

Critical Pedagogy for Health Professions and International Learning Experiences

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ABSTRACT

Experiential and community-based learning is common in health sciences education as a transition from conceptual level coursework to application of learning at the practical and practice levels. Programs typically focus on knowledge acquisition and obtaining a conceptual level understanding of the material for the initial curriculum, followed by experiential learning and application of that conceptual knowledge in a clinical setting. To address the nuances of health sciences education in the international, community-based context, this study proposes a pathway to facilitating the adoption of a new critical pedagogy accounting for an increasingly globalized and connected world and the need for mediation of the relationship between learning theory and global health education. Bierema's (2018) models are commonly utilized in health education during the initial curricular stages and are discussed, while Kolb's (1984) interpretation of Kurt Lewin's experiential learning theory is offered as the appropriate conceptualization to support the development of a critical pedagogy for international, community-based health education learning experiences. As part of this pedagogy, relevant, foundational theoretical approach to students' experiential learning should support critical observation and reflection. We recommend that educators provide practice-based education that focuses on improved outcomes of experiential learning so that learners do not just recreate their own lived experiences of order, structure and power, instead to use a critical pedagogical approach which allows learners to examine their own social conditioning and biases so that they are empowered to engage, work and live across cultures.

Keywords: health education, international experiences, experiential learning, community-based education

INTRODUCTION

With educational experiences becoming more and more globally connected and students increasingly traveling the world in preparation for leadership in this global context, a form of “critical pedagogy” is examined in this manuscript exploring potential theoretical foundations for international, community-based health education learning experiences. Twenty-first century higher education intends, at its core, to be experiential and transformational (Moore, 2013). Experts in education have maintained that the learning environment and context should contribute directly to learning outcomes, especially in the context of global health education. Given the expectation that the instructor is responsible for the successful introduction of theory and its critical application, employing critical pedagogy offers a useful paradigm for elucidating such interaction between experiential learning in global health education contexts. With the ultimate goals of promoting critical observation and reflection in the students, theories such as critical pedagogy and experiential learning serve as the foundational ‘crutches’ for the creation of global health care professionals.

Between 2019 and 2020 nearly 350,000 U.S. students traveled abroad for educational opportunities and academic credit with 20.7% focusing on business and 17% on social science (IIE Open Doors, 2020). To put this into a more global context, according to IIE Project Atlas “over 5.6 million higher education students studied abroad” (IIE Project Atlas, 2020), leaving their home countries to pursue an education abroad. As these data sources indicate, U.S. students are seeking relevant global, intercultural educational experiences that matter for, not only how they proceed professionally, but most importantly, to support the acquisition of intercultural competence that is valued when they return home and apply them in the community, classroom, or professionally. U.S. students pursuing education abroad in the health professions made up 7% of the 350,000 students in 2019-2020, or approximately 24,500 students, while NCES reports that 12.5% of the total baccalaureate students in the U.S., 15.8% master’s students, and 44.2% doctoral students in the U.S. graduated in health professions and related programs in 2018-2019 (NCES, 2021). The underrepresentation of health care professions (HCP) graduates in international study experiences indicates a need for improving access to global learning experience for health care professionals. It has been noted in research that:

health professionals’ education has not kept pace with the new emerging challenges, such as rapid demographic and epidemiological transitions, fresh emerging and re-emerging health challenges, new environmental and behavioral risks, and increasing appreciation of the social determinants of health (Zodpey et al., 2018, p. 364).

