

# Chapter 6

## Educating for Student Agency: Perspectives from Young Eco-civic Leaders in Canada

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**Abstract** This chapter shares the findings of a study that investigated how youth, nationally recognized as eco-civic leaders in Canada, perceive their agency and capacity to effect change. It explored the notion of “student agency” as it relates to the emergent trend around environmental action learning within the field of environmental education (EE) and civics education. Two key findings are examined: (1) the suggestion that a critical gap exists between student agency as interpreted in present school practices and scholarly and policy perspectives on EE and (2) the learning conditions that participating youth identified as critical in developing student agency, including the importance of youth–adult relationships. Our collective understanding and praxis of environmental action learning need to focus on the development (process) of students as active citizens, in the sense of collaborative civic actors aimed at socio-ecological change, not simply as “good stewards.”

### 6.1 Moving Beyond Recycling Programs

Community cleanups, recycling and composting programs, school gardens and local food-based cafeterias, litterless lunches, no idling and water bottle-banning campaigns, and other behavior-changing initiatives are examples of student activism that have become commonplace in schools across Canada over the past decade (Astbury et al. 2009). This groundswell of environmental education (EE)-based activism is what practitioners and scholars alike frequently refer to as “environmental action” learning (Chawla and Flanders 2007, p. 440).

Specific to Canada, the current Ontario Ministry of Education’s EE policy framework (2009) “Acting Today, Shaping Tomorrow”, for example, views students as “active citizens” (p. 13) and “decision makers to effect positive environmental change” (p. 15); teachers are asked to work toward building “student capacity to take action”

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71

(p. 15) and “to effect long-term change” (p. 11); and “system leaders” (i.e., principals, administrators, policy-makers) are encouraged to make environmental leadership a “whole system responsibility” (p. 18). Similar trends toward environmental action learning have also been documented in recent curricular revisions including the Ontario Ministry of Education’s Social Studies, History, and Geography (2013) curriculum document (grades 1–8), as well as several broader analyses of EE discourse focusing on sustainability and citizenship (Kozak and Elliott 2014).

Central to the above trend in EE discourse concerning environmental action learning is the recognition of the need to develop change agents in youth through the development of student agency, that is, building capacity in students to effect broader social change aimed at sustainability and socio-ecological well-being. The question remains, however: Can such “personal acts of responsible citizenship” (Westheimer 2008, p. 9) – the community cleanups, litterless lunches, water bottle-banning campaigns, etc. – drive the broader change being advocated for in current EE theory and policy? The study on which this chapter is based was designed to investigate how a subset of young people – specifically, young Canadians who have been recognized regionally and nationally as eco-civic leaders in their schools and communities – interpret their own sense of agency (i.e., their capacity to make change) and the kinds of learning conditions they perceived as formative in developing it. Although a limiting sample population, I was keen to examine the insights of youth who are engaged in environmental action learning processes taking place in schools or in local community structures as extensions of their formal learning.

This chapter is divided into two parts. In the first part, I examine the participating youth’s perceptions of student agency in relation to the emergent trend of learning aimed at developing “citizenship skills” (Schusler and Krasny 2010, p. 210) and “action competencies” (Schnack 2000, p. 107) within the fields of EE. As for the second part, it presents a discussion on the learning conditions that these youth identified as critical in developing student agency. Before diving into these two central clusters of the ideas presented here, however, I want to briefly situate the relevance of this research within a broader international context.

## 6.2 Getting “Unstuck”

In investigating how youth, nationally recognized as eco-civic leaders in Canada, perceive their agency and capacity to effect change, a narrative inquiry approach was used in this research. An online questionnaire, semi-structured interviews, and a face-to-face focus group served as the primary data sources. Thirty-four past recipients or finalists of the Toyota Earth Day Canada Scholarship (TEDS) participated in it, and they were all aged 18 and 24 years.

Toyota Canada and the Toyota Canada Foundation, in partnership with Earth Day Canada, established TEDS in 2002 to help support emerging young Canadian environmental leaders. TEDS “encourages and rewards graduating Canadian high school students who have distinguished themselves through environmental com-

munity service, extracurricular and volunteer activities, and academic excellence” with a \$5000 grant ([www.earthday.ca](http://www.earthday.ca)). Each year the scholarship program recognizes 20 students, all of whom are entering their first year of studies at a Canadian university.

