Spectrum of Climate Justice Education – Curricular Metasynthesis v2.1

Marna Hauk — EE Capacity, Prescott, & Institute for Earth Regenerative Studies – Portland, Oregon (2015)

Rationale & Introduction

This instrument offers a three-tier spectrum to assess depth



of implementation of climate justice and transformation approaches in curricula and projects. It can help programs avoid "greenwashing" and instead move more deeply towards social transformation,

community-based action, justice, and adaptation.

Development

This tool was developed through focused meta-synthesis of thirty sources in environmental justice, climate justice education, climate resilience theory, and climate change ethics. It was vetted at NAAEE 2014 and via a Cornell University/EE Capacity "Measuring Environmental Outcomes" course. It has subsequently been improved based on comparative case application, to both (1) a doctoral climate change education course; and (2) an innovative, community-based climate resilience incubator.

SPECTRUM, NODE 1: ADAPTATION

Not focused on transforming current power structures or changing paradigms
Strives to maintain or return to status quo and sees current state as normative
Tends to be more static, deterministic, and hierarchical pedagogically
Oriented to risk, control, management, rights
Sees oppressed (and learners) as something to be managed or a problem to be solved or dealt with

- ✓ "Rights" and "equality"/equal access orientation
- ✓ Public policy based on mutual respect and justice for all peoples, free from any form of discrimination or bias (EJP 2)
- ✓ Right to ethical, balanced, and responsible uses of land and renewable resources in the interest of a sustainable planet for humans and other living things (EJP 3)
- ✓ Right to participate as equal partners at every level of decision making including needs assessment, planning, implementation, enforcement (EJP 7)
- ✓ Consume as little of Mother Earth's resources and to produce as little waste as possible (EJP 17)

- ✓ Common and differentiated responsibility (Kjellen in Adger, 2006, viii)
- ✓ Rights to manage includes responsibilities to prevent harm and protect rights of people (EC-P-2a)
- ✓ Moving towards adaptation: Leverages diversity, decentralization, adaptation (including accepting uncertainty and change); enhances equity; connective and cooperative; understands there is no stable state, promotes continuous cycles of learning (Bahadur, Ibrahim, & Tanner, 2010)
- ✓ The focus on presenting symptoms of carbon release and building that characterizes current climate change discourse and education and the concomitant fixation on ameliorative technologies that more or less leave business as usual (Kagawa & Selby, 2009, CCE-1)
- ✓ Continue epistemologically under-dimensioned learning confined to rational, linear, analytical, classificatory, and mechanistic ways of knowing and seeking to effect change (seen a tantamount to applying disease as a remedy) (CCE-5, Kagawa & Selby, 2009, p. 242)

SPECTRUM, NODE 2: TRANSITION

Moves towards transformation but still oriented around current structures of domination and control

Might not focus on multiple scales (personal, social, structural, etc.)

Begins to connect ecological and social dimensions, with nascent movement towards interrelation and transformation of systems Pedagogical methods begin to diversify

- ✓ Affirms the fundamental right to political, economic, cultural and environmental self-determination of all peoples (EJP 5)
- ✓ Opposes the destructive operations of multinational corporations (EJP 14)
- ✓ Opposes military occupation, repression, and exploitation of lands, peoples, cultures, and other life forms (EJP 15)
- ✓ Protects the rights of victims of environmental injustice to receive full compensation and reparations for damages (EJP 9)
- ✓ Make conscious decisions to challenge and reprioritize our lifestyles to insure the health of the natural world for present and future generations (EJP 17)
- ✓ Amplifies or clarifies the connection between environment and social justice [and labor] and to emphasize the idea that these concepts are inseparable (Taylor, 2014, p. 566)
- ✓ Care for the community of life with understanding, compassion, and love (EC-P-2)