Health care professionals entering the workforce are lacking the competencies to handle the impact of international migration, which creates the need for this profession to be empowered with requisite competence and knowledge that are responsive to global mobility. With increasing globalization, international and domestic health issues also have a direct impact on the need for more students to be cross-trained in STEM (science, technology, engineering, mathematics), social sciences and health professions in order to respond to the demand for globally competent health care professionals. Further, HCPs are a growing area in higher education (NCES, 2021; United States Department of State, 2018). By examining health issues in a global context, the growing population of HCP students can be provided the opportunity to experience cross-cultural issues such as health, wellness, comparative health systems, and the social determinants of health. Students may study in various contexts, while growing an understanding about the role of language, culture, and community in global public health. Importantly, global health is not an independent, but rather a highly interdependent field that requires an education that

is equally interdependently rooted in global, content and instructional mobility (Frenk et al., 2009). Both the resulting risks and opportunities of health care education are shared by global populations that are dependent on sharing global health resources (Doobay-Persaud et al., 2018).

Increased access to international education, from the perspective of HCP students, graduate and medical schools, and employers, means that more learners have greater experience and likelihood of success with diverse populations as colleagues or patients in a globalized world that requires a specific set of knowledge and competence to thrive. Educational trends point toward increased student interest in and awareness of global interconnectedness a high demand for an education that satisfies this interest. In addition, there is a general “heightened public awareness of the global health agenda” (Jogerst, 2015, p. 240) that brings along more opportunities for private and public funding for the study of international health care issues.

Immersive global learning is essential for students to acquire experiences, cross-cultural knowledge and competence, language fluency, and with that, tools for critical analysis, problem-solving, and a tolerance for ambiguity (NAFSA, n.d.). Learning objectives for any learning program should focus on student identity development, cross-cultural understanding, academic growth, professional considerations, and language acquisition and development (IIES, n.d.). As contributors to the global community, the experience abroad has the potential to transform the lives of participants so that they are challenged to become more self-aware, engaged in experiences to re-examine their values, priorities, and constructions, and value these in others. Participating students are encouraged to recognize differences between histories and identities, cultures, beliefs and practices, with the hope that those experiences in unfamiliar communities translate to a greater, more sensitive perspectives employed in students’ home cultures. These student learning outcomes were championed more than twenty years ago when the Association of American Colleges and Universities (AAC&U, 2007, p. 2) posited that the “kinds of learning Americans need from college” clearly involve preparation for a globally interdependent world shaped by cross-cultural encounters.

However, too often educators in higher education rely on the tools of transmission of knowledge and perspectives when students are asked to engage with communities or when developing global health education programs. Consequently, “notions of best practice and effective teaching are influential at the expense of teaching based on research” (Nilsson, 2017, p. 29). While relying on previously acquired perspectives based on professional experience and collegial exchange certainly does have value in educational practice, the beneficial potential of theoretical contributions should not be ignored. There is a distinction between learned perspectives, experience, practical knowledge, science, and scholarly work that, when studied and applied holistically, might contribute to the development of educational programs. Importantly, the “tacit knowledge” of the community must be understood and engaged in the learning experience (Fitzgerald et al., 2012).

As educators, our responsibility lies in ensuring that international communities, the academic community at home, and the community of engagement are respected. In addition to that, maintaining a “centrality of engagement” while critical for advancing knowledge, also recognizes and values knowledge generation that can occur in non-academic settings as well. This renewed commitment to the community serves to strengthen partnerships and to better represent the diverse set of experiences which deserve representation in learning environments (Fitzgerald, et. al, 2012). With this approach, learners can fulfill their learning outcomes and experience transformation that equips them to promote a heightened sense of

awareness, and a greater understanding of the historical, political, economic, and social forces that actively shape their engagement with communities. Reciprocally, the community that invested its tacit knowledge into students' learning experiences is also strengthened. While different learning models rely on the experience itself to be inherently educational, other approaches intentionally address experiential learning with the expectation of transformation (Loh et al., 2015).

Health education is generally understood as an interdisciplinary field, merging “different understandings of the world, the human being and society” (Vila & Vila, 2007, p. 1179). Therefore, global health education, in particular, allows learners to broaden their horizons, perspectives as well as their world views, while simultaneously developing ideas and acquiring competence to transform and improve human society on a global level. Vila and Vila (2007) emphasize in their analysis of health education in the Brazilian context that educational practices within this field provide a space for the production and application of knowledge that is aimed at a critical reflection within the learners. Given this reflective core component in global health education, new pedagogies should be founded in critical perception and involve reflective analysis, open dialogue, and continual engagement with respect and awareness.

