The Role of Emotional Entropy and Ethnocentric Paradigms in International Service-Learning: A New Pedagogical Model for Global Agency Development

Christine M. Cress[1*] and Thomas Van Cleave[1]

[1]*Portland State University, USA*

*Correspondence: cressc@pdx.edu

Abstract

Cognitive dissonance, culture shock, and emotional entropy can stymie international service-learning and these issues are especially salient in American student encounters in India. Based upon three program years of qualitative data from student assignments, teaching evaluations, and faculty reflection journals, a new pedagogical model for international service-learning is purported for dismantling ethnocentric paradigms and supporting students' development of culturally-contextualized global agency development.

Keywords: international service-learning, transformational learning, global agency, emotional entropy, culture shock

Intersections of International Education, Emotions, and Learning

The global landscape of higher education is different than just twenty years ago due to increased mobility of students and scholars and the proliferation of international programs (Lee, et al., 2017). Indeed, internationalization has been deemed instrumental for educating students in order to problem-solve global challenges (Teichler, 2010). Moreover, international and intercultural contact with difference, virtual or physical, is "binding each of us into an interconnected world community" (Murphy,

2011, p. 1) and being able to function effectively cross-culturally is a necessary skill in the global workforce (Cobo, 2013; DeGioia, 2011).

However, as Stein (2017) warns, internationalization of higher education practices offers not only learning opportunities, but generates paradoxes, dilemmas, and contradictions in terms of political and ethical issues for individuals, communities, and organizations. The danger is that globalization efforts can serve to reinforce historical inequities across geo-political, imperialistic, and neo-colonial contexts (Blanco Ramirez 2014; Connell 2007; Shahjahan 2013). Therefore, higher education institutions have a critical responsibility in framing and initiating international engagement that deconstructs assumptions of normative paradigms for learning and community change (Shahjahan & Kezar 2013; Van Cleave & Cartwright 2017).

To that end, a relatively new form of pedagogy—international service-learning—has become a popular strategy for exposing students to issues that transcend national boundaries and that assist the formation of global consciousness (Bringle & Hatcher 2011; Van Cleave, 2013). Short-term faculty-led service-learning experiences involve international travel to communities and engage students in community service activities while combining academic readings, research, and reflection in order to promote intellectual insight, human compassion, and intercultural competence (Cress, et al., 2013).

But issues like culture shock and improperly planned programs can stymie insight into social problems like religious divides, gender roles, and economic class hierarchies. Furthermore, disciplinary connections and professional knowledge development are likely to be weak if not adequately framed through critical academic lenses (Cress & Donahue 2011). Likewise, programs claiming to increase students' concepts of global citizenship and global agency must unmask the power and privilege inherent in one's persona and positionality in the world (Stein, 2017). Indeed, Mudiamu (2020) asserts that global consciousness cannot be effectively taught without intentionally addressing xenophobia and cultural humility.

As such, international service-learning program components must be informed by the epistemological processes of learning; that is, how are students making meaning of their intercultural experiences (Blessenger & Kovbasyuk 2013; Lee, et al. 2013)? Specifically, when student encounters with the self and the other are intensively fraught with psychological and emotional dissonance (as is often the case in international education) retreat and regression to universalistic notions of values, behaviors, and attitudes can supersede insights into injustices and inhibit discernment of culturally-contextualized conceptualizations of global consciousness.

In other words, faculty must challenge students' traditional ethnocentric notions about people, places, and the self in relationship to those elements even as students' feelings of stress, discomfort, and anxiety may be heightened by the international experience. Thus, strategically anticipating and grabbling with extreme culturally-triggered feelings is a pedagogical and epistemological imperative if faculty are to help students realize the educational benefits of international service-learning and effectively conduct community service that is culturally and locally-relevant.

Driven by the over-arching research enquiry: How can students' experiences in international service-learning lead to increased "global consciousness"; an operational definition of global agency is first explicated. Second, the concept of emotional entropy and its role in global agency formation is explored in the context of learning theory. Third, a pedagogical and epistemological model for mediating emotional entropy and facilitating global agency development is proposed and explicated as the teaching context for the authors' construction of course syllabi, program elements, and international service-learning activities. Finally, international service-learning qualitative data is analyzed in light of the global agency development pedagogical model and its associated student learning outcomes.

Theoretical Perspectives and Operational Definitions

Global Agency

The concepts of "global consciousness" and global citizenship education have been evolving in the scholarly literature (Association of American Colleges and Universities, 2011; Braskamp, 2008; Brustein, 2007; Jacoby & Brown, 2009; Tarrant, 2010) and in college mission statements (Stearns, 2009). While there is not yet a singular definition for the outcome of such efforts, there are some regularly agreed upon themes which include "the ideas of [global] awareness, responsibility, and participation" (Schattle, 2009, p. 17). Similarly, McIntosh (2005) contends that the true markers of global citizenship should emphasize respect, care, and concern for the well-being of others. To that end, Ogden (2010) developed a tripartite description of global citizenship more inclusive of affective and experiential dimensions: social responsibility, global competency, and global civic engagement.

Based on Ogden's (2010) definition, a previous research investigation by one of the authors (Van Cleave, 2013) found that faculty who teach international service-learning courses at seven higher education institutions were reactive to the term "global citizenship" considering it "classist" and "unrealistic". Van Cleave's (2013) study revealed that faculty motivations and hoped for learning outcomes of international service-learning were not global citizenship, but coalesced instead in the data into five independent and interrelated competency dimensions described below. Namely the dimensions of: *Academic*, *Professional*, *Interpersonal*, *Intrapersonal*, and *Intercultural* (see table 1).

Table 1

Faculty Conceptual Dimensions of Student Outcomes in International Service-Learning

Academic – Students are able to apply academic principles to community-identified needs in ways that honor host-country cultural perspectives and ways of knowing.
Professional – Students are able to recognize how their own professional skills can contribute to addressing community-identified needs in ways that honor host-country cultural perspectives and ways of knowing, both during the experience and long after returning to the students' home country.

> *Interpersonal* – Students develop solidarity with and are able to work with diverse groups of people in order to meet community-identified needs in ways that honor host-country cultural perspectives and ways of knowing.
>
> *Intrapersonal* – Students are able to identify how their own cultural identities and perspectives impact the ways in which they approach meeting local or global community-identified needs.
>
> *Intercultural* – Students are able to identify how cultural perspectives impact the ways in which individuals and groups approach meeting local or global community-identified needs and view cultural differences as value-neutral.

