

Exploring the Impacts of an Agriculture-Focused Global Experience Three to Seven Years After the Program

T. Sorensen¹, T. Henderson², A. Schager³, R. Vierra⁴, M. Mecham⁵

Abstract

This qualitative illustrative case study sought to explore the impacts of an agriculture-focused global education program on college student participants three to seven years after their experience. Human capital theory was utilized as a theoretical lens and outcomes of global programs model (i.e., participant development, intercultural development, intellectual development, and professional development) as an operationalized conceptual framework. A single focus group interview followed by semi-structured one-on-one interviews with each of the participants were conducted and transcripts were analyzed for thematic content. Findings elucidated five emergent themes: Social – Traditional; Hospitality – Community; Resourcefulness – Perseverance; Resources - Career Impact, and Values - Community or Personal Impact. The findings suggest that agriculture-focused global experiences have much less to do with career choice than with career enrichment for college students. This agriculture-focused global experience left participants with lasting values that they have tried to apply within their own careers and personal lives. This study has added to the literature base by showing the mid-range impacts of an agriculture-focused global experience program where a dearth of literature existed previously. To add to our findings and provide more transferability, similar and more nuanced research should be conducted with other agriculture-focused global programs.

Article History






Received: June 12, 2024

Accepted: November 22, 2024

Published: November 27, 2024

Keywords

Puerto Rico; study abroad;
SDG 4: Quality Education

1. Tyson J. Sorensen, Associate Professor, Utah State University, 2300 Old Main Hill, Logan, UT 84322, tyson.sorensen@usu.edu,  <https://orcid.org/0000-0003-2103-1669>
2. Thomas M. Henderson, Associate Professor, California State University, Chico, 400 W 1st St., Chico, CA 95929, tmhenderson@csuchico.edu,  <https://orcid.org/0000-0001-8191-7256>
3. Alyssa Schager, Assistant Professor, California State University, Chico, 400 W 1st St., Chico, CA 95929, aschager@csuchico.edu,  <https://orcid.org/0000-0002-8092-5681>
4. Ryann C. Vierra, Undergraduate Researcher, California State University, Chico, 400 W 1st St., Chico, CA 95929, ryannvierra@gmail.com,  <https://orcid.org/0009-0008-1592-4915>
5. Michaela J. Mecham, Undergraduate Researcher, Utah State University, 2300 Old Main Hill, Logan, UT 84322, michaelaj.mecham@gmail.com,  <https://orcid.org/0009-0001-3230-4477>

Introduction and Problem Statement

Today, global experience education programs like study abroad have become a common-place practice for many universities across the United States (Faupel, 2021). Students greatly benefit from global engagement programs personally, socially, academically, and professionally (Alexander et al., 2022; McKeown, 2009; Tarchi & Surian, 2022). However, from published studies that have explored longitudinal impacts of global experiences, none have had an emphasis on students within agricultural degree programs (Franklin, 2010). In contrast, studies conducted to determine impacts on agricultural students lacked an emphasis on longitudinal impacts (O'Malley et al., 2019; Pigg et al., 2020; Zhai & Scheer, 2002). Research is needed to better understand the impacts of such experiences on participants. It is important to understand the impacts of agriculture-focused global experience programs on personal and career development of individuals, particularly for agriculture workforce development. In this study, we seek to understand the mid-range impacts (e.g., three to seven years after the experience) of an agricultural-focused global experience on participants.

Conceptual Framework

The conceptual framework used to frame this study was adapted from the International Education of Students Abroad Model Assessment Program's longitudinal alumni studies (Dwyer, 2004; IES Alumni, n.d.) in which data were collected from a large-scale longitudinal survey in 2002 from 50 years of global experience program (e.g., study abroad) participants ($n = 3,723$). The findings highlighted four beneficial outcomes of global programs on participants: personal development, intercultural development, intellectual development, and professional development (Dwyer, 2004; Garner, 2018). These four types of development served as the conceptual framework for this study.

