

## David Selby's Radical Approach to Sustainability Education

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**Abstract:** Although higher education institutions are being encouraged to reorient their curricula to address sustainability, not everyone accepts the tenets of the United Nations' mainstream approach to education for sustainable development (ESD), especially David Selby. This paper recounts intellectual gold nuggets garnered from critically reading his scholarship about education for sustainable contraction to counter climate change and global heating (instead of global warming). His ideas are deemed both enticing and disconcerting but apropos for these 'interesting times.' They provide a way for people to walk a different path than mainstream ESD one that respects transience, contraction, moderation and sustainability. This can best be achieved by deep education leading to deep, quantum learning so people can engage with the fears and truths staring them in the face. The thoughts shared in this paper should resonate with educators, politicians, industry leaders, civil society and the media.

**Keywords:** David Selby, education for sustainable development (ESD), sustainability education, sustainable contraction, climate change, global heating, global warming

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## Introduction

University academic staff is being encouraged to reorient their curricula to address sustainability (Biasutti, Makrakis, Concina, & Frate, 2018). Fortunately, education for sustainable development (ESD) is a well-established phenomenon with full involvement at the United Nations with its Educational, Scientific and Cultural Organization (UNESCO) taking the lead. UNESCO (2019, para. 3) affirmed the “growing international recognition of ESD as an integral element of quality education and a key enabler for sustainable development.” Its goal is to make sure people can access ESD at all levels of education with the latter ideally reoriented so it “helps people develop knowledge, skills, values and behaviours needed for sustainable development” (UNESCO, 2019, para. 2).

However, not everyone agrees with UNESCO’s take on what constitutes quality ESD with some scholars challenging this mainstream approach (McGregor, 2013). This paper shares insights into these challenges, insights gained while preparing for and teaching a university graduate-level ESD course. Of special interest is the radical conceptualization of ESD tendered by Dr. David Selby. Advocating for sustainable moderation and contraction, Selby has developed a pedagogical philosophy to make this a reality, transcending Biasutti et al.’s (2018) imperative that higher education (HE) curricula be oriented to address sustainability.

Educators, politicians, industry leaders, civil society and the media should be inspired by the potentialities of the intellectual insights herein. There is an urgent “need to engage education agencies and policymakers in the kinds of paradigm shifting ... required ... in educational curriculum” (Bieler, Haluza-Delay, Dale, & McKenzie, 2018, p. 81). Without due diligence to outside-the-box thinking, “students will not be prepared for the future” (Bieler et al., 2018, p. 81). This imperative pressures HE institutions to rethink and reorient their conceptualization of sustainability. Selby’s ideas attenuate a recently reported finding that faculty “yearned for guidance on specific content” pursuant to teaching sustainability at universities and colleges (Landrum & Ohsowski, 2017, p. 386).

### Golden Nugget Exercise

Part of the aforementioned university course preparation process involved collecting ESD-related artifacts for students to critically analyze (see Giddings, Hopwood, & O’Brien, 2002; Huckle, 2006; Ireland, 2007; Jickling & Wals, 2008; Selby, 2006, 2007a,b, 2010; Wals, 2010). A yellow highlighter was used to flag any text that stood out while the author was reading because it resonated a radical bend; that is, it departed from tradition or accepted mainstream wisdom about ESD, especially that of UNESCO. These *gold nuggets* (a pun for the yellow highlighter) reflected intuitive instances of being unable to resist tagging ideas that ‘spoke to me.’ These “intellectual nuggets” (Warren, 2013, para. 4) represent personal reactions to outside-the-box thinking about mainstream ESD.