Although this chapter is based on a Canadian-centric study, the key findings discussed here bear upon discussions of EE pedagogy and praxis that are relevant to a much broader international audience. The research, along with my experience over the past 15 years as an environmental educator, has led me to the view that we are systemically “stuck” on an approach to environmental action learning that is focused on learning about (environmental) issues through knowledge building and awareness raising and opportunities to be good stewards and good citizens. Overlooked are deeper understandings and modes of learning that focus on processes aimed at collective action toward socio-ecological change (i.e., youth–adult codesign of a community sustainability strategy) and how youth can best co-participate in these processes. The perspectives of these youth participants – although Canadian – provide an important platform from which to provoke pedagogical conversation globally, enabling us as teachers, school administrators, scholars, and teacher educators to see environmental action learning differently and to become potentially “unstuck.”

The currency of youth is their energy, innovative thinking, and inherent ability to see more relationally (Corcoran and Osano 2009). So, it is valuable to examine what solutions youth are already practicing or, at the very least, what information they might possess that can help us rethink and/or redesign EE praxis. Furthermore, the learning conditions put forth by the participants in this study offer insights from a youth perspective that might prove useful in engaging the traditionally disengaged youth – an important area requiring more research focus in the EE field.

### **6.3 Youth’s Perceptions of Agency and the Coexistence of Ego/Eco-centric Thinking**

An overwhelming majority of participating youth in the study (85%) interpreted the concept of “student agency” in relation to the idea of youth taking action toward positive personal and community change. In addition, 68% of youth are identified strongly as an eco-civic leader, although there existed a spectrum of interpretations as to what “eco-civic leadership” meant for them: one’s “passion,” one’s level of “involvement in initiatives” or “engagement in issues” or efforts to “educate others,” an overall “mindfulness of community needs,” etc. Finally, 70% of participants perceived a strong personal capacity to effect change, although largely through individual behaviors and actions. In sum, a central tendency visible in the data is the inclination of these youth to perceive the locus of change and action to reside within the individual. In other words, most of these youth identified individual, personal traits such as motivation, interests, and passions and one’s personal “actions” and “choices” as the vehicle for change. What does this first central finding – a widely

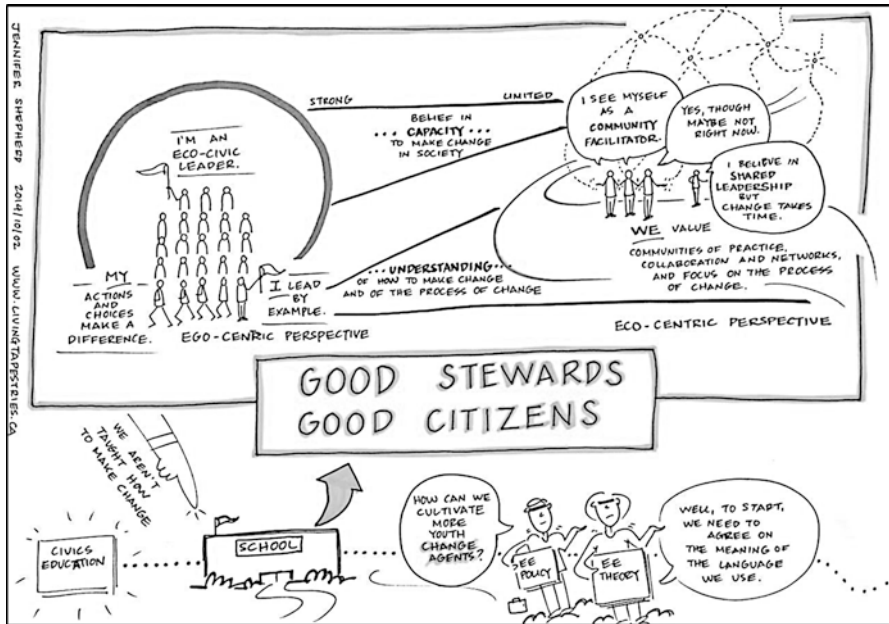
distributed egocentric perception of agency – mean? Three points worthy of discussion are raised next.

