program in Sweden, a program known for its immersive, creative, self-directed, and co-created curriculum. Jayne's recent Ph.D. thesis focused on improving sustainability leadership education and provided recommendations for systems change practitioners and educators.

Marilyn Mehlmann is the founder of Legacy17, an international not-for-profit cooperative of consultants, practitioners, and educators dedicated to realizing the UN's 17 Sustainable Development Goals. Marilyn combines backgrounds in psychosynthesis, empowerment, and action research and collaborates on the creation of innovative methods and tools for community, personal, and professional development. Marilyn was General Secretary and Head of Development at Global Action Plan International, as well as an entrepreneur and management consultant. She is the co-creator of many methods and tools, including the 'Learning for Change' methodology, which has been adopted in more than forty countries, and she is the author of many publications, including 'A Transformative Edge' and 'Empowerment: A Guidebook for Facilitators.' For her lifetime achievements, Marilyn received the Rachel Carson Prize in 2011.

Bruce Goldstein, the moderator of the panel, serves as the Lead Weaver of the Transformations Community and Associate Professor at the University of Colorado Boulder in the Program in Environmental Design. He specializes in partnerships with transformational organizations to understand how communities combine forces to adapt to social and ecological challenges and foster transformational change.

The Transformations Community and Conference

The Transformations Community is a global network of action-oriented researchers and reflective practitioners who support transformations to just, sustainable, and regenerative futures. The community comprises experienced researchers and professionals from diverse backgrounds, including sustainability-oriented academic programs, government, intergovernmental agencies, research institutes, non-profit organizations, consulting firms, and foundations. The Transformation Community organizes dialogues, workshops, and communities of practice to

enable practitioners to bring desirable transformations to life. Since 2013, the Transformations Community has hosted biennial conferences in Norway, Sweden, Scotland, Chile, and online during the pandemic in 2021. These events are deliberately transdisciplinary and seek to provide a creative and welcoming space for transformation researchers and professionals to come together in dialogue and practice. The 2023 conference was in Sydney, Australia, with a simultaneous online conference and a European Hub Conference in Prague, Czechia, followed by the North American Hub Workshop in Portland, Maine. The global theme was “Partnerships for a Better Future,” the 2023 conference program offered 250+ sessions, participation from 40+ countries, 700+ attendees, and insights shared by 400+ speakers. The panel on Systems Education was part of an open-access “State of the Field” series, which aimed to explore core ideas and practices in the field of sustainability transformations.

Dialogue about the State of the Field of Systems Education

Self and System

Jayne Bryant initiated the panel by sharing her perspective that systems education exists in two interconnected dimensions: the broader system targeted for transformation and the role and self-awareness of the individual within that system. Jayne noted that this focus on introspection differentiated systems education from other professional fields, such as medicine, which typically does not focus on self-reflection and introspection. Marilyn Mehlmann agreed that this focus on enhancing the qualities of the self was essential, emphasizing that systems educators at all curricular levels should focus on teaching effective listening, such as active, deep, and reflective listening, and noting that *"I teach deep listening, both to others and to oneself. I believe this is a crucial aspect of education for sustainability."* Extending this discussion, Debbi highlighted the need to nurture empathy, uphold ethical values, and foster collaborative skills, highlighting a shift from individual to more communal and collective expertise. She said, *"We need to put the local leaders at the center and genuinely embrace co-creation and the emerging knowledge."* Panelists agreed that teaching these skills and intercultural competencies is pivotal to making systems education both more inclusive and effective.

Transformative Learning

Bruce then asked about the relationship between systems change education and transformative learning, a process of critical reflection and personal insight that leads to profound shifts in an individual's perspective and behavior, fostering a deeper understanding and a more meaningful engagement with the world. The panelists agreed that transformative learning was essential but difficult to manifest within a curriculum. As Marilyn noted, *"As educators and facilitators, we can open doors for learners, but we cannot force them to walk through those doors."* She discussed the challenges educators face in assessing whether transformative learning has occurred, acknowledging that it is often challenging to ascertain and requires patience and trust in the process. Jayne shared findings from a study on transformative learning, which revealed that while many graduates experience transformative moments, integrating these changes into their daily lives remains a significant challenge (Bryant, Ayers, & Missimer, 2023). Marilyn

emphasized the importance of reintegration after transformative experiences. In her work, she employs strategies like visualization to help students anchor new insights into their daily lives.