### Focus on David Selby

Dr. David Selby, a renowned global educator, climate change educator and ESD educator, currently leads the nonprofit organization *Sustainability Frontiers* (SF) based in England ([www.sustainabilityfrontiers.org](http://www.sustainabilityfrontiers.org)). A frontier is a border separating two entities with the term referring especially to the extreme limits of these borders beyond which lies the unknown (Anderson, 2014). By naming the organization *Sustainability Frontiers*, Selby purposefully challenged people to consider what lies beyond the familiar boundaries of mainstream ESD

thereby pushing their thinking into unknown areas - outside the box. The organization is described as

an alliance of international sustainability and global educators dedicated to laying bare the assumptions, exposing the blind spots and transgressing the current boundaries and orthodoxies of mainstream sustainability education, while envisioning, theorizing, researching, promoting and putting into practice sustainability learning that seeks transformation and healing of the human condition through repaired and restored earth connection. (Sustainability Frontiers, 2017, para. 1)

Selby's original focus on global education (Pike & Selby, 1999, 2000) shifted to ESD when he experienced intellectual discomfort (even angst) at the key take-away messages being propagated by mainstream ESD advocates, especially UNESCO's Decade for Education for Sustainable Development (DESD) (2004-2014) (Selby, 2006; Selby & Kagawa, 2010). Like the notion of working on the sustainability frontier, the titles for his attendant scholarship are equally evocative (see Table 1). He draws on powerful parables (e.g., walking on paths built on firm and shaky ground), puns (rejecting global warming opting for heating instead), quantum physics (the holomovement), poetry (e.g., T. S. Eliot's *Burnt Norton*), allegories (hidden meanings and truth found in dark corners), metaphors (a gathering storm), and folklore (Faustian bargains).

Table 1. Evocative titles of David Selby's musings about sustainability education.

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- *The firm and shaky ground of education for sustainable development*
  - *As the heating happens: Education for sustainable development or education for sustainable contraction?*
  - *Reaching into the holomovement: A Bohmian perspective on social learning for sustainability*
  - *"Go, go, go, said the bird." Sustainability-related education in interesting times*
  - *Thoughts from a darkened corner: Transformative learning in a gathering storm*
  - *Development education and education for sustainable development: Are they striking a Faustian bargain?*
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### **Insights into David Selby's Radical Approach to ESD**

Selby (2010, p. 35) was especially concerned with what sustainability-related education should look like in "interesting times," a phrase meaning the times are disorderly, troubling and disorienting (Martin, 2015). This section sets out the intellectual insights gained from the gold nugget exercise pertaining to his thoughts (see Table 1) about what type of education best deals with the key issues of climate change and global warming, which are different and should not be conflated. Climate change refers to shifts in long-term patterns of temperature, humidity, wind and precipitation. Global warming deals with the rising temperature of the planet's surface due to greenhouse gases. Global warming (i.e., shifts in temperature patterns) is a graphic symptom of climate change (Assadourian, 2017).

Selby (2010) maintains that these catastrophic dynamics will continue as long as ESD privileges growth and development at the expense of humanity and the Earth. Selby and Kagawa

(2011) wondered why mainstream ESD keeps neo-liberalism growth in the shadows when it is so complicit in harming people and the environment. They challenged mainstream ESD to confront this growth fetishism and were perplexed about why its proponents are so comfortable with threatening sustainability's prospects. They further argued that some ESD proponents are "compromising values and trimming the original vision in light of the economic growth agenda and global marketplace" (Selby & Kagawa, 2014, p. 143). They characterized this as 'striking a Faustian bargain' meaning some people appear willing to close their eyes to the consequences and make sacrifices for unlimited power, influence or convenience (i.e., sell their soul to the devil).

### **Global Heating**

Instead of global warming, Selby (2007a) actually prefers the term *global heating* because it better connotes the perception that this symptom of climate change can cause harm (burned by touching something hot) unlike something that is 'warm to the touch' (i.e., no harm if touched). Selby (2010, p. 52) felt that the term global warming "avoids the palliative effect of the euphemism" of getting warm, which fails to evoke the powerful reactions needed relative to humanity's plight. He believed that global heating better conveys the imperative that people must take immediate action or they will get burned (figuratively and literally) (Selby, 2007a). Climate change and heating are no longer gradual and incremental. They are coming faster and rougher than anyone anticipated (Romm, 2007). Humanity is hard pressed to mitigate "the severity of the looming global heating crisis" (Selby 2007a, p. 252). A different kind of education is needed, one that is deep, holistic, even quantum. This deeper education can better cope with the "looming or actual civilisational threat . . . from rapidly oncoming global heating" (Selby, 2007a, p. 257).