First, these youth perceived school-based learning experiences as limiting their (development of) capacity for collective action, since the education system is not designed (although it is often imagined) as a space to challenge and change the status quo. As put by one participant: “our educational system doesn’t empower students to take action; it’s an institutional structure that offers little guidance on how to carry a sustainability mindset into a future career and civic life.” In response, another two participants added: “there’s just so many more skills we need to help us, like getting the ability to be the change makers” and “we need to witness and experience the process of making change.” Schooling as a whole measures individual competency in a standardized body of knowledge and skills related to its application (Sterling 2009). In contrast, EE’s focus on cultivating good stewards aligns with the individualistic nature of present public education, as pointed out by the study participants. Such egocentric thinking has informed how EE is pedagogically perceived and reinforced in the classroom. As expressed by yet another participant: “it’s a shame how so much of my time outside of school, the institution that is supposed to prepare me for the world, doesn’t... students should be educated to become key role players in society as they are growing up and should have such an integrated role in change occurring within society.”

A second point of note is that the egocentric perception of student agency by these youths was, at times, accompanied by insights more reflective of eco-centric thinking. For instance, a relatively small number of youth (21%) perceived their capacity to effect change as “moderate” or even “limited.” As one participant observed: “it is my intrinsic motivation, passion, interests, and determination that make me an eco-civic leader.” She then went on to add: “the only way we’re going to create change is through building our communities and this community-based approach.” For youth like her, the importance of being a part of a community and feeling a relational sense of belonging “to something bigger than myself,” including the more-than-human world (i.e., eco-centric or more ecologically oriented thinking), seemed necessary to cultivating, or perhaps legitimizing, their perceived sense of eco-civic identity.

Although seemingly contradictory – and perhaps reflective of the inherent complexities of our human condition – these particular youths’ egocentric and eco-centric insights revealed a constructive coexistence; it was not a matter of either/or but rather that of and/both. For them, egocentric thinking is important as it serves as motivation, commitment, passion, and the idea that one’s actions are pertinent. As suggested by one participant: “a young person needs to have it [motivation, commitment, passion] inside them, to say ‘I’m going to do X’... this sense of wanting to achieve and succeed.” Eco-centric thinking, on the other hand, matters as it represents a more reflexive understanding of participatory and collective action toward broader socio-ecological change (i.e., collaborative team member of developing a community-based water management strategy).

Closer analysis of the demonstrable coexistences of both egocentric and eco-centric thinking revealed another interesting correlation (Fig. 6.1). The more these



**Fig. 6.1** Relationship between the individualistic lens (i.e., egocentric thinking) that was dominated among a large majority of participants in the study and the eco-centric lens that coexisted among a smaller subset. Visually represented is the striking correlation between a heightened understanding on how change is made (i.e., those few youth who spoke about “collaboration” and “communities of practice” [right side]) and their perceived “more limited” capacity to effect change (© Jennifer Shepherd)

youth perceived the locus of change and action to be in the collective sphere (i.e., what “we can do” as opposed to what “I can do”), the more limited their perception of the capacity to effect change. It seemed that a deeper understanding – or at least a heightened mindfulness – of the complexities of effecting broad social and systemic change has led these few self-identified as moderately to strongly eco-civic leader youths (9%) to hold a limited perceived capacity to make change. For example, one participant shared: “I am under no illusions about my own capacity; society is a massive, constantly evolving phenomenon with a huge amount of inertia... the approach that many people use is invasive and unsustainable.” Perhaps for these youths, experience trumped idealism.

The third and final point I want to make with regard to the youths’ perceptions of student agency is the argument that a critical gap seems to exist between how EE is widely practiced in schools with relation to active citizenship and how it is theorized in the EE literature. Generally speaking, mainstream EE practice in Canadian schools overemphasizes the individual as the locus of change and action through a narrow focus on fostering good stewards or engaging students in what I have dubbed “environmentally responsible stewarding” (Glithero 2015). However, as the emer-

gent trend around environmental action learning (Arnold et al. 2009) and active citizenship (Astbury et al. 2009) critically suggests, along with more recent work linking EE to research focused on sustainability, citizenship, and change-oriented learning (Wals and Jickling 2009), the development of pro-environmental behaviors and personally responsive stewards, although important, is no longer enough. What is crucial is that we cultivate an active citizenry of youth who understand processes and are capable of participating in broader social and systemic change.

