VIRTUAL EXCHANGE
Annotated Bibliography
How to Use this Resource

Virtual exchange has — for years — been a powerful tool to support student learning outcomes and promote equity in the development of cultural competencies. COVID-19 has created an urgent imperative for higher education faculty to gain skills quickly, distributing internationalization efforts across campuses. TIEC created this annotated bibliography to better understand the connection between global educational experiences like virtual exchange and student retention, persistence, academic success, and career success. This bibliography is meant to be a starting place for educators and administrators to understand the potential impact of virtual exchange on students. Research regarding virtual exchange is in its incipiency, though this bibliography points to a promising future for greater success of all students through virtual exchange.

About TIEC

Since 1985, TIEC has served as a pre-eminent implementer of educational capacity-building programs and projects around the world. TIEC operates as an independent non-profit organization with a robust training center based in Austin, TX. TIEC is committed to creating lasting relationships between Texas higher education and counterparts around the world through capacity-building, cultural exchange, and sustainable international educational programs. TIEC advances innovation and collaboration through a unique educational methodology that harnesses the innovation and expertise of our 37 consortium universities and over 50,000 faculty and administrators.
Acknowledgements

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Due to COVID-19, higher education institutions have the opportunity to embrace monumental shifts in education. The challenge before us is no longer limited access to information and online platforms; rather, we are faced with a widespread lack of fundamental ability to leverage technology resources to seize global experiences for Texas students. Virtual exchange programs are designed for students to gain cross-cultural experience through collaboration with higher education institutions across the globe without leaving their university (Todhunter et al., 2013). Quality, engaging, and effective virtual exchange has the potential to build students’ interest in education (Curtis & Ledgerwood, 2018; Ruth et al., 2019) and success in the workforce (Di Pietro, 2015; Kronholz & Osborn, 2016; Norris & Gillespie, 2009). Global education programs can improve student persistence, retention, and success rates (Curtis & Ledgerwood, 2018; Malmgren & Galvin, 2008; Smith & Segbers, 2018) and teach critical skills that impact students’ ability to obtain a competitive job after graduation (Di Pietro, 2015).

Globally focused educational programs such as study abroad have provided a foundation for the more recent development of virtual exchange programs. Virtual exchange allows students to gain the same benefits as studying abroad without exerting a significant amount of financial resources and time (O'Dowd 2018; Curtis & Ledgerwood, 2017). Research on virtual exchange is in its incipiency (Jager et al., 2019), though a broad body of research exists on students who participated in study abroad. The literature below describes many benefits of global educational experiences and some of the positive impacts on students, including persistence, success, retention, and career success.
Student Persistence, Retention, and Success


While global education can be viewed as a key factor in improving student retention and success, Curtis and Ledgerwood (2018) sought to determine whether global education experiences benefited students’ academic and professional careers in ways that would set them apart from non-participating peers. One hundred and eighty-one students from two institutions of higher education in Arizona and Florida completed a survey consistent with the American Council on Education (2008) research standards. Over 70% of respondents returned to their university after participating in global learning programs due to an increased interest in their field of study. Specifically, Curtis and Ledgerwood (2018) postulated that the unique style of learning and introduction of different cultural perspectives could increase student recruitment and retention rates. In addition, approximately 80% of the respondents reported global education increased their desire to work in an international career field and taught essential cross-cultural communication skills.


Malmgren and Galvin (2008) sought to determine whether study abroad programs were more than just an enticing adventure and if it impacted student graduation rates. They compared graduation rates of 5,025 participants to determine if there was a difference between those who participated in study abroad and those who did not participate in study abroad. Malmgren and Galvin (2008) discovered students who participated in study abroad were significantly more likely to graduate. Moreover, minority students who participated in study abroad were between 20.3% and 40.8% more likely to graduate.
Ruth et al. (2019) sought to determine whether study abroad programs positively impacted students’ educational outcomes. This retrospective mixed-methods study analyzed data collected from 118 college graduates who had conducted research as a part of a short-term study abroad program at Arizona State University. Students reported increased confidence and more interest in their academics. They also reported more academic and social connections and expressed a desire to pursue graduate degrees. While cultural experiences have been perceived as an opportunity to socially learn, participants also gained academic skills and reported becoming better students.


Smith and Segbers (2018) studied the impact of cultural collaboration and diversity on student success in higher education. The case study followed nine students in a Transcultural European Outdoors Studies program over several semesters to determine whether cross-cultural learning across diverse cultures influenced their educational outcomes. Throughout this longitudinal study, students’ academic resiliency improved reportedly due to overcoming cultural challenges when they collaborated with others. In addition, students reported gaining marketable skills including cultural awareness and how to resolve cross-cultural issues. As a result of the study, Smith and Segbers (2018) postulated virtual global education could be similarly impactful to students’ retention and career success due to edifying and exciting cross-cultural opportunities.
Global Education and its Connection to Career Success - Understanding Diversity & Developing Unique Skills


Bruneau, et al. (2020) conducted multi-phased research with approximately 7,700 participants from 5 countries to determine if virtual exchange could reduce the blatant dehumanization of others as well as the perception of being dehumanized by others. Quality of contact between American and Muslim college students reduced the dehumanization of Muslim students by American students, as well as the perception of dehumanization from American students by Muslim students.


Di Pietro (2015) sought to determine whether students who participated in study abroad programs gained key marketable skills that set them apart from other job candidates. The researcher used survey data of approximately 33,000 former study abroad participants collected by the Italian National Statistical Institute. Di Pietro’s (2015) research concluded students involved in global education opportunities were over 20% more likely to have employment with competitive wages within three years of graduation than students who did not participate in such programs. This large sample size reflected global education’s ability to provide students with key cultural competencies employers are seeking in candidates.


Due to the misconceptions of virtual exchange programs, Jager et al. (2019) explored the benefits of the programs within higher education. The researchers surveyed 128 administrators and faculty members at over 40 higher education institutions across Europe who have facilitated virtual exchange. Using a 5-point Likert-scale, respondents reported a high likelihood (average score of 4.7) virtual exchange significantly benefited students in key marketable areas in the workforce, such as cultural awareness, communication, and collaboration.

Kronholz and Osborn (2016) surveyed 106 students who participated in a study abroad program at a public research institution in the U.S. Over 80% of the respondents reported an increased holistic understanding of themselves as a student, including improved skills and the ability to appreciate their career field. The study confirmed with global education students experienced more opportunities to self-reflect on their decision-making, identity, independence, and resiliency, which promoted persistence in their career field.


Post graduation success is often promoted as a benefit of globally-focused education, yet little research has been conducted that directly implicates its impact on careers with international components. Norris and Gillespie (2009) analyzed the results from a 2002 survey published by International Education of Students. While the survey consisted of over 17,000 responses, the researchers used approximately 3,000 respondents who had study abroad experience. Through this retrospective study, over half of the respondents confirmed global education shaped their career path, while over 80% stated they developed key marketable skills. In addition, the students with international experience had over twice the professional connections as nonparticipants.
Other Resources about Virtual Exchange


Around the world, educational institutions use virtual exchange (VE) to cultivate cross-cultural relationships and competencies for students. In the face of COVID-19 and the multitude of challenges it poses to universities worldwide, VE has proven itself a valuable, sustainable, and accessible global learning tool. VE enables students to interdependently learn with peers in other countries through meaningful, facilitated, and collaborative online experiences that are low-cost, widely accessible, and scalable. VE provides opportunities for underserved students to participate in International programs and gain access to global educational experiences.