Noticeably, the first two faculty conceptualized dimensions of student learning in international service-learning courses*, academic* and *professional*, are those cognitive outcomes that have been historically associated with traditional educational endeavors. The later three learning dimensions, *interpersonal*, *intrapersonal*, and *intercultural*, are affective outcomes that are more likely to be taught in experiential, service-learning, and community-based learning courses. Interestingly, the international service-learning faculty did not view intercultural competence as the primary outcome for students' experiences. Instead, faculty placed equal value on *intercultural* competence development in conjunction with *academic*, *professional*, *interpersonal*, and *intrapersonal* skills. And, emerging from the dynamic intersection of these five dimensions was a new culminating learning outcome*, global agency* (see diagram 1).

Diagram 1

Interactive Learning Dimensions of Global Agency in International Service-Learning

(Van Cleave, 2013)

As depicted in the diagram above, student's global agency is defined as an outgrowth of development in culturally-contextualized cognitive, affective, and behavioral skill areas across the five competency dimensions (*academic*, *professional*, *interpersonal*, *intrapersonal*, and *intercultural; see Table 1 above*). While the salience of the term global agency has yet to be tested and is beyond the scope of this paper, global agency is a form of transformational learning; learning that transforms students' existing perceptions of the world into new forms of consciousness (*academic* and *professional*) and critically-informed action (*interpersonal*, *intrapersonal*, and *intercultural*).

But the development of global agency requires openness and adaptability in the midst of differences in people, events, and situations. And, perceptions of extreme differences may cause students to retreat to ethnocentric positions (defensiveness about their own culture) rather than toward ethnorelative ones (respect for other cultures) (Reitenauer, et al., 2013). Such internalized psychological retreat is best understood as emotional entropy; a withdrawal to the familiar when confronted by unfamiliarity. If we want students to expand and transform their understanding of themselves in the world, we must better understand the role of emotional entropy in affecting global agency development.

Emotional Entropy and Epistemological Processes

The first and second laws of thermodynamics assert that in a closed system, energy tends towards increasing states of disorder and randomness. Energy is not lost, but it becomes more and more diluted and ineffective. This law is called the law of *entropy*. Entropy is measured as the degree to which energy has lost the capacity to perform useful work. In other words, entropy is the lack of order or predictability; a gradual decline into disorder.

Learning theory, how we come to make meaning of and understand new information (*i.e.*, epistemology), is premised upon the ability to control (or appropriately reduce) emotional entropy as a form of anxious uncertainty (Belkavin, 2001). While the role of emotions is critical to cognition, critical thinking, and emotional intelligence (Damasio, 1999; Goleman, 2006; LeDoux, 1996) the level of intensity of the emotional experience (and whether the emotions are positive or negative) can enable or disable one's ability to integrate new information.

Indeed, the origin of the term, entropy, comes from the English "en" meaning inside and the Greek, "tropē" meaning transformation. If emotions are too extreme, neurons in the brain's amygdala trigger a "fight or flight" response that is disconnected from the neocortex responsible for critical thinking and decision making. However, appropriate amounts of emotional arousal are actually central to reflective judgment and integration of learning through transformed insights (Belkavin, 2001; Damasio, 1999).

While our coining of the term *emotional entropy* has not been used before in the service-learning literature, we offer it as a heuristic phrase for expressing intense emotional upheavals that students can encounter as an aspect of cognitive dissonance. Emotional entropy seems an apt description for when one's mental universe descends into the void of cognitive chaos due to overwhelming emotions. In this situation, emotional energy has lost its capacity for being useful in learning and, in the pervasiveness of emotional entropy, nothing makes sense anymore.

According to Mezirow (2000), this is the theoretical assertion of transformational learning; that transformational global insight (in this case, global agency development) requires dismantling existing paradigms of the self (Robertson, 1988) through experiences that create disorienting dilemmas (Cuban, 2001; Mezirow, 2000) especially those requiring close encounters and interactions with others different than ourselves (Vygotski, 1978)—such as in international service-learning. In addressing these issues, the authors queried—could the construction of a new pedagogical model upon which international service-learning is framed attend to emotional entropy issues and facilitate the development of global agency?

Methodological Approach

The inquiry focused on how American students who participated in a short-term, intensive international service-learning program in India encountered and attempted to resolve emotional dissonance in ways that affected views of the self and the world along their developmental journey toward global agency development. Student data (using pseudonyms; n=24) from three separate program years (2013, 2015, & 2017; note that the program is only offered alternate years) and adapted narrative illustrations from students' actual written assignments, submitted reflective journals, and group interactions (instructor ethnographic journal notes), trace students' emotional and psychological reconciliations as part of their formation of global agency.

While Institutional Research Board (IRB) approval was obtained for utilization of the student data, this is not a traditional research inquiry. Qualitative data were not strictly condensed and codified into discrete thematic categories for analytical purposes. Nor is the paper intended to serve as an exemplar of evidence-based theory testing. Rather, as a comprehensive scholarly paper, the purpose is to conjoin multiple research and conceptual paradigms that align with specific ethnographic and phenomenological experiences for a particular program.

Indeed, the methodological and epistemological point is to break free from traditional positivist boundaries of research in order to identify innovative, but evidence-based frameworks for community engagement. This approach is concurrent with self-identified "community engagement practitioner scholars" who utilize various research, conceptual, and theoretical approaches in crafting their courses and programs for marked differences in learning, leadership, and community impact (Dostilio, 2017; Militello, et al., 2017; Post, et al., 2016).

A brief international service-learning programmatic description provides context for the inquiry. Following, a new pedagogical model for global agency development (based on Van Cleave, 2013) is explicated upon which the program teaching and learning elements were constructed by the authors. Finally, program qualitative data trace students' global agency development and are highlighted as case studies in the pedagogical model dimensions of *praxis* and *progression*.

Intercultural Encounters: Americans in India

Program Setting

India, as a truly unique cultural landscape that is largely unfamiliar to Americans, provided the setting for students to engage in the dissonance of transformational learning and global agency development. In this particular university program taught by the two authors, students spent 3 weeks in Southern India working in collaboration with a local college to provide service-learning to a variety of NGOs including women's shelters, orphanages, schools, and human rights organizations. Given the intensity of associated issues including gender-related violence, female infanticide, class/caste oppression, poverty, and pollution, the pedagogical task for the faculty was to craft the course and program experiences in such a way that students' emotional entropy was dissuaded from retreat to ethnocentric paradigms and could serve as a catalyst for promoting global agency rather than as a kind of biochemical inhibitor stunting potential cognitive and affective growth.

Pedagogical and Epistemological Model for Global Agency Development

Undoubtedly, all types of service-learning require appropriate preparation and processing of the experience since crossing any boundary—new environments, new people, new issues—can be a culturally foreign experience for students engaged in local service-learning. But the logistics of service and the demands of learning increase exponentially in international courses. Kiely (2005) notes that there are four important elements of context that affect students' transformational learning before, during, and after their participation in international programs: personal, structural, historical, and programmatic elements. Drawing from this work, constructivist learning theory further explained below, and student qualitative program data, a parsimonious pedagogical and epistemological engagement model is described for planning, facilitating, and assessing international service-learning for global agency development (see Diagram 2).