Addressing a question from the audience about whether transformative learning required a highly disruptive experience, Marilyn introduced the metaphor of "*Trojan mice*" versus the "*Trojan horse*." She explained that small, discreet changes (symbolized by the mouse) can sometimes be as impactful as large, public changes (represented by the horse). She concluded, "*One mouse can do as much as a horse, but it does it more discreetly.*"



The ‘father’ of transformative learning, Jack Mezirow, seems to imply that a negative experience is almost a prerequisite. This attitude is mirrored in much of the work on ‘edge emotions’: the idea that leaving the status quo is a necessity, accompanied by turbulent negative emotions that need to be overcome to reach a new, transformed status. It discounts or downplays the potential of such personal and collective attitudes as openness, curiosity, empowerment, joy, and hope. An educational approach that deliberately cultivates such attitudes can, at the very least, mitigate the impact of any negative edge emotions. – Marilyn Mehlmann

Student Grief and Burnout

Bruce introduced a student's perspective on the challenges and emotional toll of transformative learning, underscoring their sense of burnout and anxiety. Marilyn expressed concern about the depth and rapidity of transformative journeys and the risks of overwhelming students. She provided an example of a mandatory course on sustainable development that led to student disenrollment due to their heightened sense of grief and despair. She emphasized the fine balance between educating about wicked problems and maintaining hope, encouraging educators to "*Look at how to teach topics like climate change without driving students to the brink of suicide.*" Debbi emphasized the importance of fostering a sense of agency and control in students, preparing them for a constantly changing world, and empowering them to make a positive impact. Jayne delved into the emotional weight of discussing sustainability, noting the changing landscape of awareness about sustainability challenges over the past two decades. Her main point was, "*Now, in 2023, everyone knows that there are huge problems. If we go directly into the challenging content without balance, we can cause anxiety and despair.*"

Systems Change Programs and the University

The panel then considered integrating systems change education programs in universities, focusing on barriers and opportunities. When an audience member asked about whether universities currently supported systems change initiatives. Jayne pointed out the resource-intensive characteristics of transformational sustainability and systems change programs require emotional and labor-intensive student interaction, which can be challenging in institutions that don't know how to value the work (Ayers, Bryant & Missimer, 2020). Marilyn noted the

pressures on higher education to provide students with discrete skills and credentials that would enable them to be job-ready post-graduation, as opposed to curricula that would enhance their potential to be learners and change leaders. Jayne brought attention to the commodification of education in Australia, where the pursuit of financial gains often trumps the objective of societal advancement. Referring again to the concept of “*Trojan mice*,” Marilyn advocated for a crafty and subtle approach to integrating transformative learning opportunities with other educational priorities.

Expanding on this theme, Debbi highlighted the paramount role of education in positively molding societies and warned against the stagnation of universities that focus on short-term instrumental goals and fail to address evolving societal and student needs. Debbi also mentioned a notable shift by AACSB, a leading accrediting organization for business schools, towards prioritizing societal impact, indicating a wider acknowledgment of sustainability. Bruce asked about the differences between systems change programs like MSLS and conventional social entrepreneurship courses. Responding to this, Debbi clarified a prevalent misconception tying social entrepreneurship to business schools, citing research from 2018 that revealed nearly 40% of social entrepreneurship courses originated from non-business departments. Jayne emphasized the necessity of tailoring curricular language to match the needs of different disciplines and fields.

The panelists discussed the challenges of institutional and political resistance to systems education and the difficulties in getting secure funding. Jayne concluded that securing a core and ongoing role for systems education required changing the current narrative of the role of education, noting that “*Currently, we view education as preparation for existing jobs and professions as if there is one predicted future.*” She suggested that we see education as preparing students for a variety of possible futures, whether adaptive or transformative.



Higher Education in many places is big business, and education is often presented in its functional role as the answer to the question of employment and job-ready degrees for a predetermined future. This kind of education is most valuable for relatively static professions and skills. However, this does not apply to many, or even most, students. Even if they have no ambition to become proactive change agents, they will likely face rapid change and benefit from a transformative educational approach. We need to remember to keep questioning this notion of education for a singular future. Much of the education that exists within the higher education sector perpetuates our current social and environmental problems and does not educate graduates for a sustainable future nor question the current status quo of power relations that have contributed to creating these challenges. Higher Education has an important role in shaping humans and society to create more sustainable and just futures. It has the ability to build a human’s capacity to become a societal change agent, such as in Freire’s *Pedagogy of the Oppressed* (2000) and the beautiful individual with the society-building notion of *Bildung* (Buttigieg & Calleja 2020; Vásquez-Levy, 2002).- Jayne Bryant