If EE practitioners are to embrace what current, progressive EE theory is advocating, then our collective pedagogical understanding of the locus of change and action in environmental action learning – or (environmental) education for “active citizenship” – needs to broaden and encompass not only the individual but also the collective and social. As the youth in this study demonstrated through their responses, it is not a matter of either learning for environmentally responsible stewarding *or* learning the knowledge and skills to effect broader social change; both are needed. Currently, we as EE teachers are generally fixated on the former (Capra 2007), while we need to embrace a broader understanding of change and a deeper understanding of environmental action learning experiences and of learning conditions that support students in developing the necessary knowledge and skills to collectively effect change. We need to move environmental learning beyond individual behavior change (i.e., personal acts of stewardship) to include (a) collective and “strategic behavior change” in the public realm (Chawla and Flanders Cushing 2007, p. 437) and (b) a deeper learned understanding of, and capacity for, making change on a social level.

For the youth in this study, schooling-based learning experiences, although formative in developing their motivation and behavior with regard to individual action around stewardship, still have room to develop their perceived awareness of and capacity to effect broader collective and social change. For the majority of these youth, it was those learning experiences that took place in the community, either through self-initiated volunteer, internship, and/or collaborative project building experiences, that helped support and/or develop their perceived sense of agency and change-making capacity.

Several youths in this study (36%) expressed needing, actively seeking, and/or being in the process of experimentally co-creating “supportive spaces of learning,” something educational theorists might define as “communities of practice” (Wheatley 2005). Having identified such spaces as frustratingly void in public education, the youth found or built their own communities of practice. Examples include assuming a shared leadership role within a local food security and community resiliency building cooperative (<http://nourishingontario.ca/true-north/>); being a co-participant in a “living-learning community” focused on sustainability and social innovation (<https://uwaterloo.ca/stpauls/residence/future-residents/environment-living-learning-community>); co-founding a youth collaboration to address environmental, economic, and social challenges and opportunities in the Arctic (<https://www.facebook.com/YouthArcticCoalition/>); founding a community bike cooperative and building a network among other bike coops in the city (<http://santropolroulant.org/en/what-is-the-roulant/collectives/santrovelo/>); etc. In each

of these instances, it was outside the school walls where these youth sought and developed the desired knowledge of, skills for, and opportunity “to do” collective action through collaboration.

As social movement theory and history itself have taught us, youth make up their own social movements (Clarke and Dougherty 2010). These often aim at challenging and changing the status quo or the system(s) associated with it. In Canada, in the past few years, for example, several youth-led social movements can be identified, including (a) We Canada ([www.wecanada.org](http://www.wecanada.org)), (b) Powershift Canada ([www.wearepowershift.ca](http://www.wearepowershift.ca)), (c) Shannen’s Dream ([www.fncaringsociety.com/shannens-dream](http://www.fncaringsociety.com/shannens-dream)), and (d) Quebec students’ march of 2012. In each of these cases, youth championed an innovative idea and mobilized thousands of other youths (and non-youths) around this idea through alternative approaches to traditional modes of social change (Clarke and Dougherty 2010). Much of the literature on youth civic engagement, youth social entrepreneurship, and youth leadership in social movements and social change occur, almost exclusively, in the public sphere (Zimmerman 2007). Youth-led movements typically occur in the wider public sphere, beyond formal schooling, because the conditions that allow for innovative ideas, and the risk-taking and mistake-making essential to creatively operationalize such ideas, are not only present but also widely encouraged in these environments (Johnson 2003). Moreover, youth-led social movements that both raise awareness and have impact in the public sphere are rooted in collaboration, partnerships, networks, and shared leadership models (Gauthier 2003), elements that are not as common in our century-old, industrialized schooling model.