Personal development factors, such as maturity and self-confidence are widely cited as impacts of global experiences (Garner, 2018). Students develop personal autonomy, emotional resilience, flexibility, and openness as a result of formal global experiences (Maharaja, 2018). Studies also show students develop intercultural skills through study abroad and other global experiences by gaining an understanding of their own cultural values and developing intercultural competence and cultural intelligence (Alexander et al., 2022; Deardorff, 2006; Tarchi & Surian, 2022). Global experiences of any length have been shown to increase intellectual development among participants, including increased interest in academic studies, lifelong learning, graduate school, and subsequent learning within their degree programs (McKeown, 2009; Norris & Steinberg, 2008). Global experience opportunities can also have positive impacts on the professional development of participants by helping participants understand the importance of their professional work, increasing career placement rates, and expanding opportunities within career fields (IES Abroad, 2023; Liu, 2019). While the literature highlights areas of student development as a result of formal global experiences, little is known about mid-range impacts from agriculture-focused global experiences. Findings can provide

insights and justification for post-secondary agriculture-based global programs such as study abroad and study-away experiences.

Purpose

The purpose of this study was to explore the impacts of an agriculture-focused education program in Puerto Rico on college student participants three to seven years after their experience. Initially investigating the etic perspective, central themes emerged: personal, professional, intellectual, and intercultural development. We then employed progressive focusing to refine the research questions to reflect the emic stance. Findings can inform and ultimately improve educational practices of such programs. The overall goal of the agriculture-focused program in Puerto Rico was to expose participants through experiential learning to agricultural production practices, global commerce, as well as economic, social, political, and environmental challenges of a tropical island and U.S. Territory. Thus, this research examining the impacts of such an education program aligns with many of the UN Sustainable Development Goals (United Nations, n.d.).

Methods

Thick Description of the Participants and Context

A total of eight former students who engaged in the Puerto Rico education program participated in the study. Six of the participants had participated in the 2016 cohort and were from Oregon State University while two participants participated in the 2020 cohort from California State University, Chico. Of the eight participants, two identified as male and six identified as female. Participants had a variety of educational focuses as students but were all agriculture majors at the time of their program experience. Four participants majored in Agricultural Education, one in Agricultural Business, one in Agricultural Communications, and one in Crop Science. At the time of the study, participants worked in a variety of career fields including plant science, agricultural education, and agricultural business sectors. All but two participants were still involved in the agriculture industry.

The Puerto Rico experiential learning program was conducted in 2016 and 2020 and was open to all undergraduates irrespective of agriculture major as a non-credit learning opportunity. Through an application process, 10 participants each year were selected to participate. A lead professor and a selected student (i.e., student lead) carefully and meaningfully curated an educational learning experience with the intent to give students the opportunity to expand their knowledge in agriculture, natural resources, food, culture, religion, and everyday life in Puerto Rico. Program leaders coordinated with stakeholders in Puerto Rico to provide immersive experiences for students.

Before departure, students were guided in creating personalized learning goals for the experience. These goals were to align with their educational pursuits and personal values. The development of personalized learning objectives allowed each participant to have a unique lens

throughout the experience. The final itinerary for the experience was focused on Puerto Rican agriculture, cultural traditions, sustainability, and ecotourism in Puerto Rico. Participants of the educational program spent eight days and nine nights in Puerto Rico, taking tours through local farms, dairies, meat processing facilities, plantations, haciendas, El Yunque National Rainforest, and Fajardo Bay. Students engaged with several local experts, farmers, educators, and stakeholders and were immersed in Puerto Rican agriculture, culture, religion, and history. Both the 2016 and 2020 program itineraries were very similar. Each night, participants were asked to journal as they reflected on the day and how it aligned with their personally developed objectives.

Research Design, Data Collection, and Analysis

This qualitative research study utilized an illustrative case study design approach (Stake, 2008). This case study involved two cohorts of former participants who completed the agriculture-focused global experience program in Puerto Rico in 2016 and 2020 with data collected from the participants in 2023. While Puerto Rico is a U.S. Territory, we defined it as a global experience due to the vast differences in language, culture, agriculture, environment, and social factors from the students participating. Student participants in this study traveled to Puerto Rico while studying at Oregon State University in 2016 and California State University, Chico in 2020. Via email, we invited all former participants from the 2016 and 2020 programs to participate. Six of the participants were from California State University, Chico while two participants were from Oregon State University.