As explicated and illustrated, the primary scholastic dimensions of *Preparation* (pre-departure planning), *Praxis* (strategies for applying course content to real-life situations), and *Progression* (making meaning of the learning and impact) demonstrate pedagogical and epistemological structures for managing students' emotional entropy and facilitating global agency.

Diagram 2

Pedagogical and Epistemological Model for Global Agency Development
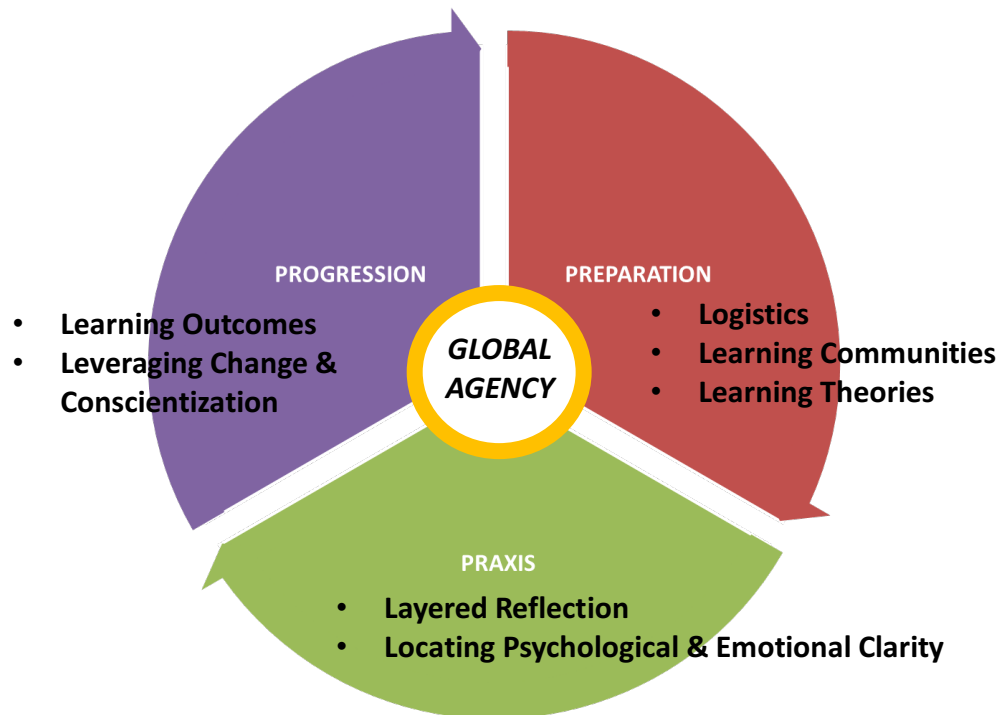
Global Agency: the cumulative development of culturally-contextualized cognitive, affective, and behavioral skills across academic, professional, interpersonal, intrapersonal, and intercultural competencies.

Preparation

Preparation encompasses the pre-departure activities of student recruitment, student selection, and student community development prior to leaving the country. While the myriad of details of preparing an international service-learning will not be described here, three components of preparation are explicated in terms of their associated pedagogical and epistemology relevance to emotional entropy and global agency: 1) Logistics; 2) Learning Goals and Learning Communities; and 3) Learning Theories.

Logistics

The importance of logistics and safeguards for student travel and housing cannot be under-estimated (Van Cleave, 2013). At most colleges, international service-learning courses are jointly offered through Study Abroad offices where expertise resides in terms of travel documents, health immunizations and insurance, and the legal contracts of international partnership memorandums of understanding (MOUs).

While some international service-learning programs pay third-party providers to arrange itineraries and in-country logistics, in this particular case the course program utilized a long-standing educational community (i.e., college) as their base of service-learning operations. As such, information concerning housing, food, and learning and serving activities were well-detailed in the syllabus and discussed with students during pre-departure class sessions.

Still, students' foremost concern in early weeks were: "what are the rooms like where we sleep?"; "will there be bugs?"; "where do we eat?"; "is the food spicy"? The angst inherent in these questions are consistent with Maslow's (1954) Hierarchy of Needs. According to Maslow, before experiences can be meaningfully reflected upon and understood, one's basic survival needs such as shelter and food must be met.

Additionally, Maslow (1954) asserted that before higher cognitive levels of *self-actualization* (e.g., transformed insights about the self in relationship others) can be achieved, basic human needs for connection, relationship, and affiliation must be met (see Diagram 3). Known as the *Hierarchy of Needs,* the model asserts that life essentials are foundational to learning and must precede community bonding; which in turn is essential to reflection which leads to insight and learning.

Diagram 3

Learning and Hierarchy of Needs (Adapted from Maslow, 1954)

Self-Actualization:
Learning & Insight

Psychological Needs:
Love & Community

Physiological Needs:
Water, Food, Shelter

Why might this pyramid of physiological and psychological priorities be important? Quite simply, and as the students rightly anticipated, most of us in new cultural settings do not eat and sleep well and, consequently, we may lose patience with our companions. If that happens, then it is quite difficult to stay engaged in learning as our emotional and cognitive energies are taxed by the circumstances. And, then more than likely, our ability to provide appropriate and culturally-contextualized community interaction and service becomes compromised; opportunities for learning, impact, and insight are diminished.

Maslow's (1954) model served both as a course program design framework (e.g., making sure that logistics were fully detailed to dispel anxiety) and as a course content component in discussing contrasts and comparisons of the cultural concepts of individualism (independence) and collectivism (group cohesion) across U.S. American and Indian contexts. The model also provided a structure for considering how to create a learning community within our program and how to connect our learning community with those of the Indian college and communities with respect to faculty goals, individual student goals, and communally defined program goals.

Learning Goals and Learning Communities

Drawing from Van Cleave's (2013) Global Agency Development Model, course objectives were outlined in the syllabi under the larger outcome term of *Global Agency* according to the interconnected learning dimensions of *Academic*, *Professional*, *Interpersonal*, *Intrapersonal*, and *Intercultural*. As well, Bloom's (1956) taxonomy informed faculty development of student learning outcomes for the program that were inclusive of the domains of cognitive, affective, and psychomotor skills and progressed from relatively simplistic to more complex categories; increases in sophistication of emotional management and knowledge and skill development that were expected to be demonstrated over time in the course.

For example, the course syllabus listed under *Academic Learning*:

- Articulate some of the social and economic challenges of India.