THEORETICAL CONSTRUCT

A pathway to facilitating the adoption of a new critical pedagogy is the mediation of the sometimes-strained relationship between theory and practice. Experiential and community-based learning is common in health sciences education as a transition from conceptual level coursework to application of learning at the practical and practice level. Programs typically focus on knowledge acquisition and obtaining a conceptual level understanding of the discipline for the initial curriculum and in a pre-departure setting, followed by experiential learning and application of conceptual knowledge in a practice or community setting. To address the nuances of health sciences education in the international, community-based context, Bierema's (2018) models that are commonly utilized in health education during the initial curricular stages are discussed. However, for a more comprehensive approach that addresses the entire experiential learning cycle, Kolb's (1984) interpretation of Kurt Lewin's experiential learning theory is offered as the appropriate conceptualization to support critical pedagogy for international, community-based health education learning experiences.

RESEARCH METHOD

In this paper we analyzed multiple pedagogies used in the delivery of international, community-based health education learning experiences and global health education. In particular, we examined a form of “critical pedagogy” and explored potential theoretical foundations for international, community-based health education learning experiences. We discuss the models and offer practical steps for theoretical integration of experiential learning into the models.

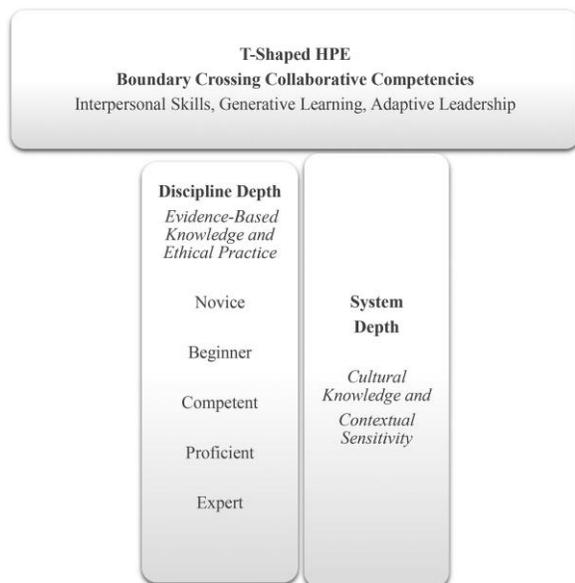
FINDINGS

Models for Experiential Learning in International Health Education

The ever-changing contexts of the health professions in an increasingly globalized world demand educational practices that consider transformative and interdependent aspects of the field. Bierema (2018) describes two models of adult learning in health professions education that are based on these developments within health professional education (HPE): T-Shaped HPE and the “Impact on Business” (IOB) model. While not specifically created for learning within international programs, both models present a solid base for the re-imagining of the international learning experience.

The transformational-oriented HPE model (Bierema, 2018) focuses on a shift from merely memorizing facts to a more active and integrated analysis and synthesis that ultimately leads to informed decision making. A “transitioning from seeking professional credentials to developing core competencies for effective teamwork” (p. 23) is accompanied by an adaptive approach to the use of learning models that supports globality to be employed in local and/or global contexts. Interdependent HPE is based on the idea of health care as an interprofessional field with networks and collaborations connecting often isolated specializations of health professionals. The main idea in this type of adult learning is that “education needs to take a more global, outward perspective on the education and learning process” (p. 30). The resulting model, T-Shaped HPE, combines the three aspects of collaboration, specialized competencies and contextual awareness and knowledge (Fig. 1) and merges the ideas of transformative and interdependent educational approaches. Lastly, and importantly, Bierema (2018) acknowledges the global reach and importance of a strong health care education where “gaps in health advances and persistent inequities in quality of health care exist” (p. 28).