- ✓ Increased freedom, knowledge, and power brings increased responsibility to promote the common good (EC-P-2b)
- ✓ Build democratic societies that are just, participatory, sustainable, and peaceful (guarantee rights and freedoms, access to realize potential, secure and meaningful livelihood, social and economic justice (Earth Charter, 3)
- ✓ Engage with virtue, situational, and existential ethics (Crowell, 2013, p. 105)
- ✓ Climate Change Education must bridge scientific research to be widely understood and help learners apply cultural, social, economic, ethical, political, and spiritual intelligences to understandings of causes, implications, and proposed ways forward (Kagawa & Selby, CCE-2, p. 241)
- ✓ Reclaim nonscientific, indigenous knowledges (Kagawa & Selby, CCE-2, p. 241)
- ✓ Explore local ways to mitigate and live with climate change, to understand how to live lightly and locally, to engage in local community development, and to reflect on what is precious in local nature and culture that may well be lost (CCE-4, Kagawa & Selby, 2009, p. 242)
- ✓ Build capacity, develop networks for knowledge and learning; scale up (Brown, Diyal & Del Rio (2012)
- ✓ Civic ecology practices and related environmental education programs may foster resilience in urban social-ecological systems, through enhancing biological diversity and ecosystem services, and through incorporating diverse forms of knowledge and participatory processes in resource management. (Krasny & Tidball, 2009, p. 465)
- ✓ Community-based environmental education change includes personal sense of achievement and empowerment and a generative cycle of creating health environments leading to creating healthy communities (Price, Simmons, & Krasny, 2014, p. 6)
- ✓ Mitigation and adaptation responses that are socially transformative and not just technical. CCE should harness creativity and be empowering. (Lotz-Sisitka, 2009, p. 73)
- ✓ Use an inquiry-based and dialogue-centered approach rather than a didactic, content specific orientation. (Downey & CCE POLCA, 2013)
- ✓ CCE can be emancipatory and deepen critical engagement: Cultural-historical approaches, reflexive engagement with contradictions and tensions have more to offer the field of environmental education than awareness raising and behavior change because they are agency-centered with the potential to enhance capabilities and social change, value engagement with conflict and contradictions, and are more pluralist and open-ended, with material benefits for those living in poverty, assisting with the emergence of innovative adaptation practices. (Lotz-Sisitka, 2009, p. 73)
- ✓ "Protection" and "vulnerability" language (see Shue, 2014)

SPECTRUM, NODE 3: TRANSFORMATION

Justice orientation

Systems thinking deeply integrated, including accepting change

Embeds Environmental Justice Principles and Earth Charter

Radical transformation of current structures, power, and paradigms

Oriented towards change and action Nurtures community and learner strengths and meaning

- ✓ Sacredness of Mother Earth (EJP 1); Ecological unity and interdependence of all species (EJP 1; Earth Charter 1a)
- ✓ The right to be free from ecological destruction (EJP 1)
- ✓ Special recognition of Native Peoples affirming sovereignty and self-determination (EJP 11)
- ✓ Clean up and rebuild our cities and rural areas in balance with nature, honoring the cultural integrity of all our communities, and providing fair access for all to the full range of resources (EJP 12)
- ✓ Calls for the education of present and future generations which emphasizes social and environmental issues, based on our experience and an appreciation of our diverse cultural perspectives (EJP 16)
- ✓ Undermine traditional silos Transdisciplinary dialogues and "trading zones" approaches (Krasny et al, 2009, 2011)
- ✓ Adapt WITH climate change (Pelling, 2011, p. 164) Adapting with sees climate change as internal (a product of humanity's values, decisions and actions), but also its coevolution with the environment, so that neither environmental nor social change is independent
- ✓ Connect to the process of inquiry, personally meaningful, springboard for action, cooperative and creative (Crowell, 2013, p, 97)
- ✓ Actively transforms military to peace and ecology forces (Earth Charter 16; EJP)
- ✓ Secure Earth's bounty and beauty for present and future generations (transmit to future generations values, traditions, and institutions that support long-term flourishing) (Earth Charter 4)
- ✓ Climate change education should address root causes, including to unpack and critique the currently hegemonic economic model and social order and how it puts the world at risk (Kagawa & Selby, 2009, CCE Agenda 1)
- ✓ A lived paradigm shift; a radical departure, take interesting leaps into the dark (Kagawa & Selby, 2009, CCE Intro, p. 241)
- ✓ Education has a role in challenging and rolling back climate change injustice (Kagawa & Selby, 2009, CCE-3, p. 242)