### **ESD as Business as Usual**

Foremost, Selby (2007a, 2010, 2015) faulted mainstream ESD for perpetuating an uncritical "'business as usual' agenda built upon the idea that the path to sustainability lies with a combination of better management, more technological efficiency, and responsible citizenship (usually inferring citizenship that does not overly rock the boat of 'business as usual' production and consumption)" (Selby, 2010, p. 37). Business as usual manifests as treating climate change and global warming as "technical problems that can be managed by a mix of technological innovation and policy solutions that . . . happily bolster growth" (Selby, 2015, p. 30).

He maintained that those who uncritically embrace the business-as-usual approach to ESD, to ensure continued development, tend to erroneously feel they "are *doing something* [emphasis added] while actually remaining deeply complicit in a growth paradigm that is destroying both ecosphere and ethnosphere" (Selby, 2010, p. 36). The ethnosphere constitutes "the sum total of all thoughts and dreams, ideas and myths, intuitions and inspirations, brought into being by the human imagination since the dawn of consciousness. The ethnosphere is humanity's greatest legacy" (Davis, 2009, p. 2). Selby's (2010) allegation that mainstream ESD is trampling humanity's greatest legacy (i.e., its collective soul) is provocative.

### **Sustainable Contraction, Moderation, Restitution and Restoration**

Echoing Sachs (1995), Selby (2006) also asserted that sustainability education needs to focus on the "conservation of nature" not the "conservation of development" (Sachs, 1995, p. 434). Privileging development means that any *alternatives* to development and attendant growth

are blackballed. Selby basically rejected the construct of “education for sustainable development” calling instead for “education for sustainable contraction” culminating in “education for sustainable moderation” (2010, p. 41). He proposed that transitional contraction education would “eventually morph into the more steady state idea of . . . sustainable moderation” (p. 41). Moderate is Latin *moderatus*, “within bounds, reduced intensity, regulated, modest” (Harper, 2019). An eventual avoidance of extremes in actions and opinions (i.e., moderation) is feasible but it requires deep, deep learning (to be discussed).

**Sustainable contraction.** Selby (2007a) further claimed that mainstream ESD fails to challenge apathy, Greek *apatheia*, “without feeling” (Harper, 2019). It “literally means the inability or refusal to experience pain” (Selby, 2007a, p. 254). Apathy lets people become numb and desensitized to what is happening. This is perpetuated by their fears, including the fear of experiencing guilt and despair, causing distress, being unpatriotic, looking weak and emotional, appearing morbid, and feeling powerless (2007a, 2010, 2015). Selby (2007a) explained that apathy and fear “serve as psychological sources through which [people] repress deep concern about the planetary circumstance” (p. 254). Repression entails suppressing thoughts or feelings until they move to the back of the mind (Anderson, 2014); like the proverb says, ‘out of sight, out of mind.’

To offset mainstream ESD’s neglect of apathy and fear, Selby proposed education for sustainable contraction that relies on *fearlessness* (bold, intrepid, brave) replete with resolve, optimism, acceptance of crises, renewal, an awakened self, and agency (2007a, 2010; see also McGregor, 2013). Such education is “the only means of fostering realistic hope” (Selby, 2015, p. 32) with hope meaning a connection to the future. Selby (2010) viewed education for sustainable contraction as a transitional vehicle getting people ready for moderation. The word *contraction* has two meanings: (a) to become narrower or draw together and (b) to come to an agreement (Harper, 2019). Presuming both, Selby (2007a, p. 258) viewed sustainable contraction as “a softer and more ecological concept” than growth-driven development, which he eschewed.

