Developing Critical Hope: A Necessary Component for an Environmentally Conscious Workforce

By Alyssa Gandolph and Isabella Capeci

Executive Summary

As the workforce adapts to the new demands that climate change imposes, critical hope is necessary for workers in all types of sustainable jobs. Critical hope, or hope that is constructive and grounded in the severity of the climate crisis, is a disposition that can be cultivated through various emotional, cognitive, and behavioral processes. This article defines critical hope, makes a case for its importance in workforce development, and points to some key processes that help cultivate the disposition.

What Is the Future of Sustainable Jobs?

As pressures mount to adapt and mitigate against climate change, so does the demand for a greener economy (Scully-Russ, 2013). The United Nations set out 17 Sustainable Development Goals, highlighting the need for affordable and clean energy, sustainable cities and communities, and taking action to combat climate change (United Nations, 2022). Some cities like New York, Toronto, and Vancouver rose to the occasion and set high decarbonization goals (Linton et al., 2022). Consistent with increasing regulations, jobs related to conservation and helping the environment are expected to grow from 2020 to 2030 (U.S. Bureau of Labor Statistics, 2022). Heightened demand for green jobs raises the question of what kinds of skills are needed for these jobs and how to prepare the future workforce to succeed.

Which Skills Are in Demand for Green Jobs?

On top of basic academic skills, workplace readiness skills, and traditional job-specific credentials, green job-specific skills are necessary (Cleary & Kopicki, 2009). These green job-specific skills tend to be stressed towards the development of broad knowledge in sustainability, green technology, and processes.

However, narrow specialization in a green job skill will not be enough to keep up with the rapidly changing credentials of the green market (Grotzer et al., 2021). Adaptive expertise, or "an ability to think flexibly, adapt to varied contexts, and to gain new understandings" (p. 1) is essential for workers to navigate changes in workforce needs. While adaptive expertise is crucial for workforce development in all sectors, the green job market will require additional environmental-specific dispositions outside of process and technology skills. One of these

essential, yet under-considered, dispositions is hope. Hope is more of a disposition than a skill because cultivating hope involves cultivating attitudes and changing thought patterns.

What is critical hope? And why is it a disposition worth cultivating?

Critical hope lies at the intersection of constructive hope and critical thinking. Maria Ojala is a leading scholar on critical hope. Drawing from thinkers like Freire, she has developed a concept of critical hope by identifying which aspects of hope are most generative for education for sustainable development (ESD).

Critical hope is*:*

> *"an acknowledgement and critical understanding of the current situation; in a realization that something is missing…Hope is stimulated by a vision of what the present needs to be, and can be, changed and that there is a promise of a future which is 'Not-Yet'" (Ojala, 2016).*

We propose an addition to this definition that hope must be constructive and not based on denial. We add that hope must also be based on an openness to new ideas and reflective skepticism.

Three Required Components of Critical Hope

1. Hope is constructive.

Coping with the climate crisis by restructuring threats with positive perceptions about ability to face difficult decisions, trust in collective action and trust in the average person's effort are facets of constructive hope. High levels of constructive hope explain one piece of why someone might behave in an environmentally conscious way.

2. Hope is not built upon denial.

Hope is correlated with pro-environmental behavior unless it overlooks or denies the severity of the problem (Ojala, 2012). If, for example, one's hope stems from a feeling that things will "just work out," there are negative correlations with pro-environmental behavior.

3. Hope is based on critical engagement.

For hope to be meaningful, it should be coupled with an understanding of, and reflection on, the state of the world. Two elements of critical thinking are especially pertinent: openness to new ideas and reflective skepticism (Sosu, 2013). While skepticism is important, critical openness allows for a hope that new solutions will be effective.

Why is hope so important to the green job workforce development?