Figure. 1. *T-SHAPED HPE*



Source: Bierema (2018), p. 31.

The Impact on Business (IOB) model (Fig. 2), originally created by Corbett and Ho (2012) and modified by Bierema (2018), merges the idea of teaching health care competence with desired outcomes such as adaptive leadership and effective communication.

Figure. 2: *IOB MODEL*

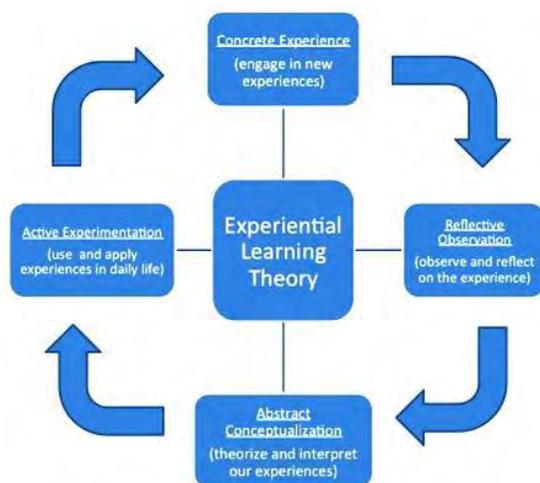


Source: Corbett & Ho (2012) with modifications by Bierema (2018)

The models above are useful for pedagogy in face-to-face classroom settings. However, international, community-based learning environments require a critical examination of pedagogy. When students leave the home institution, face-to-face classroom setting and enter the space of international communities for practice-based experiences in health education, different learning models are needed to support student learning. While health education curricula have historically included theoretical knowledge at the beginning of the program and clinical practice in the latter part, it is now argued that early practical experience are beneficial to immerse the student in “the social context of practice and strengthen students’ affective and cognitive learning” (p. 287). Practical experience in a globalized context entails knowledge on how to successfully operate in different cultural environments and social interactions (Dyjack et al., 2001). International health education programs are ideal tools to deliver those exact competencies. These learning experiences not only add to the value of global health education, and they are an essential component for any international health profession learning experience.

Experiential Learning Theory

Experiential learning theory (ELT) is often used to inform practice-based learning experiences and is appropriate for application to the international, community-based health professions education experience. The goals articulated in ELT are to achieve increased knowledge acquisition, skill development, clarification of values and enable the learners to contribute to the overall benefit of their communities (Hedin, 2010). This still incorporates the central element of an active and integrative learning experience of the T-Shaped HPE model. Kolb (1984) adapted Lewin’s scholarship of a testable model for action research and training, “The Lewinian Experiential Learning Model” into a practical, four stage method by which to engage an experiential learner in a meaning-making process from a direct experience. Figure 3 shows this model:

Figure 3. *EXPERIENTIAL LEARNING THEORY*

Source: Kolb (1984), p. 5

The first stage of the cycle is the concrete experience itself, and in this case, the international study or practice-based experience. This experience is the foundation for the opportunity to learn. The second stage, reflective observation, describes students' immersion experience in a different cultural setting, which requires engagement of observation and reflection behaviors. The third stage, abstract conceptualization, requires the learner to start to explain that experience and to continue the process of

knowledge generation. The goal of this stage is to create concepts to be developed and applied in the application or active experimentation stage. This stage requires the incorporation of other sources of knowledge such as other sources of data or scholarship, then to engage active analytical competence by which to process the new experiences with a new context. Finally, the fourth stage describes students' full application and integration of the experience.