- Analyze the political and economic relationships that exist today.

- Evaluate and demonstrate understanding of the above issues within the context of the community service site.

Under *Intercultural Learning*:

- Develop an awareness of diverse peoples, cultures, and ideas, and appreciate the importance of engaging in ongoing interdisciplinary learning.

Under *Interpersonal* and *Intrapersonal Learning*:

- Interact effectively and respectfully with diverse classmates and community members toward common goals that address human needs.

- Apply reflective, analytical, and evaluative skills to understand one's own cultural perspective, past experiences, and individual identity.

- Examine race, class, and gender as they relate to service-learning and social justice.

Under *Professional Learning* outcomes:

- Critique global citizenship and charity models of international service-learning.

- Identify challenges and evaluate solutions related to establishing and maintaining international service-learning partnerships.

Moreover, each program year the courses included multiple readings (e.g., journal articles, book chapters) and resources (e.g., films, online videos) on India and international service-learning. Students in-class and on-line responded to the queries:

- What would Gandhi think about developing global citizenship through international service-learning?

- Rather than reinforcing neo-colonial globalization, how can our trip contribute to responsible global leadership and sustainable development?

- How to you define the development of global agency with respect to the Van Cleave's (2013) dimensions?

Importantly, faculty (*i.e.,* the authors) intentionally facilitated discussions and activities to form a learning community as students identified class intention "rules" for handling sensitive topics, controversy with civility, and managing interactions when emotions were more pervasive than thinking (see also, Cress, et al. 2013). Students discussed responses to questions such as: What are the expectations for performing service? What should happen if someone is not doing their share? What are the expectations for participating in reflection sessions? And, what if someone doesn't listen and speak with respectfulness?

Further, students participated in role play activities based on case study scenarios of dilemmas in service-learning including cultural boundary crossing and facing personally conflictive situations like being a vegetarian and being served meat at a host family dinner. (More case study examples are readily available: Cress, et al. 2013). The role plays introduced students to the anxiety and emotional turmoil

that can arise when there is cognitive dissonance and affective uncertainty about what is "right" to do in a given cultural situation.

Students were also informed about intercultural skills specific to India (such as handling food with the right hand only), and were exposed to the concepts of *cultural surprise* (small differences such as food), *cultural stress* (anxieties resulting from uncertainties about appropriate social interactions) and *cultural shock* (extreme negative reactions that can become debilitating) (Yamashita & Schwartz, 2012). Recognizing these responses is an initial step in reducing emotional entropy and promoting higher cognitive functioning as a part of laying the foundation for surviving and thriving in international service-learning.

Learning Theories for Effective Service-Learning

Both faculty (the authors) had previously led international service-learning courses and traveled extensively. As such, they had professionally and personally experienced the deleterious effects of emotional entropy on individual and group intercultural interactions. Thus, as pedagogical anticipatory measures, students reviewed and discussed a variety of psychological and conceptual models such as Maslow's (1954) hierarchy of needs and their potential relevance to emotional entropy and transformational learning during international service-learning.

Similarly relevant to individual and collective learning, Dirkx (2001) asserts that negotiating the fluid boundaries of *I* and *We* is a constant dilemma whether within the context of family, friends, work groups, or class communities. The challenge is how to maintain the integrity of the self (*I*) while connecting authentically with others (*We*). Given that the quintessential task of global agency is to connect the self to others across vast personal, social, and cultural domains, two additional pedagogical conceptual models were included in pre-departure class meetings: Jones and McEwen's (2000) conceptual model of multiple dimensions of identity and Kolb's (1984) Learning Styles model.

Jones and McEwen (2000) describe individual identity as encompassing a core sense of self that is constructed from aspects of identity that interact with our social environments (see diagram 4).

Diagram 4

Multiple Dimensions of Identity (Adapted from Jones & McEwen 2000)
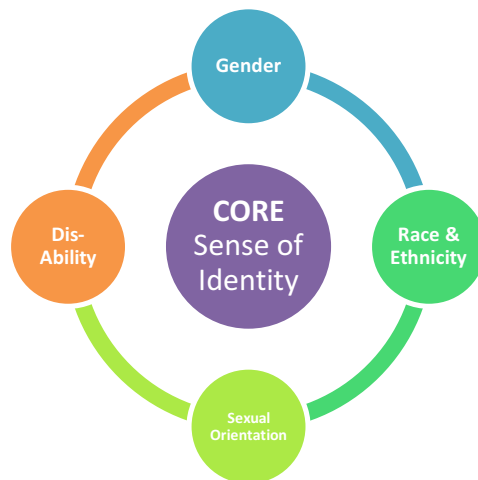
While our core sense of self is usually quite resilient, individual aspects of our identity are affirmed or experience dissonance depending on the relative amount of congruence between our self and that present in the social environment at that moment. So, for example, a student of color in a primarily white class may feel a heightened sense of his race/ethnicity. A female student in a primarily male engineering class may feel a heightened sense of her gender.

The higher the dissonance between dimensions of the self and our social surroundings, the higher become the emotional and psychological demands for maintaining one's core self. Thus, "foreign" sociocultural traditions, like arranged marriages in India, may challenge not only American students' social constructions of family, but may challenge their own notions of gender roles and gender-related choices as a part of the core self.

Finally, during pre-trip class sessions, students identified their preferred learning styles based on Kolb's (1984) Learning Styles model (i.e., concrete experience, reflective observation, abstract conceptualization, and active experimentation) and the students discussed aspects of learning

community leadership on the upcoming trips (such as who would help the group negotiate airport connections or direct the planning of service site activities) best undertaken depending on one's learning style proclivity for "feeling", "observing", "thinking", or "doing".

In sum, *Preparation* content, interactions, and activities were constructed to "support and challenge" (Sanford 1966; 1967) students' cognitive and affective domains for optimal learning prior to, during, and after the international experience. The goal was to amplify students' understanding of themselves, concepts of international service-learning, fundamentals of historical and contemporary issues in India, and community complexities inherent in community engagement. Faculty aspirations for student global agency development were premised upon revisiting these pedagogical and epistemological foundations while in-country (*praxis*) and upon return (*progression* of learning).

Praxis

The term *praxis* means applying ideas to real-life situations; or, the application of theoretical research and conceptual models in problem-solving community conditions. After all, that is the purpose of learning through international serving--doing short-term good while gaining insight into issues to which academic skills can be applied toward longer term solutions.

This is the unique feature of faculty-led international service-learning (as compared to other types of volunteer service activities), *praxis* is facilitated reflection that utilizes academic knowledge in developing larger learning outcomes such as global agency. Pedagogical *praxis* helps to ensure that the international experience is truly educative, not just exotic.