1. **Hope can decrease turnover.** Workforce development aims to address the needs of both workers and employers (Zabin, 2020). For workers, they can gain skills and advance in their careers. For employers, the training increases the quality and productivity of work. However, in some fields there is a mismatch in this relationship where workers are not enjoying the benefits of their chosen careers and leave at higher rates. Although there are a number of ways to increase retention such as increasing wages or offering one-time bonuses, promoting hope and meaning-finding in work may be an intangible benefit that lowers turnover.
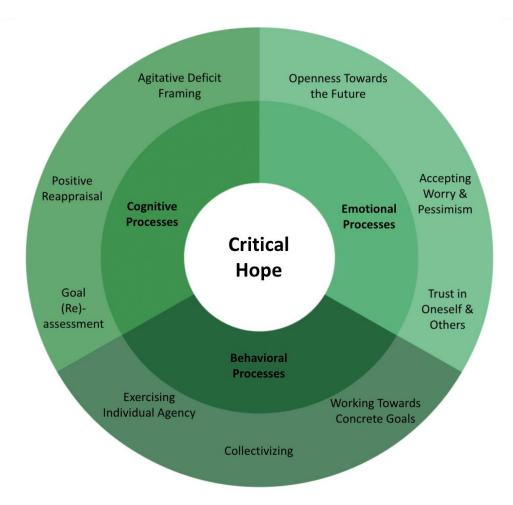
   For example, in the construction sector, workers' retention is impacted by anticipated factors such as "experience in construction" and less predictable factors like morale (Vidakovic et al., 2020). Another predictor, awe – or an emotion facilitating learning and drive towards work that is larger than the self – is noted as a motivating emotion (Cuzzolino, 2021). In turn, paying heed to more cognitive, dispositional pieces of the workplace, like moral cultivation, may lessen turnover. We also must account for the characteristics of the future generation moving into green jobs. Indeed, evidence suggests negative mental health impacts among youth such as depression and eco-anxiety in response to awareness of climate change (Leger-Goodes et al., 2022). In promoting critical hope among future green jobs workers, employers may be able to increase morale and meaning-finding in work, thereby reducing turnover.

2. **Cultivating hope is a skill that cannot be replaced by automation.** With the rise of job automation and AI and machine learning, a lot of repetitive physical work is being replaced with technology (Chui et al., 2016). However, hope is not a disposition that can be internalized by automation. The ability to envision a better future, innovate, and design new solutions is not only cultivated by critical hope, but will be ever-appreciating skills in an automating society.

3. **Communities most in need may have greatest potential gains from hope-inspired workforce development.** Vulnerable communities may be especially impacted by climate change. For example, one study examining recovery after Hurricane Katrina saw that long-term psychological harm and PTSD were higher for those who had coexisting depression, were low-income, had a history of abuse, or had experienced other negative life events (Benevolenza & DeRigne, 2019). For individuals doubly struck by climate change combined with other challenges, it may be even more necessary to inspire hope. These demographics may not have the resources to leave areas most negatively impacted by climate change and will comprise the remaining workforce. In turn, constructive hope will a) allow individuals to come up with creative solutions to climate change problems most pressing to their region

and b) aid in developing coping skills for long-term psychological harms potentially impeding their ability to reach their full potential in the workforce.

Which skills and processes cultivate critical hope?

Cultivating critical hope requires a combination of cognitive, emotional, and behavioral processes. These processes were developed by working backwards from the dispositions that Ojala cites as markers of critical hope.

Critical hope consists of cognitive processes that require us to change our thought patterns. **Goal (re)assessment** involves locating oneself in the problem – accepting that one person cannot reverse climate change, but that they can contribute meaningfully in some way. Goal reassessment is largely a process of configuring our role in changemaking. **Positive reappraisal** involves looking for benefits or silver linings to increase positive affect to motivate us to address the climate crisis. For example, climate change will demand us to be in community, which is a benefit for many of us who dislike how atomized our society is. **Agitative deficit framing** means

framing things in terms of what is missing to inspire action – this is what distinguishes critical hope from other types of hope.