Kolb's (1984) adaptation of Lewin's work on experiential learning is useful as it explicates students' assimilation in the international learning context: knowledge is continually generated through personal, then contextual environments, then the process of conceptualization to facilitate the meaning, then through the utilization of other sources of knowledge to create new solutions to problems. This integrative approach to learning and application of knowledge draws on the competencies and behaviors suggested in both the T-Shaped HPE and IOB models that address pedagogy and student learning outcomes. Viewing adult education as an integrative process is an important tool to directly enhance global health profession education. Central to the development of reflection in the ELT model is the integration of theory with practice, and to give the learner the opportunity to put emotions, thoughts, and ideas into action. However, with this transformation of experience into knowledge (Kolb & Fry, 1975) and by reflecting on the experience, learners can gain a general understanding of a new situation, then can actively generate new understandings, perspectives, and knowledge. Transitioning learners in the field from experience to thinking with intentionality requires systematic planning to take the original data generated by the observation, then develop those experiences into concepts, theories and explanations. The process of integrating ideas, since we typically integrate an experience through our own ideas or do so through a collaborative process, takes place with others, as a part of a group.

Kolb's Stage 3, abstract conceptualization, speaks to the integration of foundational theories and interpretation of experiences. Students as well as faculty have experiences that shape their "lenses" or worldview. With careful attention to a critical pedagogical approach to international learning experiences, these perspectives or "lenses" can be acknowledged during the learning process. Rather than something that needs to be overcome, our lenses are phenomena that need to be consciously recognized and integrated into the learning experience because they will dominate learning experiences. Intentional strategies to identify student perspectives and experiences in the early stages of experiential learning support their abilities to move through Kolb's Stage 2 of observation and their capacity to actively create and conceptualize proper meaning to an experience.

As part of this pedagogy, relevant, foundational theoretical approach to students' experiential learning should support critical observation and reflection. Without this critical pedagogical approach, students' learning may be inhibited because they do not have the opportunity to examine their own social conditioning, biases, stereotypes and mores and, without deliberate thought, may impose them on other cultures, contexts and histories. In order to support the development of students and practitioners in expanding their practical experiences and cultural lens, the foundational theories of global health education must also be deployed during this stage of experiential learning. It is particularly in the context of study abroad experiences that Kolb's (1984) model can be used to guide experiential learning reflections (Erdem Mete, 2019).

Practical Steps for Theoretical Integration into the Learning Model

Like any knowledge creation, learners in Kolb's Stage 4 are required to assemble meaning from multiple sources, including the experience, observations, data or other empirical work, and scholarship. Activities for the field include exercises to take this first step in explication and to engage in the intellectual process and careful analysis of those initial perceptions of experience. This exercise is intended to move beyond journaling and adopt a more scholarly perspective of conceptualizing experience as knowledge generation, especially when encountering and making sense of new experiences.

Kolb's Stage 4 symbolizes the learner's transition to active experimentation with the knowledge acquired in the international learning setting. Knowledge generation requires the active conceptualization of an idea from experience. Thinking with concepts requires the integration of a different types of experiences and observations. It is during the conceptualization phase that it is time to integrate yet another type of data to the experience and initial observation of events that is recognizable or knowable. For further knowledge generation, it is necessary to take an encounter with the physical world and turn it into an idea by creating a concept or grasping a concept. This step does not require planning, implementation, or achievement, but extracting the experience, and converting it into a meaningful discovery. This conversion happens under a set of extenuating circumstances that require mindful facilitation due to the student being immersed in a learning environment that is outside of her typical frame of reference, or set of circumstances, histories, events, personal biographies. A practical facilitation of this theory integration process must be rooted in the curriculum, and could include setting up guided dialogues, involving community partnerships, listening exercises as well as other exercises actively deconstructing stereotypes.

These activities require the learner to take from experience, something otherwise seemingly ambiguous or vague, to an actual construct that is more concrete. Especially in practice-based experiences, it is essentially that one could start to see or develop measures useful for the field. To formulate a construct from an experience and to give it meaning, one must then supplement that idea with

another type of scholarly production such as literature, then also propose it to the group to test it for reliability and validity. It is then, through discussion, that the initial experience and conceptualization are made more-narrow or defined to become concrete. During this step of discussion, one must look for consistency, agreement, and disagreement and this stage is preparation for formulation of the problem. Transforming the oral discussion into a written documentation can additionally increase the impact, since “reflective writing as a process and practice can be used to engage deeper experiential learning” (Dressler et al., 2018, p. 491).