**Sustainable moderation.** In his opinion, sustainable moderation is the ultimate focus of education. People need to pull back from aggressive production and consumption and live modestly by moderating their actions (Selby, 2010). His idea of sustainable moderation stems from Lovelock’s (2006) notion of a sustainable retreat. This entails an ordered and sustainable withdrawal to a world where people live in harmony with Gaia (the primordial Earth Goddess or Earth Mother). Once there, they would ‘live in moderation’ respectful of the limitations of locale and place. Lovelock (2006) personified Earth and named her Gaia. He proposed that the conditions for sustainable life on the planet are maintained and perpetuated by humans interacting with their inorganic surroundings on earth (e.g., Gaia) to form a synergistic and self-regulating, complex system. Lovelock held that humanity’s abuse of Gaia has led to climate change and global warming, which he cleverly framed as *The Revenge of Gaia* (Lovelock, 2006).

Sustainable moderation is predicated on six factors: alternative conceptions of the good life; an intimacy with self and nature; nonviolence; addressing despair, pain, grief and loss; fostering restitution and restoration; and living and learning as a denizen in one’s locale (Selby, 2010). Actually, Selby (2010) placed a lot of credence on the notion of denizenship to augment ESD’s focus on global citizenship. A citizen has legally recognized rights in a given nation while a denizen dwells in a *particular place* or *locale* with less secure rights (Turner, 2016).

Selby (2011) favoured the denizen construct because it both (a) connotes primacy of immediate context and (b) respects that a denizen can be either human or other-than-human (e.g., plants, animals, fishes, birds, insects). For humans, he claimed that denizenship involves “*learning for conscious* [emphasis added] occupancy and participation in a place” (Selby, 2010, p. 49). Related to this idea, Selby (2010) called for both (a) localization, a connection to a place, and (b) place attachment, an approach that assumes *learning* can be rooted in what is local. Connecting to a place and learning to live and learn within that locale as a denizen are keys to sustainable moderation.

**Restitution and restoration.** In the event that we do not pull back in time and we pass the threshold of irreversible global heating, Selby (2010) envisioned “zones of habitability” (p. 51), which are small enclaves where people finally settle in their dystopian world. Within these zones that are suitable to live in with the rest rendered unfit for human life due to the ravages of climate change and global heating, he envisioned the need for “a long-term educational project of restitution and restoration” (Selby, 2010, p. 51) of both the earth (Gaia) and humans’ souls if either hopes to survive and thrive. Restitution means to replace something or recompense for injury or loss. Restoration refers to renewal and healing or restoring of health by repairing, rebuilding or reviving (Harper, 2019). Both the damaged earth (Gaia’s soul) and humanity’s soul will have to be healed.

### **Deep Fears and Deep Learning**

Deep-seated apathy and unexamined fears can result in inertia (a tendency to do nothing), avoidance of truth, and uncritical acceptance of a situation (McGregor, 2013). Any approach to ESD that does not engage with these fears thwarts deep learning (Selby 2006), which is predicated on the concept of *depth* versus shallowness. Depth refers to complexity and profundity of thought (penetrating deeply), incredible intensity (concentration and passion) and comprehensiveness of study (Anderson, 2014). Deep learning involves exploring things in great detail, understanding and questioning basic principles, and putting forward one’s own arguments while anticipating push back. It involves self-reflection and examining one’s beliefs and value system (Nicholls & Adolphus, 2003).

Deeper learning helps students extract meaning and understanding from their learning experiences and life (Warburton, 2003) thereby augmenting in-depth sustainability learning. This deeper learning has also been called higher order learning with the highest order called *epistemic learning*. When successful, the latter leads to transformation of worldviews and perspectives. This transformative learning “poses a significant challenge to existing beliefs and ideas, reconstruction of meaning, discomfort and difficulty, but also sometimes excitement [and] for some it is inspiring” (Sterling, 2010-2011, p. 25). Not surprisingly, deep learning requires an ‘academic mindset’ that actualizes when students finally come to *believe* that they *can* change their intelligence and worldviews, succeed, engage with others, and dig deeper into relevant issues (Briceño, 2013).