At the beginning of any international service-learning experience students' ability to engage in *praxis* is usually limited. Rather, acclimation to new sights and sounds tends to take precedence (recall Maslow's *hierarchy of needs*); overcoming jet lag and adjusting to early cultural surprises and stress is taxing. Yet, a critical characteristic of emotional intelligence and intercultural competence is that how one feels does not have to dictate how one acts (Cress, Emil, & Yamashita 2013). To promote such

learning and *praxis*, the faculty engaged students in group discussions and individual writing activities as layered reflection.

Layered Reflection

In service-learning, the four multilayered epistemological principles of reflection are that it be: continuous, connected, challenging, and contextualized (Eyler, et al., 1996). Specifically, a pedagogical tool for integrating layered reflection is referred to as the DEAL Model of Critical Reflection (Ash & Clayton, 2009). DEAL is an acronym for *Describing, Examining,* and *Articulating Learning.* Based on the assumption that critical thinking is a developmental progression, the model starts with asking students to "describe" what is happening. The descriptive level is highly sensory oriented: what do students see, hear, smell, and feel?

The second stage, "examining", asks students to view the situation from different academic angles. The examining level guides students toward new perspectives: how might their views and reactions be re-reframed from multiple standpoints? Finally, in the last stage, students ponder how they can "articulate their learning" through deeper insights and possible actions for leveraging positive community change.

The DEAL model is also useful if conflict or miscommunication occurs at the service site. Since serving is emotionally, psychologically, and interpersonally "messy" (Donahue, 2011), using a framework like DEAL can help in understanding causes and possible solutions. As well, leveraging critical incidents in teaching from discord and dissonance into lessons of discernment is a pedagogical art and science.

Indeed, faculty in this case turned to the DEAL model during times of students' emotional entropy as a tool for dealing with intense feelings and in attempting to progress students' perspectives from self-referenced towards those more inclusive of global agency development. As noted earlier, student qualitative data (journal reflections, course assignments, and group discussion notes; n=24), were captured across three program years (2013, 2015, and 2017). The data were utilized as an iterative

process for developing the global agency development model and its associated pedagogical and service-learning elements. The faculty authors attempted to epistemically address students' dissonance between the American self and Indian culture that often resulted in affective outbursts and cognitive confusion of students.

Described below are two angst-provoking situations that occurred while in India. The depictions are offered as case study examples of emotional entropy dynamically interacting with students' culturally-contextualized cognitive, affective, and behavioral competencies. In other words, students' ethnocentric paradigms were fully encountering interpersonal, intrapersonal, and intercultural dissonance resulting in students' longing for emotional and psychological clarity. Utilizing direct student quotes (pseudonyms), the narratives of group interactions are adapted from instructors' journal notes to illustrate the concept of emotional entropy, its role in global agency development, and application of theories and concepts from the pedagogical model.

Locating Psychological Clarity: *Scared Out of My Mind*

Emotional entropy is the accumulative effect of overwhelming feelings brought about by acute intercultural dilemmas that create extreme cognitive dissonance. It is a state of emotional and psychological chaos where notions of the self within the context of social situations no longer make sense and that are likely to be manifested as verbal resistance, retreat, and regression rather than as reflection (see also Perry 1970 concerning issues of development versus impairment).

On their 5th day in India, emotional entropy seemed to have hold of the students collectively. It had been their initial day of direct service experiences. While the class had exhaustively reviewed the websites and initially visited the community sites to learn about the organizational missions, clients served, and service task roles they would undertake, students' actual engagement experiences with orphaned children and children with mental disabilities overpowered their preparation, expectations, and perspectives.

In the evening group discussion, when queried by faculty, "can you describe how you feel about your first service day?" Rebecca immediately stated, "It was horrible. The children fought over the toys we brought them and they screamed clinging to us when it was time to leave. I feel like we did more harm than good. I don't want to go back." She began crying and asked, "I don't have an academic background in child development; so can I go to the men's site instead? I'm too distraught to think about tomorrow."

Paul responded, "I'd love to trade with you. But seeing as they won't let us serve at the orphanage because men are considered potential 'child abusers' I have no choice." His voice raised in anger, "Talk about gender discrimination and stereotypes!"

Melinda retorted, "Well, it's a gender stereotype to think that I'm good with kids just because I'm a woman. I don't know anything about kids and I feel pressured to act like I do."

"At least you can fake it with the little kids," asserted Jeff. "The teacher put me immediately in charge of an English grammar lesson. I have no professional experience with how to communicate to mentally challenged high school students who only speak Tamil! I'm scared out of my mind."

"Scared out of my mind is precisely how I feel too," said Sarah. "I'm emotionally saturated."

Paul added, "My whole being feels assaulted. I can't work at the orphanage because I'm a man. People keep asking about my 'squishy eyes'--'what are you?'. And, I'm completely closeted here [as a gay man]. It's like the core parts of who I am don't exist."

Emily spoke up quietly, "My feelings and thinking are overloaded. I don't want to be interculturally appropriate any more. I just want to curl up on the bed and not feel and not think."

Jonathan stated simply, "I'm too steeped in emotions to cognitively analyze anything."

Silent nods of agreement were shared amongst the group.

At moments like these, when thoughtfully crafted class elements seem to go awry in the midst of prevailing emotions, instructors have little recourse but to carefully honor what students are feeling.

Still, students look to faculty to guide them in making sense of their experiences so that emotional entropy does not completely debilitate learning. The pedagogical challenge is how to balance the importance of students sharing and "describing" their experiences while offering cognitive structures for "examining", analyzing, and "articulating their learning" (recall the DEAL model).

In this instance, faculty tried a pedagogical intervention in attempting to make an academic connection to the students' emotive distress. One faculty stated, "It seems that while more academic or professional preparation might be helpful, at the core of what you're feeling is extreme dissonance between intrapersonal elements of the self, interpersonal interactions, and intercultural situations.

A U.S. educator, Ronald Takaki (1994), used a mirror metaphor in a book called, *In a Different Mirror*. He asks in the book, 'what happens when you look into a societal mirror…and you are not reflected in it?'

Takaki was writing about the college curriculum and how students of color in the U.S. often don't see their own lives and experiences mirrored in education. For college students of color, education is a 'foreign' experience that doesn't reflect who they are or want to become.

Similarly, as you're all expressing, and especially Paul as a gay, Japanese American man, it's not just culture shock or your own discomfort with the service experiences that are upsetting, but that the societal mirror of India doesn't reflect you as a 'foreigner'.

Takaki actually borrowed his mirror metaphor from the lesbian poet, Adrienne Rich (1986), who in commenting upon 'compulsory heterosexuality and gender conformity', wrote that when your likeness in society isn't explicitly evident, such incidents are 'disorienting' and create 'a moment of disequilibrium, as if you looked into a mirror and saw nothing'.