## 6.4 Learning Conditions Important in Developing Student Agency

Turning to the second part of this chapter, I discuss the learning conditions that these youth identified as critical in developing student agency in the context of eco-civic action learning. The youths’ insights on learning conditions focused predominantly on teacher praxis. A few insights also addressed broader schooling culture (e.g., shifting the perceived space of learning from classroom to community), as well as curricula more generally (e.g., developing certain skills like communication, presentation, and decision-making, among others). However, as discussed in the previous section, it was the learning experiences that they encountered when actively seeking to co-participate with peers and adults in community projects and processes aimed at broader social and environmental change (i.e., outside of the classroom) that best allowed them to put many of their insights into practice (i.e., communities of practice).

Specific to teacher praxis, the learning conditions that these youth collectively identified as formative shared several common features.

These included the need for teachers to (1) make learning (i.e., curricula) more “personal,” “relevant,” and “interdisciplinary”; (2) embrace a more project, experiential, inquiry, and

“action-oriented” approach to learning, one centered on students’ interests; (3) perceive learning as “outputting,” where experiences embedded in the local community enable students to apply their ideas, knowledge, and skills as active participants in real initiatives aimed at broader change; (4) value relationships, collaborative and participatory learning, and communities of practice; (5) serve as community connectors for youth and as models of active citizenship (i.e., to be more aware of opportunities and entry points for their students based on students’ respective interests); (6) recognize identified skills (e.g., communication, partnership building, consensus decision-making, etc.) as important learning outcomes alongside a demonstrated knowledge of the curricula; and finally (7) recognize the importance of youth–adult relationships in which both serve as co-participants in the learning and change-making process.

In the next part of this chapter, I specifically focus on two of these learning conditions put forth above: (1) the idea of “learning as outputting” and (2) the importance of youth–adult relationships in which both serve as co-participants. These two conditions, I suggest, effectively serve to illuminate a necessary shift in schooling’s approach to environmental action learning that may help us get “unstuck.” By focusing on learning processes aimed at collective action toward socio-ecological change (i.e., youth–adult codesign of a community sustainability strategy), the following discussion contributes to a much larger and existing argument in the literature on the reorientation of teacher education to which I will address in the concluding section.

### ***6.4.1 Learning as Outputting***

The youth participants clearly expressed a desire for learning to be about “doing,” to engage in the process of making change, and to have the “supportive framework,” “partnerships,” and/or “space” to implement “real initiatives that were actually happening out in the world...and not an exercise.” Perhaps more pivotal for educators, these youth contextualized this as part of what formal learning (schooling) should be. The metaphor of school as “inputting” versus “outputting,” put forth by Noah, a 20-year-old student, offers a useful perspective around which to shape further discussion of action-oriented learning:

Students don’t have to wait until they get out [of school] to start something... they are capable of making change when they are in school. My philosophy [on school] is that it is all about inputs... you getting knowledge, teachers are talking to you all the time, giving information to you but you are not outputting... you are not really contributing to anything to make a positive difference when you are in school. A lot of the times students feel that it is too much to do both at the same time and it does take time/skills but I do think young people are capable of outputting and making a difference while they are students. To create that vision a reality is it’s an institutional change how education system is currently versus how we envision it to be... we need people at a local level who can drive programs that aim to and are dedicated to making all those connections between school and community and finding the avenues where they [students] can actually do stuff.

Noah, quoted above, self-identified the current approach of schooling as “inputting” and perceived this approach as a central impediment to developing his/students’ capacity to engage in processes of effecting change in society – their agency. He



went on to articulate a need for a shift in schooling culture (including teacher praxis), toward providing more opportunities for learning as “outputting,” experiences that enable youth to participate in “real initiatives” in their communities and to authentically engage in the process of change. Noteworthy, Noah and other youth participants in the study appear aware on a very concrete level of what celebrated educational theorist Paulo Freire (1972) discussed much more abstractly with regard to the “banking model” of education – or the notion that the “scope of action allowed to the students extends only so far as receiving, filing, and storing the deposits” (p. 72).