This demanding deep learning entails starting out with relatively simple concepts and ideas. As each is internalized and becomes new knowledge, learning continues to transform into deeper levels of abstraction until very complex ideas have been learned. As learners move through multiple processing of different layers of facts, impressions and insights, they progress to higher orders, *deeper* levels, of abstraction and internalized knowledge (LeCun, Bengio, &

Hinton, 2015). Ultimately, this depth ensures that students can construct their *own* framework for understanding complex issues rather than relying on others (Nicholls & Adolphus, 2003). As a caveat, this deep “epistemic learning can be deeply uncomfortable [pun intended] and can be a lengthy process over time as mental models undergo radical change” (Sterling, 2010-2011, p. 25). But it is worth it because people end up seeing things differently, which is what Selby (2006, 2015) intended as long as they can move through their debilitating and paralyzing fear.

**Shallow learning.** If, however, learning is shallow, people are not able to bring serious thought and intellect to an issue. Their learning is superficial (surface level) and trivial (insignificant or marginal), and they come away without great understandings or perceptions of an issue (Anderson, 2014). They rely on someone else to interpret and tell them how to understand a situation (Nicholls & Adolphus, 2003). Shallow education addresses the immediate symptoms of an issue but neglects to address any underlying (deeper) cultural, political or ideological concerns (Stibbe, 2004).

For ESD in particular, shallow education manifests in flattening out any contradictions; mollifying any fears or tensions (i.e., reducing their actual intensity); blurring nuances and distinctions; averting any focus on awe, mystery, wonder and reverence; and not focusing on culture, beauty, the spiritual or life purposes (Selby, 2006, 2011, 2015). In a recent paper, Selby (2017) called for *vernacular learning* as a way for learners to engage with “the inhospitable, the unappealing, the uncomfortable” (p. 20). This would involve learners facing down fears to make room for awe and wonder.

### **Eyes-Wide-Shut Syndrome**

In line with his claim that deeper learning is needed so people can face their fears and unlearn unsustainability (see Wals, 2010), Selby (2010) insightfully observed that from a position of apathy and fear (unchallenged by mainstream ESD), humans have unfortunately developed a “sleepwalked attachment to a distorted value system” (p. 36). They are now walking around with an “‘eyes wide shut’ syndrome” (p. 37). Clark (2010) explained that this means people are not seeing what is right in front of them. They do not realize they “have fallen into a blind pattern of living” (para. 1) (blind meaning unable to recognize or understand) thereby failing to gain awareness of what they may be seeing or feeling. This phenomenon is exacerbated by mainstream ESD’s anthropocentric core meaning humans are the most significant species (Selby, 2007a). All of reality is interpreted in terms of a human value system thereby distorting other species’ realities (Selby, 2010). The sleepwalking goes unchallenged and “anthropogenic heating is under way” (Selby, 2007a, p. 252).

### **Dark-Skies Thinking**

Walking around with our eyes wide shut prompted Selby (2010) to claim that “we live in a dark age” (p. 39). Darkness is disorienting with people getting confused and losing their sense of direction. “Failure to engage with the disorientation of darkness” negates people fully understanding what they are up against with global heating (Selby, 2010, p. 41). When ESD “stays within the comfortable arc of light” (Selby, 2015, p. 27), it does not socialize people into the importance of seeing and knowing in the dark; people become more mired in denial (a form of fear), which takes away their agency and any sense of responsibility toward others. The crippling results are inertia, lack of motivation, and avoidance of the truths staring them in the face (Selby, 2010). He challenged ESD’s inclination for “‘blue-skies’ thinking,” which he

described as “brainstorming positive alternative ideas for progressing sustainability” (Selby, 2010, p. 49).

Blue-skies thinking involves creative thinking that is not limited by current thinking or beliefs (Anderson, 2014). Taken at face value, this would appear to be a good thing. However, Selby creatively proposed that future curriculum planners should also engage in “some ‘dark skies’ thinking that starts out from and unflinchingly confronts the dire threats we face” (2010, p. 49). This would involve helping people to expect the inevitability of fear, confront it and move beyond it so they can inturn move forward to healing and renewal of both theirs and Gaia’s soul. This restitution and restoration are necessary so people can face the real possibility of a dystopian scenario in the very near future. In a dystopian world, life has progressed in a downward spiral to a very, very bad state much faster than people could handle because they did not face the truth (Selby, 2010, 2015).