- ✓ The North's enclosure of the 'atmospheric commons' and position as 'atmospheric debtor' must be exposed (Kagawa & Selby, CCE-3, p. 242)
- ✓ CCE must animate a worldwide participatory dialog that elicits and weaves together the best of indigenous, mundane, and scientific insights about what we value and how best to live, valuing earth-connectedness, earth concern, social justice and inclusiveness, peace and human rights, health and well-being. (CCE-4, Kagawa & Selby, p. 242)
- ✓ Voices from the grassroots; the importance of community voice (Schlosberg & Collins, 2014); Utilizes frames of community self-empowerment
- ✓ Just adaptation, investing in local communities
- ✓ Actively invests at intersections of race, poverty, and preexisting environmental risks to restructure so urban centers of color become adaptation/green zones of sustainable development proactively funded (Burkett, 2008)
- ✓ Climate Change Education should emphasize social and holistic learning processes rather than formal; flexible learning and emergent curriculum approaches that embed climate change learning and action within community contexts (CCE-5, Kagawa & Selby, 2009, p. 242; echoed in Crowell, 2013)
- ✓ All-aged learning linked to local arenas and channels of participatory democracy and directed towards effective responsive change locally (CCE-5, Kagawa & Selby, 2009, p. 242)
- ✓ Need for complementary and recursive use of artistic, embodied, experiential, symbolic, spiritual, and relational learning, especially in the vital task of reconnecting learners to the earth while enabling them to discover their (connected) identity and realize their full potential (CCE-5, Kagawa & Selby, 2009, pp. 242-243)
- ✓ Break through cultures of denial, invisibility, and uncertainty; build a culture of learning in which uncertainty provokes transformative yet precautionary commitment rather than paralysis (CCE-6, Kagawa & Selby, 2009, p. 243)
- ✓ Embrace the discomfort of being/ feeling vulnerable. (Price, Simmons, & Krasny, 2014)
- ✓ Community EE requires trust, connecting with others and the willingness to adapt your original goals into goals you develop collectively with partners. (Price, Simmons, & Krasny, 2014, p. 6)
- ✓ Affirms inherent dignity of all human beings and in the intellectual, artistic, ethical, and spiritual potential of humanity (Earth Charter 1b)

Usage

Suggested usage includes multiple reviewers selecting statements that characterize the curriculum or project to develop an overall assessment and placement on the spectrum. The spectrum can also be used proactively by program and project designers to include more transformational elements within their climate change projects and curricula.

Vibrant Practices & Dimensions – Climate Change Education for Justice and Resilience

- ✓ Social & Holistic: Social and holistic learning processes rather than formal; flexible learning and emergent curriculum approaches that embed climate change learning and action within community contexts (CCE-5, Kagawa & Selby, 2009, p. 242; Crowell, 2013)
- ✓ All-Age & Project-Based Learning
- ✓ Transdisciplinary Approaches (Krasny & Dillon, 2013): Climate change education must happen within interdisciplinary and multidisciplinary frames (Kagawa & Selby, 2009, CCE-2)
- ✓ Multiscale Thinking and Dimensions; Cross-Boundary and Cross-Temporal Dimensions (Gardiner, 2006; Crowell, 2013)
- ✓ Systems Thinking (Downey/EE Capacity, 2013; many)
- ✓ Collaborative, Creative, Artistic, Ethical, Visionary, & Transformative
- ✓ Social Learning: Requires socioecological dimensions and thinking and catalyzes community action (Pelling, 2011; Krasny et al)
- Meaningful and Multiperspectival:
 Dynamically revisited from multiple perspectives and personally meaningful and important content (Crowell, 2013, p. 89)
- ✓ Glocal: Locally empowered and relevant (many); Must include global dimensions (Kagawa & Selby, CCE-3, p. 242)
- ✓ Embodied & Empowered: Catalyzes Justice, Empowerment, Community-Based Learning and Power Shifts