The irony is that you are seeing, hearing, smelling, and experiencing so much that your hearts and minds can't yet organize and structure these into a coherent image of India or of your own role as an American in that image."

Melinda nodded in agreement and piped in, "You're right. It's not just cultural shock or discomfort in feeling academically or professionally inadequate. I long to connect myself to the people here, but at times the situations are so foreign that I don't know how to connect 'me to them' which overwhelms me. This reminds me of the Jones and McEwen model of identity we studied. While we think that our energy is going toward external events, we are actually expending it internally to keep dimensions of our self intact as we try to connect the self to others."

Jeff offered the group, "I agree with Melinda about parts of the self. I didn't travel across the globe just to see the same image of myself. I want India to show me different reflections of myself. But I think that for me it is more like the emotional pressures regress us to our preferred learning style in Kolb's (Kolb, 1984) model. I'm an abstract conceptualizer. And, he added with a smile that brought humorous relief to the whole group, "I just want all the abstract emotional, interpersonal, and intercultural encounters neatly categorized into clear academic components that are easy to understand and digest."

The two conceptual models, dimensions of identity (Jones & McEwen, 2000) and learning styles (Kolb, 1984) were conversationally embraced by the students the rest of the reflection session. The models became important pedagogical *praxis* ladders for students in stepping above their emotional entropy and into higher levels of cognitive analysis. And, throughout the India experience, the models continued to provide new language platforms for students in describing how the foreign and the familiar were reflected on their academic, professional, intrapersonal, interpersonal, and intercultural journeys toward global agency.

Locating Emotional Clarity: *The Dissonance of Arranged Affection*

Each evening the class had discussion sessions to reflect upon the day's events, to "describe" what had been seen, heard, smelled, and to try to use academic frameworks to put into a larger context what could be "examined" analytically and then "articulated" as insights and potential action steps. By

sharing experiences, events and views of ourselves in those events are differently reflected through the mirrored language of others in our yearning for insight. According to Mezirow (2000), insight and "personal transformation leads to alliances with others of like mind to work toward effecting necessary changes in relationships, organizations, and systems, each of which requires a different mode of praxis" (252). For praxis to be realized, affective and cognitive domains must be in connection and the self and community must find components of commonality. In this case, the setting of dissonance was student witness of a traditional Hindu wedding in which the bride did not meet the groom until the moment of the ceremony at the temple.

Sarah expressed: "As a feminist, my head and heart were exploding for that poor woman! She was so beautiful and gracious, but the patriarchy determined her destiny without any regard for her as an individual. I wanted to yell 'stop!"; 'run away'."

Erik chimed in: "But don't forget that the groom was 'stuck" too. He probably had very little choice in the matter and was freaking out too."

Katya offered a counter perspective: "Because we are uncomfortable with arranged marriage, we're assuming that they were not happy and were just going along with it. We're imposing our Western thoughts and emotions on these individuals with truly different traditions and truly different feelings and thoughts about those traditions."

Steven concurred: "I think we can thoughtfully critique systems that have the potential for exacerbating gender inequities. But, we need to claim our positionality in that critique and realize that we don't understand the thoughts, feelings, or dynamics of those involved. As a Westerner, I question a system that can 'force' rather than 'arrange' love and happiness. But I have to open myself to possibilities that 'arranged affections' can grow into love over time; like my cousin who adopted a little boy from China. She loved him initially because she was responsible for him and then her real love for him grew organically over time."

Sarah responded: "Wow, Steven, your example just shifted my consciousness. I literally feel the synapse in my mind connecting. I honestly never thought about arranged marriage as liken to adoption. This is a different way of thinking about and feeling the situation. And you might just be right; maybe they will both come to love each other like often happens in adoption. In fact, it must actually happen a lot or people all over India would be unhappy and ultimately reject the system."

During preceding evening reflection sessions, students became more adept at recognizing their own ethnocentric reactions and emotions and how entropic emotional regression could limit alternative perspectives and ethnorelative insights. Indeed, over time, the potency of emotions receded allowing students to consider intercultural, interpersonal, and intercultural events as key reference points in analyzing and 'examining' larger political, economic, and health care issues. As well, students also began to 'articulate" and express the weight of their new responsibility for creating global consciousness awareness and change for the sake of all humanity. They also voiced concern about how to adequately engage in such efforts upon their return.

"I'm scared about how to answer people when they ask, 'so how was your trip?' How am I even supposed to begin answering that? I know that people are going to want a clear and concise answer for what I experienced and what I learned, but that is not something I can do yet."

Progression

The concept of the progression of learning is fundamentally about making meaning of the experience—how are things, including individuals, different or not? If things or people did change, why? And, what types of action can facilitate differential outcomes—what needs to happen to realize positive change? In other words, what was learned? And, what was leveraged as effective impact?

Learning Outcomes

Progression of learning is essential in the formation of global agency; to identify what skills and knowledge were developed or enhanced as part of the experience. So too, such continued reflection

and processing should lead to important iterative revisions in curriculum and program design for

increased efficacy and effectiveness (Stokamer, 2011). Finally, progression elements, such as data

collection, can also set the stage for faculty engaged scholarship (Cress & Donahue 2011).

Certainly, in the case of re-entry from an international experience back to the U.S., students

need the opportunity before leaving the host country to consider what changes they have experienced

and what progressions of change might they anticipate upon their return. In-country discussions should

explore how students might best negotiate experiences of re-entry culture shock, any associated

emotional entropy, and return to their "normal" lives.

Leveraging Change and Conscientization

As well, evaluation of impact on community is best begun in conversational review with

community partner sites. Determining the impact of project-based service is often easier than

determining the impact of community-based service because of the existence of a tangible product (a

new website for the community partner) or object (a new house for a family).

Having a reference point such as, "I built that brick wall", or "I dug that water well" helps

students to feel that their contributions are durable. In contrast, service tasks like playing with children

in an orphanage are harder to quantify and can leave students struggling with how to assess meaningful

impact. Hopefully, community partners or other cultural experts can help with interpreting the relative

effects.

Moreover, post trip group reflection sessions can assist students with extending psychological,

cognitive, academic, and professional learning as students compare their "foreign" experiences with

their re-entry to the familiar. Whether in writing or as a part of group discussions, the DEAL model can

be instructive in processing. For example, *describe* what it looks and feels like to once again see yourself

in the mirror of U.S. American culture? Next, *examine* how this description informs your understanding

of the concept of global agency? Finally, *articulate* how such insights will transform your ways of interacting with local and global communities in the future?