DISCUSSION & IMPLICATIONS

Integrating theoretical models such as Kolb’s (1984) model for experiential learning with existing models such as Bierema’s (2018) T-Shaped HPE and the Impact on Business (IOB) models are proposed to generate a more reflexive, genuine and ethical learning experience for students. This critical pedagogy approach to international community-based learning experiences not only supports student development and practice, but also articulates the tacit knowledge and value of the community where the learning occurs. Thus, the experience is reciprocal and mutually beneficial for all collaborators (Fitzgerald et al., 2012). Global health education, in particular, must be supported by learning experiences that move students from their limited experiences and “lens” and affirms the tacit knowledge of new communities and cultures. This learning experience is reciprocal in the exchange of knowledge, with faculty and students emerging with new “lens” to approach their leadership roles in community and global health as such international, community-based health education experiences provide students the opportunities to acquire and exercise the tools necessary to constructively reflect upon new and unfamiliar international contexts (Mitchell & Poutiatine, 2001).

Increased access to international, community-based educational experiences is a priority for HCPs to support global health access and education so that HCPs are prepared to practice in a context of increasing diversity and interdependency. Combining Bierema’s (2018) T-Shaped HPE and the Impact on Business (IOB) models with Kolb’s (1984) experiential learning theory in course design, learners and practitioners in global health will be better prepared with the tools of their own knowledge production before producing knowledge about others and for others. It is the responsibility of educators to provide practice-based education that focuses on improved outcomes of experiential learning so that learners do not just recreate their own lived experiences of order, structure and power, but engage in knowledge generation with the tools for seeing, working and living across cultures.

CONCLUSION

Application of this critical pedagogy in global health education requires theory-based course design, which includes an enhanced pre-departure orientation (PDO) so that students and faculty have the space and opportunity to become more familiar with the environmental context where the study experience will occur. Suggested activities for the PDO are ones to include in- depth introductions with each other and with in-country hosts. Courses of study ideal for a PDO include orientations to people, culture, history, and languages that will help students be more successful in their new immersive experiences. Without pre-departure preparation and a rigorous course design specifically intended to not just reflect and process through the same lens used at home, but to create the opportunity for students to actively deconstruct, synthesize and integrate new knowledge and perspectives, the success of the international learning experience is inhibited.

Further, students need to be given the opportunity to build a new set of tools so that they may adequately, and responsibly, construct their experiences with the new set of histories, circumstances, cultures, and contexts, relieved of the burden of their own context and rather than be limited to their own experiences. By following Kolb's four stage theory of experiential learning theory (1984), course design can actively structure learning at each of the four stages, then can be applied to the learning context and content to intentionally shape the learner's experience. Faculty leading these experiences are challenged to transform their curricula to guide students through both the theoretical and experiential learning that occurs in international contexts.

In addition to incorporating a PDO, this can be accomplished by incorporating assessment during pre- and post-departure phases of study, rigorous evaluation of the course itself, then also the use of critical reflection, case studies and simulation so that students have the opportunity to practice their growth. In conclusion, a critical pedagogy for international, community-based health education learning experiences requires that the integration of the theoretical approaches (T-Shaped HPE, IOB and ELT) shape the curricular, co-curricular and non-curricular components of the learning experience. This approach acknowledges the roles of the community, learners, and teachers to enable transformative learning that endures and shapes the HCPs practice.