For this illustrative case study, we collected three sources of data which included a single focus group interview, followed by semi-structured one-on-one interviews with each of the participants, and the collecting and analyzing of documents such as program itineraries, example student learning goals, and field notes. The focus group and one-on-one interviews served as the main data collection point in developing the emerging themes, with documents and field notes serving as secondary artifacts to support the core findings. Documents and field notes were saved from the 2016 and 2020 programs and analyzed to confirm identified themes. We conducted interviews in February and March of 2023. IRB approval was obtained before data collection began.

The focus group consisted of seven participants representing both cohorts, two from the 2016 cohort and five from the 2020 cohort. The Zoom interview began with a general research question (etic issue) focusing on broad topics related to their global experiences. Central themes began to emerge related to personal, professional, intellectual, and intercultural development. For example, participants spoke of their experiences as “very impactful,” “life-changing,” and “eye-opening” as they spoke about their career preparation, current jobs, and current life situations. We then used progressive focusing (Stake, 1995) to refine the research questions to reflect the emic issues. We also used the conceptual framework to guide the formation of questions and further analysis. Based on the emerging themes found in the group interview and the conceptual framework, we developed five groups of questions for the individual interviews with a series of follow-up questions: (a) Was there a moment or experience that left an impact on you? (b) Did your perspective change as a result of this

experience? (c) If so, how is this playing out today in your life? (d) Were there any important things you learned from this experience? How are they playing out in your life today? And (e) Was there anything you learned from the Puerto Rican people? Using these questions as the guide, a one-on-one semi-structured interview was then conducted with a total of six participants that had expressed interest from the focus group interview to take part in the one-on-one interviews. Two participants from the initial focus group did not participate in the one-on-one interview but one additional participant who could not join the initial focus group interview did participate in the one-on-one interview. Both cohorts were represented with three participants each. The six interviews each lasted approximately 30 minutes via Zoom.

The Zoom recordings of the one-on-one interviews were transcribed verbatim and then analyzed using a thematic analysis and utilizing the conceptual framework (i.e., professional development, personal development, intercultural development, and intellectual development) as a guide (Auerbach & Silverstein, 2003). Two separate researchers performed the coding process with intercoder/interrater checks for reliability and accuracy (Yin, 2014). The two lead researchers coded individually then came together to confirm the overarching themes (Yin, 2014). The initial coding yielded unanimous agreement on themes. The transcripts and the coded themes were then shared with a panel of external qualitative research experts for review and feedback (Yin, 2014). After being reviewed by the experts, an agreement was reached and five themes were agreed upon: (a) Social - Tradition, (b) Hospitality - Community, (c) Resourcefulness - Perseverance, (d) Resources - Career Impact, and (e) Values - Community or Personal Impact.

As the majority of our research team experienced the agriculture-focused education program in Puerto Rico as a student or facilitator, our involvement and familiarity may have influenced our interpretation. To establish credibility, member checking and triangulation of multiple data sources were utilized (Lincoln & Guba, 1985; Stake, 2008). We involved the participants in checking and approving the initial findings to reduce research bias (Creswell, 2013). There were no disagreements, clarifications, or suggested changes from the participants when presented with the initial findings. Transferability was established by the use of thick, rich descriptions of the study context and the participants (Lincoln & Guba, 1985). We established confirmability by clearly documenting the coding process, maintaining an audit trail, and utilizing a data bank as a reference (Lincoln & Guba, 1985). We established dependability by utilizing external researchers to conduct an external inquiry audit (Creswell, 2013; Merriam, 1988). The outside researchers examined the data collection and analysis process as well as the results.

Findings

This study sought to understand the mid-range impacts for agriculture students who participated in an agriculture-focused global experience program. Five major themes emerged from the data: (a) Social - Traditional, (b) Hospitality - Community, (c) Resourcefulness - Perseverance, (d) Resources - Career Impact, and (e) Values - Community or Personal Impact.