### **Blind to Truth**

To make this blind-to-the-truth point in a colourful and memorable way, Selby (2010) titled a book chapter with a quote from T. S Eliot’s (1936) poem *Burnt Norton*. The phrase Selby drew on was “Go, go, go said the bird: human kind cannot bear very much reality.” In Eliot’s poem, the bird is the messenger of truth speaking to the fact that humans find it hard to acquiesce to that which is true. Failure to accept and deal with the truth means they remain blinded (Weitz, 1952). Gardner (1949) explained that Eliot’s poem speaks to the human virtue of humility (i.e., a modest view or estimate of one’s own importance) and the necessity of accepting ignorance (i.e., acknowledging a lack of knowledge or awareness). Without these virtues, humanity continues to sleepwalk with its eyes wide shut and climate change and global heating march inexorably onward (Selby, 2010).

### **Liminal Deficit**

The eyes-wide-shut syndrome also leads to a “liminal deficit” (Selby, 2010, p.45). By this he meant that people lack the opportunity to cross deep learning thresholds leading to earth-shattering insights. Liminal stems from Latin *limen*, “threshold” (Turner, 1974). It means barely perceptible, a space that is neither here nor there. When people enter this space, they stand on a threshold where something can cease to exist or come into existence. It is likened to ‘being in the flow’ or ‘in the zone’ where people temporarily step outside of their body and become one with their surroundings. Suddenly, they understand everything - it *all* makes sense. When they come back to earth, so to speak, they have new insights and an expanded consciousness (Turner, 1974).

Selby (2015) epitomized this threshold-crossing idea by saying “it is possible for the learner to walk the interface between science and spirituality and so cultivate resistance to [their] sense of loss” (p. 33). He faulted mainstream ESD for stymieing people’s ability to approach and cross these thresholds - to take the leap. To offset this possibility, he advocated for *liminal experiences* instead of *liminoid experiences*. The latter narrowly represents ‘feel good’ moments that affirm the status quo and cement denial, meaning people never get the chance to approach a deep-learning threshold (Selby, 2010). In effect, he maintained that mainstream ESD keeps people in the dark, unable to move toward new light. Deep transformative learning would allow people “to understand concepts that were formally opaque” having let the light shine through (Ison, Armson, & Stowell, 2001, p. 12).



## Quantum Learning

Selby (2007b) expanded his flow and threshold metaphors in a chapter titled *Reaching into the Holomovement*. Holomovement is a quantum concept for the flowing movement of the whole, which is in perpetual, dynamic flux. Picture the toy called a Slinky, a compressed helical metal spring that moves gracefully and sinuously. The *whole* toy moves by flowing. Drawing on the holomovement principle, Selby (2007b) pushed educators beyond even deep learning toward *quantum learning* so that students can make quantum leaps toward sustainability. Quantum leaps are sudden, highly significant (sometimes extreme) advances or breakthroughs in thinking and perception (Anderson, 2014) revealed as the whole moves (i.e., the Slinky repeatedly rests, unfolds, flows and comes to rest).

Quantum learning is further informed by the quantum principles of implicate order (invisible) and explicate order (visible) (Selby, 2010). The resting Slinky is explicate (i.e., visible and easily seen as a whole entity). The open spaces revealed when the Slinky unfolds are implicate, made visible (i.e., people can peer deep inside the whole). Once it has appeared, the implicate can easily disappear back into the whole if the Slinky is set to rest again; yet it still remains part of it - the holomovement (i.e., the whole moves and flows as one, even when at rest). Using these principles, Selby explained that deep, quantum education would entail learners being able to “see beyond the world as it immediately and outwardly seems [explicate], and to experience and draw upon the dynamic flow of the whole [implicate]” (2007b, p. 177). These quantum insights lead to *great* leaps of learning with Latin *quantum*, “how great” (Harper, 2019).