In one illustrative example, Julie, age 18, identified the learning experience of building a community garden as “a powerful thing.” In comparing it to school-based learning experiences, Julie went on to say: “if I’m talking about like concrete changes that I want, then doing them locally is going to, for me, be a lot more powerful than like letter writing campaigns [in school] where the results are very theoretical and out there.” Beyond Noah and Julie, participating youth repeatedly identified community learning experiences that enabled them to embed themselves as participants in decision-making, policy-making, and project development initiatives that led to “meaningful” community-based change as their most formative learning experiences to date (e.g., “my civic–engagement work with Mississauga’s Environmental Advisory Committee taught me about politics, how to get things done on committees, and a chance to actually make change”). For many of these youth, there was a stark contrast between the kind of learning that they experienced through various community participation and leadership opportunities and the “kind of learning in a class.” Delving further into the 19-year-old youth’s experience quoted above as a member of a local environmental advisory committee, Ben shared:

Like it’s day and night between learning in a class and then – I think for a lot of people, if they [as a class] went to a meeting at city hall and realized, you know that in the format within which things are discussed the range of issues that get brought up, they would see that, that they have a chance to actually make change, or that it’s not as intimidating or difficult as they perceive, that would mean a lot more than just learning about different levels of government in class. Students need to witness the process of change.

We can glean from these participants’ stories the imperative that more of the depth and quality of learning that they experienced across various community-based learning experiences need to be incorporated into the kinds of environmental action learning that could/should take place as part of public education learning. Inextricably linked to this point is the need to shift the locus of learning from the classroom to the community, a key condition identified by the youths themselves.

### 6.4.2 *Youth–Adults as Co-participants*

Some exciting work has been done on youth–adult relationships both within formal educational research and within broader public discourses pertaining to youth. Much of this work builds on Roger Hart’s (1997) seminal “Ladder of Young People’s Participation.” Despite wide recognition and take-up of Hart’s model, the enduring challenge highlighted by the experiences of participants in this study was how to cultivate such effective youth–adult partnerships in the context of formal education. The majority of youth in this study who addressed youth–adult partnerships developed these (trans) formative relationships outside of their school-based learning experiences. For one 18-year-old youth, her experience at a community-based organization in which she took the lead on writing a benchmark report on sustainability in her region served as a prime example. This report had been identified as a strategic priority for the organization, yet no one had “the time to take it on.” Recognizing this, the youth in question, working as a volunteer, offered to take it up. Adult input was offered through subsequent team meetings, and the end result was a finished report that largely exemplified effective youth–adult partnership. In contemplating if such a partnership could take place within formal schooling, very few youth participants spoke about teachers giving them this kind of “freedom” and “support” or treating them as an “equally valued participant.”

For the few youth who did speak about teachers as “peers” or “co-participants,” what was common to the youths’ descriptions of those teachers was the degree to which the teachers were embedded in their communities as actively engaged citizens. In addition, the youths identified these particular teachers as having a perceived awareness of myriad local, regional, and/or national opportunities for youths with which the students could connect. It seemed the challenge(s) for this kind of youth–adult (student–teacher) partnerships in formal learning experiences is not only a matter of the “structured” nature of schooling as an institution as aptly pointed about by the work of CEYE noted above. It is also a challenge, according to these youth, of teacher capacity, teacher education, and teacher identity (Iverson and James 2013).

The perspectives of these youth participants, particularly, with regard to the two learning conditions discussed above – the notion of learning as “outputting” and the need for youth–adults to serve as co-participants in collective social action-oriented project learning in the public sphere – provide an important platform from which to provoke pedagogical conversation on the need for teachers and teacher educators to see and “do” environmental action learning differently.