Daloz Parks (2000) describes this examination of individual consciousness as a distinctive mode of meaning making where students "become critically aware of one's own composing of reality" (6). In composing one's self-identity within the context of and in connection to community, students become cognizant of their self-authorship capacities in constructing local and global communities (Rendón, 2009).

Freire (1970) defined this type of transformational learning as *conscientization;* individuals who come to understand their contributory roles in shaping local and global realities. Indeed, *conscientization,* or consciousness commitment to positive action, is a critical quality of global agency.

As a summative progression experience in the program, the faculty authors required students to complete a final reflective paper that included first person narrative analysis in relationship to the literature and commentary on student's own conscious development of global agency.

One student reflected:

Bennett (2008) describes how teachable moments can emerge from emotional dissonance and cognitive disequilibrium. The key to a teachable moment is facilitated reflection and group processing to turn our instances of emotional anguish into cultural and cognitive insight. Our daily conversations unpacked confusion, acknowledged cultural filters, and explored alternative perspectives. Yet, our deepest learning was not borne out of cognitive intellectual roots, but rather by honoring the emotional intensity of the experience in a new-found sense of empathy and caring for ourselves and others.

Another student commented:

It is difficult to point to a particular experience and definitively say *this* was the moment when I

experienced growth in *that* cognitive, affective or academic outcome. But the course models did

help me understand how personal identity shapes your experiences in an international setting.

It was important for me reflect on my own identity as an upper-middle class White European

male. Multiple aspects of my identity played a large role in my interactions, perceptions, and

ability to connect with the culture and community. In Indian culture, being male put me in a

higher social standing and garnered more attention in many circumstances, but was not without

its disadvantages, such as the concern of my potential for child perversion due to my gender.

The duality of gender advantages and disadvantages were far more evident to me in India than

in America ultimately prompting new consciousness about gender and its dynamic interplay in

intercultural and interpersonal situations.

Finally, one student's clear statement plainly exemplifies her global agency development: "My time in

India reaffirmed for me the real need to promote gender equity everywhere."

Conclusion

Dewey (1910) noted that in the "suspense of uncertainty" and fear we tend to retreat to familiar

psychological localities unless and until we find the courage to engage in critical reflection. Emotional

entropy, especially during international service-learning programs, has the potential for arresting

developmental growth and transformational learning since it dissuades reflective praxis. As such,

pedagogical preparation, praxis, and progression strategies and instructional elements can offer

students epistemological methods for empathetic introspection of the self and others. Specifically,

utilization of the global agency development model can serve as an educational foundation for helping

students overcome emotional entropy in "foreign" situations and move toward holistic growth in global

agency. Moreover, the model offers an opportunity for scholars to test the pedagogical dimensions and

learning outcomes in alternate international settings. A final student reflective comment sums up future opportunities:

> I have only begun to unpack and reflect on my own personal experiences and transformation
> from the trip, but it is obvious at this point that without deliberate teachings and critical
> reflection in the pre, during, and post phases of the trip, I would not have walked away from the
> immersion in India with nearly the same impact and lessons learned. This deep impact and
> transformation are a direct result of a deliberate teaching approach to valuing not only the
> experience of international travel and becoming a global citizen, but also the connection and
> guided understanding of relationship to community, intercultural sensitivity, and global
> competence.

Author Note

Christine M. Cress is Professor of Educational Leadership and Service-Learning at Portland State University. She directs a Master's degree specialization in higher education and service-learning and was a Fulbright Senior Scholar to Middle East Technical University in Turkey.

Thomas Van Cleave is an Intercultural Communications Consultant and former faculty at Portland State University. He previously directed International Programs, Study Abroad, and Service-Learning at Iona College in New York.

References

Ash, S. L. & Clayton, P. H. (2009). Generating, deepening, and documenting learning: The power of critical reflection in applied learning. *Journal of Applied Learning in Higher Education*, *1*(Fall), 25–48.

Association of American Colleges and Universities. (2011). *Shared futures: General education for a global century*. Programs. http://www.aacu.org/SharedFutures/global_century/cfp.cfm

Belkavin, R. V. (2001). Modeling the inverted-u effect in ACT-R. In E. M. Altmann, W. D. Gray, A. Cleeremans, & C. D. Schunn (Eds.), *Proceedings for the 2001 Fourth Inernational Conference on Cognitive Modeling*. Lawrence Erlbaum Associates.

Bennett, J. M. (2008). On becoming a global soul: A path to engagement during study abroad. In V. Savicki (Ed.), *Developing intercultural competence and transformation: Theory, research and application in international education*. Stylus.

Blanco Ramirez, G. (2014). Trading quality across borders: Colonial discourse and international quality assurance policies in higher education. *Tertiary Education and Management*, *20*(2), 121–134.

Blessenger, P., & Kovbasyuk, O. (Eds.). (2013). *Meaning centered education: International perspectives and explorations in higher education*. Routledge.

Bloom, B. S. (1956). *Taxonomy of educational objectives: The classification of educational goals*. Longman.

Braskamp, L. A. (2008). Developing global citizens. *Journal of College & Character*, *X*(1), 1–5.

Bringle, R. G., & Hatcher, J. A. (2011). International service learning. In R. G. Bringle, J. A. Hatcher, & S. G. Jones (Eds.), *International service learning: Conceptual frameworks and research* (pp. 3–28). Stylus.

Brustein, W. (2007). The global campus: Challenges and opportunities for higher education in North America. *Journal of Studies in International Education*, *11*(3/4), 382–391. https://doi.org/10.1177/1028315307303918

Cobo, C. (2013). Skills for innovation: Envisioning an education that prepares for the changing world. *The Curriculum Journal*, *24*(1), 67–85. https://doi.org/10.1080/09585176.2012.744330

Connell, R. (2007). *Southern theory: The global dynamics of knowledge in social science*. Poplity.

Cress, C. M., & Donahue, D. M. (Eds.). (2011). *Democratic dilemmas of teaching service-learning: Curricular strategies for success*. Stylus.

Cress, C. M., Emil, S., & Yamashita, M. (2013). International service-learning: Strategies for entry, engagement, & evaluation. *Faculty-Led International Service-Learning: Pedagogical Strategies for Entry, Engagement, and Evaluation.*, 24–29.

Cress, C. M., Stokamer, S. T., Van Cleave, T. J., & Edwin, C. (2013). Global and immersive service-learning. In C. M. Cress, P. J. Collier, & V. L. Reitenauer (Eds.), *Learning through serving: A student guidebook for service-learning and civic engagement across academic disciplines and cultural communities* (2nd ed., pp. 177–190). Stylus.

Cuban, L. (2001). *How can I fix it? Finding solutions and managing dilemmas*. Teachers College Press.