There is also a major emotional component to cultivating critical hope. For example, we must cultivate **openness towards the future** as a way of embracing uncertainty, rather than accepting blind optimism. This is an important feature of critical hope, since pessimism and cynicism are rooted in certainty of negative outcomes. **Accepting worry and pessimism** means making room for the negative emotions that are often inevitable when facing the climate crises, such as eco-grief and fear. Developing **trust in oneself and others** means trusting that others are taking action. This trust can be developed by exposing oneself to that action firsthand through activist circles or effective policymaking. Developing trust in external actors is a fluid process because without believing others are working to solve the climate crisis, we may be demotivated to address the problem, but it is equally demotivating to assume that external actors will handle it.

Critical hope must also be actionable. To foster a sense of critical hope, we must do what we can by **exercising agency** in our green behaviors. Whether recycling or taking public transit regularly, exercising agency allows us to contribute positively towards climate mitigation and to get into the practice of de-centering ourselves and our convenience in relationship to the earth. **Collectivizing** involves knowing our sphere of influence and knowing who our allies are. Finally, critical hope requires **working towards concrete goals**. Inaction can be paralyzing, whereas seeing our impact (even if on a very small scale) keeps us motivated.

Acknowledgements

References

Benevolenza, M. A., & DeRigne, L. (2019). The impact of climate change and natural disasters on vulnerable populations: A systematic review of literature. *Journal of Human Behavior in the Social Environment*, *29*(2), 266-281.

Cleary, J., & Kopicki, A. (2009). Preparing the workforce for a "green jobs" economy. *Rutgers, NJ: John J. Heldrich Center for Workforce Development*.

Chui, M., Manyika, J., & Miremadi, M. (2016). Where machines could replace humans-and where they can't (yet). McKinsey & Company.

Cuzzolino, M. P. (2021). "The awe is in the process": The nature and impact of professional scientists' experiences of awe. Science Education, 105(4), 681-706.

Grotzer, T.A., Forshaw, T., & Gonzalez, E. (2021). Developing Adaptive Expertise for Navigating New Terrain: An Essential Element of Success in Learning and the Workplace. The Next Level Lab at the Harvard Graduate School of Education. President and Fellows of Harvard College: Cambridge, MA.

Linton, S., Clarke, A., & Tozer, L. (2022). Technical pathways to deep decarbonization in cities: Eight best practice case studies of transformational climate mitigation. *Energy Research & Social Science*, *86*, 102422.

Léger-Goodes, T., Malboeuf-Hurtubise, C., Mastine, T., Généreux, M., Paradis, P. O., & Camden, C. (2022). Eco-anxiety in children: A scoping review of the mental health impacts of the awareness of climate change. *Frontiers in Psychology*, *13*.

Ojala, M. (2012). Hope and climate change: The importance of hope for environmental engagement among young people. *Environmental Education Research*, *18*(5), 625-642.

Ojala, M. (2017). Hope and anticipation in education for a sustainable future. *Futures*, *94*, 76-84.

Scully-Russ, E. (2013). Are green jobs career pathways a path to a 21st-century workforce development system?. *Adult Learning*, *24*(1), 6-13.

Sosu, E. M. (2013). The development and psychometric validation of a Critical Thinking Disposition Scale. *Thinking skills and creativity*, *9*, 107-119.

United Nations. (2022). *The Sustainable Development Goals Report 2022 | DISD*. United Nations. https://www.un.org/development/desa/dspd/2022/07/sdgs-report/

U.S. Bureau of Labor Statistics. (2022, April). *Green growth: Employment projections in environmentally focused occupations : Career Outlook*. U.S. Bureau of Labor Statistics. Retrieved April 8, 2023, from https://www.bls.gov/careeroutlook/2022/data-on-display/green-growth.htm

Vidakovic, D., Hadzima-Nyarko, M., & Marenjak, S. (2020). The Contribution of Workers' Attributes on Sustainability of Construction Project Realization Goals-Survey on the Impact on Productivity in Croatia. *Sustainability (Basel, Switzerland)*, *12*(23), 9946. https://doi.org/10.3390/su12239946

Zabin, C. (2020). Supply-Side Workforce Development Strategies: Preparing Workers for the Low-Carbon Transition. *Putting California on the high road: A jobs and climate action plan for*, *2030*.