The Role of Nature

The conversation shifted to how experience in nature could enable the transformative process. Jayne recounted her master's experience at MSLS, where she and her peers developed a sustainability leadership course. She noted that while she had lived in Sweden and Australia, Jayne assumed that nature was always nearby. A classmate from Mexico City explained to her that access to nature is not a given everywhere, redirecting their approach. When asked what supported their transformation, many of the MSLS students identified being close to nature as being an essential component, with one quote: *“Being in nature contributes to both the connection to what we are studying and the personal journey”* (Bryant et al. 2021). Marilyn emphasized the importance of framing the human relationship with nature as reciprocal and interconnected and noted that she had experienced resistance to nature-based approaches from international students who initially saw ‘the outdoors’ as hostile and in need of control, necessitating a shift in her teaching approach.

The Making of a Systems Change Educator

Bruce asked the panelists, *“Is there a different kind of expertise required to be a system change educator compared to a conventional one? If so, how do we cultivate that distinction?”* Jayne responded by sharing that systems educators are change facilitators in addition to being educators. Marilyn emphasized the importance that an educator possesses a strong will to support their own and other’s personal transformation. The relationship between their teaching approach and their own personal transformative journey is essential, and the example they set can either empower or disempower their students. Debbi supported this idea by sharing her experiences at Berea College, which supported transformative experiences for educators as well as students.



There is a need for educators in disciplines from sustainability to business; from social work to engineering, educators need to embrace systems education as a core component in social entrepreneurship education. Creating an environment where undergraduate and graduate students are able to experience transformations – while working with community partners or simulated in the classroom.

Having a transformative educational experience allows students to bridge learnings in the classroom, in their professional experience, and in their community. Secondly, systems education needs to move beyond university campuses. Educators and practitioners must bring a systemic perspective into large corporations and small businesses, from elementary schools to community development and other environments where systemic change is necessary to transform the environment. – Debbi D. Brock

How the Transformations Community Can Contribute to Systems Education

The Transformations Community can offer systems educators support to develop their craft and improve opportunities for developing the field. This support could include providing spaces for self-reflection and opportunities for systems educators to connect with one another. Debbi suggested the Transformations Community could establish a training platform for educators in systems education, enabling practitioners to exchange knowledge and develop new skills. The Transformations Community could contribute to developing the field by promoting best practices, pushing its boundaries, and working toward transforming the educational system itself so it can better accommodate systems education.

Before concluding the panel, Bruce noted that the Transformations Community had begun to contribute to enhancing the field by developing an online searchable Systems Education Catalog. This catalog is a comprehensive database listing global systems education programs. It serves as a valuable resource for prospective students, helping them find the ideal program tailored to their specific needs, such as program length, cost, and location.

Next Steps and Ways to Connect

Catalyst 2030 aims to connect and collaborate with social change innovators from around the globe to achieve the Sustainable Development Goals (SDGs). Educators and practitioners working toward systems-level change are a vital stakeholder group within Catalyst 2030. Learn more about the Catalyst 2030 and join the movement at www.catalyst2030.net.

As a cooperative association, **Legacy17** offers a range of publications and courses and invites leaders, students, researchers, and social entrepreneurs to collaborate on their projects.

If you are a sustainability change agent and/or prospective student, learn more about the program in Strategic Leadership toward Sustainability.

Please join us at the **Transformations Community**, a global network of reflective practitioners and action researchers.

Conclusion

The State of the Field panel delved into the opportunities and challenges of systems education, highlighting its divergence from traditional pedagogies. A recurring theme was the educator's role not only as a knowledge transmitter but also as a facilitator of transformative change. The panelists stressed the significance of introspection, self-awareness, and personal transformative growth among educators to effectively empower students. They outlined key challenges to the field, including institutional resistance to unconventional programs, broader societal hurdles concerning the instrumental role of education in enabling students to merely integrate within the existing unsustainable economic system, and the emotional demands of transformative learning.

Acknowledging these concerns, the panel concurred that the state of the field of systems education is robust and growing. There was a shared desire among the panelists to reimagine education to prepare students for the roles they might play in a transformative future. The discussion underscored the need for systems educators to cultivate distinctive expertise to foster active and deep listening and support student agency through their transformative journeys. They could address institutional obstacles to sustaining systems education programs through subtle and crafty integration into the structures and conventional disciplinary and professional discourses of traditional institutions, alongside efforts to challenge and change these institutions from within, akin to “Trojan Mice.” They urged the Transformations Community to not only provide a platform for discussion but also to assist systems educators in connecting, sharing knowledge, and acquiring new skills essential to driving sustainability transformations.

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