Daloz Parks, S. (2000). *Big Questions, worthy dreams: Mentoring young adults in their search for meaning, purpose, and faith* (1st ed.). Jossey Bass.

Damasio, A. (1999). *The feeling of what happens: Body and emotion in the making of consciousness*. Houghton Mifflin Harcourt.

DeGioia, J. J. (2011). The impact of globalization and the future university. *EDUCAUSEreview*, *May 2011*. http://er.educause.edu/articles/2011/5/the-impact-of-globalization-and-the-future-university

Dewey, John. (1910). *How we think*. D.C. Heath & Company.

Dirkx, J. M. (2001). The power of feeling: Emotion, imagination, and the construction of meaning in adult learning. In S. B. Merriam (Ed.), *The New Update on Adult Learning Theory*. Jossey Bass.

Donahue, D. M. (2011). The nature of teaching and learning dilemmas: Democracy in the making. In *Democratic dilemmas of teaching service-learning: Curricular strategies for success*. Stylus.

Dostilio, L. D. (2017). *The community engagement professional in higher education: A competency based model for an emerging field*. Stylus.

Freire, P. (1970). *Pedagogy of the oppressed*. Continuum International Publishing Group.

Goleman, D. (2006). *Emotional intelligence* (20th Anniversary hardcover edition). Bantam Dell.

Jacoby, B., & Brown, N. C. (2009). Preparing students or global civic engagement. In B. Jacoby (Ed.), *Civic engagement in higher education: Concepts and practices* (pp. 213–226). Jossey Bass.

Jones, S. R., & McEwen, M. K. (2000). A conceptual model of multiple dimensions of identity. *Journal of College Student Development*, *41*(4), 405–414.

Kiely, R. (2005). A transformative learning model for service-learning: A longitudinal case study. *Michigan Journal of Community Service Learning*, *12*(1), 5–22.

Kolb, D. (1984). *Experiential learning: Experiences as the source of learning and development*. Prentice Hall.

LeDoux, J. E. (1996). *The emotional brain*. Simon and Schuster.

Lee, A., Williams, R. D., Shaw, M. A., & Jie, Y. (2013). First year students' perspectives on intercultural learning. *Teaching in Higher Education*, *19*(5), 543–554.

Lee, J. J., Metcalfe, A. S., & Suspitsyna, T. (2017). Introduction to the special issue. *Review of Higher Education*, *41*(1), 1.

Maslow, A. H. (1954). *Motivation and personality*. Harper and Row.

McIntosh, P. (2005). Gender perspectives on educating for global citizenship. In N. Noddings (Ed.), *Educating citizens for global citizenship* (pp. 22–39). Teachers College Press.

Mezirow, J. (2000). *Learning as transformation: Critical perspectives on a theory in progress*. Jossey Bass.

Militello, M., Ringler, M. C., Hodgkins, L., & Hester, D. M. (2017). I am, I am becoming: How community engagement changed our learning, teaching, and leadership. *International Journal of Qualitative Studies in Education*, *30*(1), 58–73.

Murphy, D. (2011). The impact of faculty reflection on international service learning experiences. *Journal for Civic Engagement*, *17*, 1–16.

Ogden, A. C. (2010). *Education abroad and the making of global citizens: Assessing learning outcomes of course-embedded, faculty-led international programming* [Ph.D. dissertation]. The Pennsylvania State University.

Post, M. A., Ward, E., Longo, N. V., & Saltmarsh, J. (2016). *Publicly engaged scholars: Next generation engagement and the future of higher education*. Stylus.

Reitenauer, V. L., Cress, C. M., & Bennett, J. M. (2013). Creating cultural connections: Navigating difference, investigating power, unpacking privilege. In C. M. Cress, P. J. Collier, & V. L. Reitenauer (Eds.), *Learning through serving: A student guidebook for service-learning and civic engagement across academic disciplines and cultural communities* (2nd ed., pp. 77–91). Stylus.

Rendon, L. I. (2009). *Sentipensante (sensing/thinking) pedagogy: Educating for wholeness, social justice and liberation*. Stylus.

Rich, A. (1986). *Blood, bread, and poetry: Selected prose 1979-1985*. Norton.

Robertson, D. L. (1988). *Self-directed growth*. Accelerated Development.

Sanford, N. (1966). *Self and society: Social change and individual development*. Atherton Press.

Sanford, N. (1967). *Where colleges fail: A study of the student as a person*. Jossey Bass.

Schattle, H. (2009). Global citizenship in theory and practice. In *The handbook of practice and research in study abroad* (pp. 3–20). Routledge.

Shahjahan, R. A., & Kezar, A. J. (2013). Beyond the "national container": Addressing methodological nationalism in higher education research. *Educational Researcher*, *42*(1), 20–29.

Shahjahan, Riyad Ahmed. (2013). Coloniality and a global testing regime in higher education: Unpacking the OECD's AHELO Initiative. *Journal of Education Policy*, *28*(5), 676–694.

Stearns, P. N. (2009). *Educating global citizens in colleges and universities*. Routledge.

Stein, S. (2017). Internationalization for an uncertain future: Tensions, paradoxes, and possibilities. *The Review of Higher Education*, *41*(1), 3–32.

Stokamer, S. T. (2011). *Pedagogical catalysts of civic competence: The development of a critical epistemological model for community-based learning* [Ed.D. dissertation]. Portland State University.

Takaki, R. (1994). *A different mirror: A history of multicultural America* (1st ed.). Hachette.

Tarrant, M. A. (2010). A Conceptual Framework for Exploring the Role of Studies Abroad in Nurturing Global Citizenship. *Journal of Studies in International Education*, *14*(5), 433–451.

Teichler, U. (2010). Internationalizing higher education: Debates and changes in Europe. In D. Mattheou (Ed.), *Changing educational landscapes: Educational Policies, schooling systems, and higher education—A comparative perspective* (pp. 263–283). Springer.

Van Cleave, T. J., & Cartwright, C. T. (2017). Intercultural competence as a cornerstone for transformation in service-learning. In T. D. Mitchell, T. Stanton, & T. Eaton (Eds.), *The Cambridge Handbook of Service Learning and Community Engagement* (pp. 204-218). Cambridge University Press.

Van Cleave, T. J. (2013). *Short-term international service-learning: Faculty perceptions of and pedagogical strategies for the design and implementation of successful learning experiences* [Ed.D. dissertation]. Portland State University.

Vygotski, L. S. (1978). *Mind in society* (M. Cole, V. John-Steiner, S. Scriber, & E. Souberman, Eds.). Harvard University Press.

Yamashita, M., & Schwartz, H. L. (2012). The coconut and the peach: Understanding, establishing, and maintaining interpersonal boundaries with international students. *New Directions for Teaching and Learning*, *2012*(131), 57–69.