To maintain confidentiality, the participants in this study are represented using pseudonyms. For the sake of this study, all participants will be referred to using female pronouns.

Theme A: Social – Tradition

Participants noted that one of the greatest impacts generated by their agriculture-focused global experience pertained to their social interactions with the people of Puerto Rico and fellow participants. Throughout the interviews, participants conveyed how these interactions broadened their worldview as well as fostered an interest and respect for perspectives different than their own. Participant 3 stated, “getting out of your comfort zone and being able to be aware of different cultures makes you a more open, curious and tolerant person.” Similarly, Participant 1 expressed, “when there's people coming with different backgrounds, different opinions, different perspectives, I think that's really important to be able to recognize where they're coming from.” Participants noted similarities and differences in traditional social trends between the mainland United States and Puerto Rico as they related to agriculture. Participant 6 said,

I'm an agriculture communications major and so I'm super interested in how the public views agriculture and how the misconceptions are so present. So, there were a lot of similarities in that sense that changed my perspective just because I had no idea that the same challenges that they were facing, we are too.

Theme B: Hospitality – Community

The hospitality and sense of community demonstrated by the people of Puerto Rico left a strong impression on participants. The participants seemed to compare the hospitality and sense of community openness of the Puerto Rican people with their own personal and cultural practices in the United States. From these comparisons, the participants shared their fondness of Puerto Rican hospitality and desired to be more like them in their own everyday lives. Participant 2 reminisced on this by stating, “They were very humble, they were very kind, and they genuinely wanted to show us what they did.” Participant 3 touched on the warm and welcoming community, affirming,

I think the ability to make anybody feel welcome is something that I learned from many of the individuals that we met in Puerto Rico. And that's something that I hope I can help other people as they grow and develop in their own way, too. So those are some of the qualities that I learned from my experience with different individuals in Puerto Rico.

Many of the participants were surprised at how readily the people invited strangers into their home and how people in the United States tend to be a little more closed off. They discussed how they appreciated being welcomed into homes as complete strangers. Participant 4 reflected on a farmer's invitation to his home after their tour, stating,

He invited us to his home, and we ate and drank, had a merry time, and it just showed us how he embraced us in his culture and life. I danced with the mother and the grandmother. It was a good time.

Other participants discussed similar experiences of being welcomed into the home as a complete stranger but treated like family. Participant 3 stated,

She invited all of us over to her house and we ate and hung out and played with her little kids, and she showed us around her everyday activities. It was just such a cool experience to be welcomed into the home of somebody who barely met us earlier that week and a bunch of college kids over to your house. And it was just a great moment, it felt like the scene in a movie, and everybody had a great time, and we just laughed and hung out. And it was just a great moment of humanity.

Theme C: Resourcefulness – Perseverance

Resourceful practices and persevering attitudes were observed by participants in Puerto Rico. Participants provided rich examples of ingenious agricultural applications and optimism demonstrated by agriculturists in Puerto Rico as well as how they have tried to emulate that attitude in their own lives. Referring to the disparity of resources, participant 1 stated,

I just realized, wow, we have so much technology and so much access to things that they do not have and they're still making the best of it and doing a great job. They're so passionate about what they do still.

Referring to how crop management processes and government regulations differ in mainland United States and Puerto Rico, participant 4 declared, "It's just crazy how there's the difference in the everyday functions of the farm. It is cool to see how they could work around that."

Recognizing the technological limitations of farmers in Puerto Rico but the resourcefulness that comes with it, participant 3 expressed:

It is interesting to see just how they're moving towards making sure that they had sustainable food resources there on the island...they were dependent on barges for a lot of their food and I'm dependent on those exports... (and) being able to grow your own food or take care of your own animals, to be able to provide for your family and the people there despite a large dependence on imports from the United States. I thought that was one of the most impactful parts of the experience for me.