## 6.5 Teachers as Civic Actors

There are many conceptions of teaching – instructing, guiding, facilitating, mentoring, and empowering, to name a few. In his book, *Inventions of Teaching: A Genealogy*, Brent Davis (2004) offers a genealogical tree of contemporary conceptions of teaching. In doing so, he puts forth the argument that teaching, through an ecological epistemic lens, suggests teaching as “conversing, a quality of interpersonal engagement that is all but ignored in the traditional, radically individuated classroom” (p. 177). As Davis asserts, this concept of teaching “point(s) more to teachers’ attitudes” than to teacher praxis, although I would argue that both are involved. Teaching through this lens directly resonates with, and builds upon, the related work of Nel Noddings’ (1984) “ethic of caring,” Max Van Manen’s (1991) “pedagogical thoughtfulness,” and Chet Bowers’ (2002) “eco–justice,” as Davis notes. He goes on to speak about teaching as “mindful participation” (p. 176) toward “expanding the space of the possible” (p. 179), drawing on Maxine Greene’s (1995) work on wide-awakeness – “an awareness of what it is to be in the world” (p. 35) and the importance of “teaching for openings” (p. 109).

The insights shared by the youth participants in this study overlap with and extend (empirically) the work of Davis and related scholars in suggesting the need for teachers and teacher educators invested in environmental action learning to rethink professional learning around understandings and modes of learning that focus on processes aimed at collective action toward socio-ecological change (i.e., youth–adult codesign of a community sustainability strategy). This re-/orientation is a critically important condition for learning that is specifically aimed at youth engagement and student agency development. Part of the necessary reorienting work is about shifting teacher attitudes, as pointed out by Davis, to be “mindful in, being conscious of, being the consciousness of – the collective” (p.178). Another part of this work is about educating teachers on the value of becoming more aware and active participants in the communities in which they teach and live.

Although research has been done recently on “self-authoring a civic identity” (e.g., Iverson and James 2013), its focus has been on students and less so on teachers and teacher educators. More broadly still, this reorienting work is a cultural capacity-building effort, aimed at developing awareness of teaching and learning (and schooling) as an experiential and emergent process that takes place in community – as opposed to a standardized learning institution. This type of learning has to do with active, risk-taking participatory action (Reid et al. 2008). Small glimpses of this reorientation appeared within existing systems I examined, including the Ministry of Ontario’s (Canada) “SpeakUp” and “Students as Researchers: Collaborative Inquiry Action Research” (i.e., [www.edu.gov.on.ca/eng/students/speakup](http://www.edu.gov.on.ca/eng/students/speakup)). However, to understand fully how far this reorientation has progressed and how to aid it, further more research is needed on learning experiences where students and teachers co-participate in action/change-oriented learning, as well as administrative support for such pedagogical experimentation (Reis and Guimaraes-losif 2012).

We need to orient EE practice, based on a wider understanding and adoption of promising learning processes emerging from such fields as social and participatory action learning and critical socio-ecological perspectives and from other works related to eco-civic action learning frameworks. Considering that “deep sustainability requires deep participation” (Wals and Jickling 2009), youths becoming young adults capable of participating as critical, democratic, political, social justice, ecological, and change-oriented citizens represent the learning endgame of educating for student agency.

## Questions

Discussion questions that could help instructors and students to engage in meaningful conversation about the ideas presented in this chapter.

1. Name and discuss possible modes of learning that focus on processes aimed at collective action towards socioecological change.
2. To what extent do teachers need (or not) to be community activists in order to support the development of agency in their students?
3. How does teacher education need to shift in order to better support the development of student agency?