Harkening back to liminal thresholds, quantum learning “can be a prelude to real transition by eliciting a sense of discomfort and unease combined with an intimation of what is thinkable and what is realizable” (Selby, 2007b, p. 177). Selby likened this to “the grit in an oyster [which offers] fertile potential for virtual transitions” (2007b, p. 177); that is, quantum leaps. To make these leaps, people have to learn their way out of unsustainability (Wals, 2010). This entails moving beyond their comfort zone to one of discomfort (the grit) potentially leading to deep insights and epistemic, quantum leaps in learning (Selby, 2007b).

## Educate for . . .

Not surprisingly, given his radical challenges to mainstream ESD, Selby (2006) challenged the term education *for* sustainable development. He suggested if we have to educate *for* anything, it should be *for* (a) ephemerality (lasting for a short time), (b) elusiveness (escaping notice) and (c) ineffability (too great to be described in words). Both sustainable contraction and moderation demand that people are taught to deal with ephemerality, elusiveness and ineffability.

Put simply, even though what humanity is facing is too calamitous to be described in words, people have to learn to quit ignoring what is going on and appreciate that nothing lasts forever (Selby, 2006). These end goals of education respect all of Selby's radical insights into sustainability education including the eyes-wide-shut syndrome, need for liminal experiences, respect for dark times, need for dark-skies thinking, inability to face the truth, lack of humility, need for denizenship, awareness of portending dystopia, and deep-seated apathy, fear of and denial about what is happening to the world, who and what is causing it and what can be done to address it.

## Paths to Walk

By way of summation, mainstream ESD is deeply entrenched at the UN and in national, state and provincial policies and curricula. Typical to his approach, Selby (2006) tendered three parables to creatively illustrate a way forward - *away* from the mainstream. A parable is a simple story used to illustrate a lesson. In an article titled “the firm and shaky ground” of ESD, Selby (2006) shared three narratives about decisions people could make about embracing (or not) sustainability that is *not* predicated on growth and development (see Figure 1). He started by positioning people in a large clearing in a forest with them trying to figure out what to do - which path to take (if any).