Theme D: Resources - Career Impact

Although the Puerto Rican experience did not seem to alter the career trajectories of the participants while they were students, it solidified their pathway and desire to remain in the agriculture industry. Additionally, it allowed them to view their occupation through a different lens. Participant 6 explained that although the trip "didn't spark anything in me that I haven't already discovered about myself," it did, however, foster, "more of a knowledge about agriculture, the industry as a whole." Participant 6 continued, "I'm very focused on that from that agricultural communications perspective because that's what I want to do in the future, advocate for the misconceptions of agriculture." This participant was set on her decision to pursue a career in the agricultural communications world, and the experience strengthened her knowledge and resolve for this major.

Many of the participants discussed how Puerto Rican's work with much less resources than what the participants have experienced in the United States, but they find ways to be successful anyways. When reflecting on how the trip impacted her perspective, Participant 2 discussed how the United States farmers use so many technological advancements in

agriculture, including using crop insurance as a way to protect their investments. They also noted that in the United States there are also too many rules and regulations. Yet, seeing how Puerto Rican's farmed and dealt with natural disasters (i.e., hurricanes), changed their perspective. Participant 2 stated, "I remember going out to the pineapple farm and they did everything by hand...there was no technology, there were no tractors." Comparing the regulatory framework between mainland United States and Puerto Rico, Participant 2 discussed the agency of farmers in Puerto Rico and their ability to grow crops how they want to but with potential lack of concern for the environment. Participant 2 continued:

I think California is a huge leader in agriculture in terms of environmentalists. Puerto Rico doesn't have that. Puerto Rico is like...if it's going to work and it's going to grow, this is what we're going to do. And so those things are total opposites because we in California can only use X, Y, and Z where Puerto Rico can probably use A through Z... there are less limits...I work in crop insurance, so I think about this more now than I did before the trip.

Theme E: Values - Community or Personal Impact

Students' experiences in the agriculture-focused global experience program impacted their personal lives in a way that has made the participants want to be better people.

Correspondingly, participant 5 remarked, "one thing that stuck out to me the most is how selfless [stakeholder] was to have us stay in her home and opening us up to Puerto Rico living and actually getting a real look at culture." She continued,

I think about how generous she was to us, and it makes me want to give to others and to teach them our side of agriculture and things. It definitely changed my outlook on helping others and being able to share knowledge.

Participant 1 discussed the challenges the Puerto Rican people face and how that makes them better people. She stated,

They are so passionate about what they do still, and if this was my own family's operation here and we had to deal with all the problems they did, I don't know if we would be as grateful and... have as much of a positive outlook on things. That was cool to see...and is an example of how my perspective was changed during the trip.

The participants discussed how the Puerto Rican people, despite whatever was going on around them, always found time to prioritize their relationships with people. They discussed their admiration for how they keep focused on what is most important, and how this is an example for others to live by. Participant 6 discussed:

There's so much to do in the world and there's so much to see so it's sometimes hard for me to live in the moment, take a breath, take a step back for a minute from everything and value the relationships and the people around me that I think that they do. I think it would be nice to be more like that. I'm so busy doing everything... I feel like there's always something that you can learn from the people around you. And I think all of us experienced something in Puerto Rico that we're like, oh, I should probably really take advantage of family and friends and everything, like the way that they do. But sometimes it's hard.

Conclusions, Discussion, and Recommendations

The findings of this study revealed five key themes related to mid-range impacts of participating in an agriculture-focused global experience. Our findings suggest that agriculture-focused global experiences have much less to do with career choice than with career enrichment. It is possible that with the focus on personalized learning goals, which tended to center around each of the students' chosen careers, the experiences were contextualized through that lens and not on career choice. While that could be plausible, these findings seem to also be supported in the literature. Other studies show agriculture-focused global experiences stimulate interest and deepen understanding within their own chosen career fields (Liu, 2019; McKeown, 2009; Norris & Steinberg, 2008). Faculty leading agriculture-focused global experience programs should consider this finding as they think about the purpose and goals of their own programs.

It is interesting to note that the participants seemed to focus less on their careers and more on other aspects of their life when describing the impacts of the global experiences. While this research focused holistically on the mid-range impacts of an agricultural-focused global experience, further research could be beneficial to explore in more detail how and why the experiences impact their agricultural careers. Such research could have implications for colleges and universities of agriculture and other agriculture-based training programs.