References Summary

Spectrum synthesis quoted and adapted from Adger (2006), Agyeman, Bullard, & Evans (2003), Bahadur, Ibrahim, & Tanner (2010), Bigelow & Swinehart (2014), Brown, Dyal, & Del Rio (2012), Burkett (2008), Clugston, Calder, & Corcoran (2002), Crowell (2013), Downey et al/EE Capacity (2013), Earth Charter (EC, 2000), Environmental Justice Principles (EJP, 1991), Gardiner et al (2010), Holifield, Porter, & Walker (2009), Krasny & Dillon (2013), Krasny & Tidball (2009), Lotz-Sisitka (2009), Pelling (2011), Price, Simmons, & Krasny (2014), Schlosberg & Collins (2014), Selby & Kagawa (2009), Shue (2014), Slaby et al (2007), Taylor (2000), Tidball & Krasny (2011), and others. See detailed citation list with references for items used in meta-synthesis.

Metasynthesis Methods References

Saldaña, Johnny. (2013). *The coding manual for qualitative researchers* (2nd ed.). Thousand Oaks, CA: Sage Publications.

Thorne, S., Jensen, L., Kearney, M. H., Noblit, G, & Sandelowski, M. (2004). Qualitative metasynthesis: Reflections on methodological orientation and ideological agenda. *Qualitative Health Research*, *13* (X), pp. 1-24.

Contact

Marna Hauk, Ph.D.
Climate Change Fellow, EE Capacity
Postdoctorate, Prescott College &
Faculty, The Institute for Earth Regenerative
Studies
earthregenerative@gmail.com
www.earthregenerative.org/wecan/

Climate Justice Metasynthesis References

- Adger, Neil (Ed.). (2006). Fairness in adaptation to climate change. Cambridge, MA: MIT.
- Bahadur, Aditya V., Ibrahim, Maggie, & Tanner, Thomas. (2010). The resilience renaissance?: Unpacking of resilience for tackling climate change disaster.

 Strengthening Climate Resilience Discussion Paper 1. Sussex, UK: Institute of Development Studies.
- Bigelow, Bill, & Swinehart, Tim (Ed.). (2014). *A people's curriculum for the Earth: Teaching climate change and the environmental crisis*. Milwaukee, WI: Rethinking Schools.
- Brown, Anna, Dayal, Ashvin, & del Rio, Cristina Rumbaitis. (2012). From practice to theory: Emerging lessons from Asia for building urban climate change resilience. *Environment & Urbanization*, *24* (2), 531–556. doi: 10.1177/0956247812456490.