## References

- Arnold, H., Cohen, F., & Warner, A. (2009). Youth and environmental action: Perspectives of young environmental leaders on their formative influences. *The Journal of Environmental Education*, 40(3), 27–36.
- Astbury, J., Huddart, S., & Theoret, P. (2009). Making the path as we walk it: Changing context and strategy on Green Street. *Canadian Journal of Environmental Education*, 14(1), 136–148.
- Bowers, C. (2002). Toward an eco-justice pedagogy. *Environmental Education Research*, 8(1), 21–34.
- Capra, F. (2007). Foreword. In A. Wals (Ed.), *Social learning towards a sustainable world: Principles, perspectives, and praxis* (pp. 13–15). Wageningen: Wageningen Academic Publishers.
- Chawla, L., & Flanders Cushing, D. (2007). Education for strategic environmental behaviour. *Environmental Education Research*, 13(4), 437–452.
- Clarke, A., & Dougherty, I. (2010). Youth-led social entrepreneurship: Enabling social change. *International Review of Entrepreneurship*, 8(2), 1–23.
- Corcoran, P. B., & Osano, P. (Eds.). (2009). *Young people, education, and sustainable development: Exploring principles, perspectives, and praxis*. Wageningen: Wageningen Academic Publishers.
- Davis, B. (2004). *Inventions of teaching: A genealogy*. Mahwah: Lawrence Erlbaum Associates.
- Freire, P. (1972). *Pedagogy of the oppressed*. Harmondsworth: Penguin.
- Gauthier, M. (2003). The inadequacy of concepts: The rise of youth interest in civic participation in Quebec. *Journal of Youth Studies*, 6(3), 265–276.
- Glithero, L. (2015). *Exploring the development of student agency from the perspectives of young eco-civic leaders*. Retrieved from [https://www.ruor.uottawa.ca/bitstream/10393/32335/1/Glithero\\_Elizabeth\\_2015\\_thesis.pdf](https://www.ruor.uottawa.ca/bitstream/10393/32335/1/Glithero_Elizabeth_2015_thesis.pdf)
- Greene, M. (1995). *Releasing the imagination: Essays on education, the arts, and social change*. San Francisco: Jossey-Bass.

- Hart, R. (1997). *Children's participation, the theory and practice of involving young citizens in community development and environmental care*. London: Earthscan Publications.
- Iverson, S. V., & James, J. H. (2013). Self-authoring a civic identity: A quantitative analysis of change-oriented service learning. *Journal of Student Affairs Research and Practice*, 50(1), 88–105.
- Johnson, S. (2003). *Young social entrepreneurs in Canada*. Edmonton: Canadian Centre for Social Entrepreneurship.
- Kozak, S., & Elliott, S. (2014). *Connecting the dots: Key learning strategies for environmental education, citizenship, and sustainability*. Toronto: Learning for a Sustainable Future.
- Noddings, N. (1984). *Caring: A feminine approach to ethics and moral education*. Berkeley: University of California Press.
- Ontario Ministry of Education. (2009). *Acting today, shaping tomorrow*. Toronto: Queen's Printer for Ontario.
- Reid, A., Jensen, B., Nikel, J., & Simovska, N. (2008). Participation and learning: Developing perspectives on education and the environment, health and sustainability. In A. Reid, B. Jensen, J. Nikel, & N. Simovska (Eds.), *Participation and learning: Perspectives on education and the environment, health and sustainability* (pp. 1–18). Dordrecht: Springer.
- Reis, G., & Guimaraes-losif, R. (2012). The death and life of a school-based environmental education and communication program in Brazil: Rethinking educational leadership and ecological learning. *Applied Environmental Education & Communication*, 11(3–4), 123–132.
- Schnack, K. (2000). Action competence as a curriculum perspective. In B. B. Jensen, K. Schnack, & V. Simovska (Eds.), *Critical environmental and health education: Research issues and challenges* (pp. 107–126). Copenhagen: The Research Centre for Environmental and Health Education, The Danish University of Education.
- Schusler, T., & Krasny, M. (2010). Environmental action as context for youth development. *The Journal of Environmental Education*, 41(4), 208–223.
- Sterling, S. (2009). Ecological intelligence: Viewing the world relationally. In A. Stibbe (Ed.), *The handbook of sustainability literacy: Skills for a changing world* (pp. 77–83). Devon: Green Books.
- Van Manen, M. (1991). *The tact of teaching: The meaning of pedagogical thoughtfulness*. London: Althouse.
- Wals, A., & Jickling, B. (2009). A framework for young people's participation in sustainability. In P. B. Corcoran & P. Osano (Eds.), *Young people, education, and sustainable development: Exploring principles, perspectives, and praxis* (pp. 77–84). Wageningen: Wageningen Academic Publishers.
- Westheimer, J. (2008). What kind of citizen? Democratic dialogues in education. *Canadian Education Association*, 48(3), 6–10.
- Wheatley, M. (2005). *Finding our way: Leadership for an uncertain time*. San Francisco: Berrett-Koehler Publishers.
- Zimmerman, K. (2007). Making space, making change: Models for youth-led social change organizations. *Children, Youth and Environments*, 17(2), 298–314.