The brief agriculture-focused global experience in Puerto Rico left participants with lasting values, memories, and mottos. The experience fostered cultural understanding, built participant knowledge, broadened perspectives, and strengthened relationships. Serving as the conceptual framework for this study, the four categories of personal, intercultural, intellectual, and professional development were intensified. Participants gained global awareness and an appreciation for cultural norms, such as hospitality and generosity. The resourcefulness of the Puerto Rican agriculturists, who achieved outcomes with limited resources, left an impression on participants and impacted their approach to professional and intercultural development. The immersive nature of the experience cultivated opportunities for participants to interact and collaborate with producers and industry professionals, shift paradigms, explore problem solving strategies, and experience the social inner workings of a team. By their own accounts, participants seek to apply their personal and professional growth to their own careers, thereby becoming more valuable assets in their respective workplaces. With such profound results, it is recommended that institutions provide and illuminate opportunities for authentic agricultural-based experience programs.

Depending on the year, interests, and major of college participants, faculty may consider elevating awareness of global agricultural careers prior to and during the study abroad experience. Considerations may include intentionally selecting students from a multitude of agricultural majors and incorporating activities and discourse relevant yet not limited to agricultural practices, culture, food security, and agricultural careers. It is recommended that participants should immerse themselves fully by following the natives' ways of life, even if for a brief period of time, for an authentic experience. Whether implementing daily journaling

centered around learning goal(s), partner reflection with the use of prompts, and/or group debrief sessions; reflective learning should be practiced throughout the experience. Furthermore, it is recommended that faculty leads consider a cross-collaboration with other institutions to encourage interdisciplinary reflection, learning, and content exchange.

This study has added to the literature base by showing the mid-range impacts of an agriculture-focused global experience program where a dearth of literature existed previously. Based on our findings, agriculture-focused global experiences seem to be a productive investment for student development that has impacts well beyond the experience itself. More longitudinal research is needed to determine long-term impacts of agriculture-focused global experiences. Moreover, further research should be conducted to determine if/how the number of participants and/or universities affects the quality and impact of the program. Researchers should consider measuring the satisfaction as well as personal and professional growth of students who assisted with itinerary development versus those who did not. Location and relevant activities could also be examined to determine the most empowering learning experience for participants.

Acknowledgments

This study received no funding. An abstract of this research was previously presented at the American Association for Agricultural Education Western Region Research Conference in 2023.

Author Contributions: **T. Sorensen** – methodology, formal analysis, supervision, project administration, writing-original draft, writing-review and editing; **T. Henderson** – methodology, formal analysis, supervision, writing-original draft, writing-review and editing; **A. Schager** – formal analysis, supervision, writing-original draft, writing-review and editing; **R. Vierra** – investigation, data curation, formal analysis, writing-original draft, writing-review and editing; **M. Mecham** – investigation, data curation, formal analysis, writing-original draft, writing-review and editing.

References

- Alexander, K. C., Ingersoll, L. T., Shields, C. G., Miller, M. L., Gipson, J. A., Calahan, C. A., ... & Alexander, S. C. (2022). Cultural intelligence and short-term study abroad length: The effect of an undergraduate cultural development course and short-term study abroad program on student CQ. *Frontiers: The Interdisciplinary Journal of Study Abroad*, 34(2), 280–301. <https://doi.org/10.36366/frontiers.v34i2.567>
- Auerbach, C., & Silverstein, L. B. (2003). *Qualitative data: An introduction to coding and analysis*. NYU Press.
- Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches*. SAGE Publications.