REFERENCES

- Association of American Colleges and Universities (2007). *College learning for the new global century: A report from the National Leadership Council for Liberal Education and America's Promise*.
- Bierema, L. L. (2018). Adult learning in health professions education. *New Directions for Adult and Continuing Education*, (157), 27-40.
- Bureau of Educational and Cultural Affairs, Promoting Mutual Understanding, Open Doors Reports 2018, Survey of International Exchange Activity in the United States. <https://www.iie.org/en/Research-and-Insights/Open-Doors>
- Corbett, B., & Ho, R. (2012). *What's your impact on business: The Sherpa guide to business, behavior, and you*. Sasha Corporation.
- Doobay-Persaud, A., Chuang, C. J., & Evert, J. (2017). Global health pedagogy: The art and science of teaching global health. In *Global Health Experiential Education: From Theory to Practice*. Routledge.
- Dressler, R., Becker S., Kawalilak C. & Arthur N. (2018). The cross-cultural reflective model for postsojourn debriefing, *Reflective Practice*, 19(4), 490-504.
- Dyjack, D., Anderson, B., & Madrid, A. (2001). Experiential public health study abroad education: Strategies for integrating theory and practice. *Journal of Studies in International Education*, 5(3), 244-254.
- Erdem Mete, D. (2019). Learning from reflection: A case of a post-sojourn debriefing workshop with EFL university students. *Journal of Language and Linguistic Studies*, 15(4), 1376-1394. <https://doi-org.lib-e2.lib.ttu.edu/10.17263/jlls.668487>
- Fitzgerald, H.E., Bruns, K., Sonka, S.T., Furco, A., & Swanson, L. (2012). The centrality of engagement in higher education. *Journal of Higher Education Outreach and Engagement*, 16(3), 7-28.
- Frenk, J., Gómez-Dantés, O., Adams, O., & Gakidou, E. E. (2009). The globalization of health care. In *International Co-operation in Health*. Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780192631985.003.0003>
- Hedin, N. (2010). Experiential learning: Theory and challenges. *Christian Education Journal*, 7(1), 107-117.

- Institute for the International Education (IIE) (n.d.). Learning objectives for any study abroad program. <https://www.iesabroad.org/study-abroad/about/academic-excellence/learning-objectives>
- Institute of International Education (IIE) (n.d.). *Open Doors Fast Facts*. <https://opendoorsdata.org/wp-content/uploads/2020/05/Open-Doors-2020-Fast-Facts.pdf>
- Institute of International Education (IIE) (2020). Project Atlas. <https://iie.widen.net/s/rfw2c7rrbd/project-atlas-infographics-2020>
- Jogerst, K., Callender, B., Adams, V., Evert, J., Fields, E., Hall, T., Olsen, J., Rowthorn, V., Rudy, S., Shen, J., Simon, L., Torres, H., Velji, A., & Wilson, L. (2015). Identifying interprofessional global health competencies for 21st-Century health professionals. *Annals of Global Health*, 81(2), <http://dx.doi.org/10.1016/j.aogh.2015.03.006>
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice-Hall, Inc.
- Mitchell, M. M., & Poutiatine, M.I. (2001). Finding an experiential approach in graduate leadership curricula. *The Journal of Experiential Education*, 24(3), 179-185.
- Moore, D.T. (2013). *Engaged learning in the academy: Challenges and possibilities*. Palgrave Macmillan.
- National Association for Study Abroad (n.d.). Connecting people. Changing the world. Trends in U.S. Study Abroad. https://www.nafsa.org/Policy_and_Advocacy/Policy_Resources/Policy_Trends_and_Data/TrendsinUSStudy_Aboard/
- Nilsson, M. H. Z. (2017). Practical and theoretical knowledge in contrast: Teacher educators' discursive positions. *Australian Journal of Teacher Education*, 42(8), 29-42.
- United States Department of State (n.d.). USA Study Aboard, Study Aboard Data 2018. <https://studyabroad.state.gov/value-study-abroad/study-abroad-data>.
- Vila, A. C. D., & Vila, V. D. S. C. (2007). Trends of knowledge production in health education in Brazil. *Revista latino-americana de enfermagem*, 15(6), 1177-1183.
- Zodpey, S. P., Evashwick, C. J., Grivna, M., Harrison, R. A., & Finnegan, J. R. (2018). Educating the global workforce for public health. *Frontiers in Public Health*, 5, 364.

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