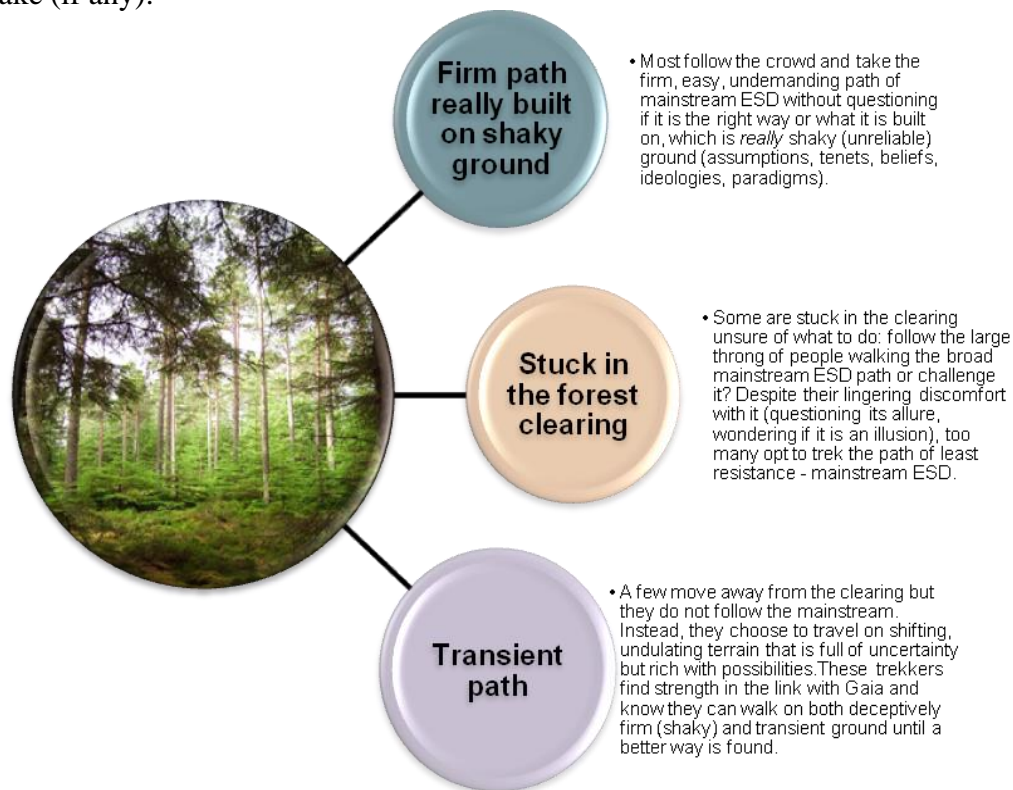


Figure 1. David Selby's (2006) parable of ESD's firm and shaky ground.

First, the majority of people in the clearing choose to walk, what *appears* to be, the easy, broad, firm and undemanding path of mainstream ESD. In strength, they walk forward, shoulder to shoulder, knowing (or not) that this path was built on an excessive focus on growth; technological and managerial fixes; the privileged Anthropocene; and a disdain for awe, wonder, reverence and nature (other than as an exploitable resource). Although the ground under the path *feels* firm, Selby (2006) characterized it as shaky and unreliable because it is based on principles and tenets that do not respect humanity, non-human species and Gaia. And although standing on solid (firm) ground is not possible right now, that is exactly where people *think* mainstream ESD puts them. So . . . onward they march, confident in their decision.

Second, knowing the *real* make up of the seemingly firm mainstream path, some people linger in the clearing, hesitant to walk the mainstream path because they correctly perceive it as built on an unreliable foundation and faulty assumptions and premises. They tarry in the clearing,

standing around mulling and fretting over a lack of good reason to head down the deceptively firm path. As teased out by Selby, this path fosters denial, avoidance of truth, abuse of Gaia, and it reifies both growth and development. Despite feeling disappointed when they realize this, they are still torn between pragmatically going with the mainstream ESD flow and finding another path. And so they linger, reluctant to walk the firm path without good reason but not immediately seeing a viable alternative (Selby, 2006).

Third, a few others in the clearing also wrangle with the idea of joining the throng on the firm path to ESD. Resisting its allure, they know in their hearts it is an illusion and opt instead to move to the new *ground of transience* (i.e., not permanent, short lived). When walking on transient ground, people need to appreciate that the certainty of their travels over “*the give and camber of the path*” (Selby, 2006, p. 363) will be more ensured if they remain attuned to the *flow* of life in both the firm but shaky path and the righteously sound yet undulating path that respects transience. While treading this shifting terrain (deemed better than illusion or inertia), people can draw sustained strength (pun intended) and perseverance from their deep appreciation of humanity's reciprocal link with Gaia. All of Selby's radical concepts presented herein are the makings of a new transient and potentially firm path, one focused on contraction and moderation. This new path will be a blend of reason, feelings and wisdom (Gray-Donald & Selby, 2008; Selby, 2006).

### Conclusions

A gold nugget is a ready-formed precious metal found in the earth (Anderson, 2014). This paper highlighted several gold nuggets, intellectual ideas ready formed in David Selby's radical thoughts on challenges to mainstream ESD and how to do things differently - to think outside the box. They are offered as thought stimulants for those engaged in political, managerial (industry), educational, civil society and media initiatives intent on a deeper education that accommodates transience, contraction, moderation and sustainability.

Selby (2006, p. 351) called this higher education curricular exercise one of “fomenting a dynamic complementarity” appreciating that such education will require “stirring things up.” His radical ideas that innovatively depart from ESD traditions are both enticing and disconcerting but apropos for these ‘interesting times.’ “*Everyone has to understand and come to terms with the fact that we are threatening our own existence*” (Selby, 2011, p. 11). To that end, education for humanity and Gaia's future has to change; Selby's ideas contribute to that curricular enterprise.

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