- Deardorff, D. K. (2006). Identification and assessment of intercultural competence as a student outcome of internationalization. *Journal of Studies in International Education*, 10(3), 241–266. <https://doi.org/10.1177/1028315306287002>
- Dwyer, M. M. (2004). Charting the impact of studying abroad. *International Educator*, 13(1), 14–17.
- Faupel, C. (2021). *A historical analysis of U.S.-based study abroad program providers*. [Doctoral dissertation, University of South Carolina]. Scholar Commons. <https://scholarcommons.sc.edu/etd/6301>
- Franklin, K. (2010). Long-term career impact and professional applicability of the study abroad experience. *Frontiers: The Interdisciplinary Journal of Study Abroad*, 19, 169–190. <https://files.eric.ed.gov/fulltext/EJ936414.pdf>
- Garner, A. E. (2018). *The impact of the Gilman Scholarship on underrepresented students studying abroad: A qualitative exploration of psychosocial outcomes* [Master's thesis, Penn State University]. Electronic Thesis and Dissertations for Graduate School. <https://etda.libraries.psu.edu/catalog/15192aeg23>
- IES Alumni. (n.d.). *Alumni survey results*. <https://www.iesabroad.org/about/alumni-survey-results#50-year-alumni-survey>
- IES Abroad. (2023). *Career outcomes of study abroad students: Survey of IES abroad alumni 2012–2015*. <https://catalogs.iesabroad.org/career-outcomes-of-study-abroad-students-2012-2015-survey/page/1>
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry* (Vol. 75). Sage Publications.
- Liu, W. (2019). “Education abroad” for international student advisors: What is the impact on their professional development?. *Journal of International Students*, 9(1), 306–319. <https://doi.org/10.32674/jis.v9i1.258>
- Maharaja, G. (2018). The impact of study abroad on college students' intercultural competence and personal development. *International Research and Review*, 7(2), 18–41. <https://files.eric.ed.gov/fulltext/EJ1188735.pdf>
- McKeown, J. S. (2009). *The first time effect: The impact of study abroad on college student intellectual development*. Suny Press.
- Merriam, S. (1988). *Case study research in education: A qualitative approach*. Jossey-Bass.

- Norris, E. M., & Steinberg, M. (2008). Does language matter? The impact of language of instruction on study abroad outcomes. *Frontiers: The Interdisciplinary Journal of Study Abroad*, 17, 107–131. <https://files.eric.ed.gov/fulltext/EJ899299.pdf>
- O'Malley, A. M., Roberts, R., Stair, K. S., & Blackburn, J. J. (2019). The forms of dissonance experienced by US university agriculture students during a study abroad to Nicaragua. *Journal of Agricultural Education*, 60(3), 191–205. <https://doi.org/10.5032/jae.2019.03191>
- Pelinescu, E. (2015). The impact of human capital on economic growth. *Procedia Economics and Finance*, 22, 184–190. [https://doi.org/10.1016/S2212-5671\(15\)00258-0](https://doi.org/10.1016/S2212-5671(15)00258-0)
- Pigg, J., Richardson, M. A., Roberts, R., & Stair, K. S. (2020). Awakening transformative learning: A comparison of the dissonance experienced by agriculture majors during study abroad courses to Costa Rica and Thailand. *Journal of International Agricultural and Extension Education*, 27(3), 132–147. <https://doi.org/10.4148/2831-5960.1104>
- Stake, R. E. (1995). *The art of the case study*. Sage Publications.
- Stake, R. E. (2008). Qualitative case studies. In N. K. Denzin & Y. S. Lincoln (Eds.), *Strategies of qualitative inquiry* (pp. 119–149). Sage Publications.
- Stehr, N., Adolf, M., Mast, J.L. (2020). Knowledge society, knowledge-based economy, and innovation. In: E. G. Carayannis (Ed.) *Encyclopedia of Creativity, Invention, Innovation and Entrepreneurship*. (pp. 1536–1541). Springer, Cham. https://doi.org/10.1007/978-3-319-15347-6_440
- Tarchi, C., & Surian, A. (2022). Promoting intercultural competence in study abroad students. *European Journal of Psychology of Education*, 37, 123–140. <https://doi.org/10.1007/s10212-021-00554-0>
- United Nations. (n.d.). *The 17 goals*. <https://sdgs.un.org/goals>
- Yin, R. K. (2014). *Case study research and applications: Design and methods*. Sage Publications.
- Zhai, L., & Scheer, S. D. (2002). Influence of international study abroad programs on agricultural college students. *Journal of International Agricultural and Extension Education*, 9(3), 23–29. <https://doi.org/10.5191/jiaee.2002.09303>