- Burkett, Maxine. (2008). Just solutions to climate change: A climate justice proposal for a domestic clean development mechanism. *Buffalo Law Review*, 56, 169-244.
- Clugston, Richard M., Calder, Wynn, & Corcoran, Peter B. (2002). Teaching sustainability with the Earth Charter. In Walter Leal Filho (Ed.), *Teaching sustainability at universities: Towards curriculum greening*. New York, NY: Peter Lang.
- Crowell, Sam. (2013). Teaching what really matters. In author & David Reid-Marr, *Emergent teaching: A path of creativity, significance, and transformation* (pp. 89-107). Lanham, MA: Rowman & Littlefield Education.
- Dow, Kristin, Kasperson, Roger E., & Bohn, Maria. (2006). Exploring the social justice implications of adaptation and vulnerability. In Neil Adger (Ed.), *Fairness in adaptation to climate change* (pp. 79 +). Cambridge, MA: MIT Press.
- Downey, L., Gentile, S. J., Hollweg, K.S., Hubbard-Sánchez, J., Johnson, C., Kumler, L., LaRocque, L., Poppleton, K., Shiflett-Fitton, D., Shuttleworth, J. [Community Climate Change POLCA] (Eds.). (2013). Advancing Climate Change Environmental Education: Resources and Suggestions. Ithaca, NY: EECapacity, Cornell University Civic Ecology Lab, and North American Association for Environmental Education. Retrieved from: http://www.eecapacity.net/climate-change-ee-project-based-online-learning-community-alliance.html
- Earth Charter Commission (2000). The Earth charter. Available online at http://www.earthcharterinaction.org/content/pages/Re ad-the-Charter.html
- Gardiner, Stephen, Caney, Simon, Jamieson, Dale, & Shue, Henry. (2010). *Climate ethics: Essential readings*. New York, NY: Oxford University Press.
- Gardiner, Stephen. (2006). A perfect moral storm: Climate change, intergenerational ethics and the problem of moral corruption. *Environmental Values*, *15*, 397–413
- Kagawa, Fumiyo, & Selby, David. (2009). Climate change education: A critical agenda for interesting times. In Authors (Eds.), Education and climate change: Living and learning in interesting times (pp. 241-243). Florence, KY: Routledge, 2009.
- Krasny, M.E. and K.G. Tidball (2009). Applying a resilience systems framework to urban environmental education. Environmental Education Research 15:465-482.
- Krasny, Marianne E. & Dillon, Justin (Eds.). (2013). Trading zones in environmental education: Creating transdisciplinary dialogue. New York, NY: Peter Lang.
- Leach, Melissa, Scoones, Ian, & Stirling, Andy. (2010). Dynamic sustainabilities: Technology, environment, social justice. New York: Earthscan.

- Lotz-Sisitka, Heila. (2009). Climate injustice: How should education respond? In David R. Selby Fumiyo Kagawa (Eds.), *Education and climate change: Living and learning in interesting times* (pp. 72-88). Florence, KY: Routledge.
- Macdonald, Amie A. & Sánchez-Casal, Susan. (2002). Twenty-first century feminist classrooms: Pedagogies of identity and difference. New York: Palgrave-Macmillan.
- Mobilization for climate justice. Retrieved from http://www.actforclimatejustice.org/about/what-isclimate-justice/
- Mohanty, Chandra Talpade. (2003). Feminism without borders: Decolonizing theory, practicing solidarity. Durham, NC: Duke.
- Pelling, Michael. (2011). Adaptation to climate change: From resilience to transformation. New York: Routledge.
- Price, Akiima, Simmons, Bora, & Krasny, Marianne. (2014). Community environmental education guidelines (Version 2014). EE Capacity.
- Principles of Environmental Justice. (1991). Retrieved from http://www.ejnet.org/ej/principles.html
- Roberts, Debra. (2003). Sustainability and equity. In Julian Agyeman, Robert D. Bullard, & Bob Evans, *Just sustainabilities* (pp. 187-200). Cambridge, MA: MIT Press.
- Schlosberg, David & Collins, Lisette B. (2014). From environmental to climate justice: Climate change and the discourse of environmental justice. *WIREs: Climate Change*, *5* (3), 359-374.
- Selby, David & Kagawa, Fumiyo (Eds.). (2009). Education and climate change: Living and learning in interesting times. Florence, KY: Routledge, 2009.
- Shue, Henry. (2014). *Climate justice: Protection and vulnerability*. New York: Oxford UP.
- Sterling, Stephen. (2007). Riding the storm: Towards a connective cultural consciousness. In Arjen E. J. Wals (Ed.), Social learning towards a sustainable world: Principles, perspectives, and praxis (pp. 63-82). The Netherlands: Wageningen Academic.
- Taylor, Dorceta E. (2000). The rise of the environmental justice paradigm: Injustice framing and the social construction of environmental discourses. *American Behavioral Scientist*, 43(4), 508-580.
- Tidball, Keith G. & Krasny, Marianne E. (2011). Toward an ecology of environmental education and learning. *Ecosphere, 2*(2), Retrieved from http://www.esajournals.org/doi/pdf/10.1890/ES10-00153.1
- UN Economic Commission. (2009). Gender and climate change: Women matter [Report].