

An-Najah National University | IREX | University of Washington Bothell



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# **TABLE OF CONTENTS**

| Introduction                     | 2  |
|----------------------------------|----|
| An-Najah National University     | 4  |
| IREX                             | 8  |
| University of Washington Bothell | 12 |
| Conclusion                       | 15 |

The Stevens Initiative publishes case studies that explore promising practices in the virtual exchange field. Virtual exchange programs use technology to connect young people around the world to have dialogue and learn together. These case studies present innovative models and solutions to common challenges that will allow teachers, educational leaders, and other exchange practitioners to adopt and adapt these models so that young people in their communities can build the knowledge, skills, and experiences they need to prosper in an increasingly interconnected world. Learn more about virtual exchange and the Stevens Initiative, and find more resources at www.stevensinitiative.org.

# Introduction

Virtual exchange uses technology, curricula, and facilitation to give young people the opportunity to gain the knowledge, skills, and experiences they need to prosper in an interconnected world. Participants learn and work with peers around the world, building global competencies such as collaboration and communication skills, foreign language proficiency, awareness of diverse perspectives, and an interest in civic and global engagement.

Young people see the environment as a high priority issue, and many leaders recognize education should be designed to meet a "growing need for global environmental stewardship." In order to address this global challenge as they rise to positions of responsibility, young people need to understand diverse perspectives on environmental issues, and they need to recognize how societies depend on each other to find shared solutions.

This publication highlights three virtual exchange programs that connect young people in different countries to develop solutions to environmental issues. An-Najah National University's (NNU) **Green Futures Exchange** brought together university students from Arizona and the West Bank to explore sustainable engineering. IREX's **Global Solutions Sustainability Challenge** (**Global Solutions**) linked American community college students with Jordanian technical and university students to pursue sustainable solutions for the hospitality industry.<sup>2</sup> And the **Great Rivers course** allowed university students from the University of Washington Bothell (UWB) to work with Egyptian and Peruvian university students to address issues concerning the Nile, the Amazon, and the Columbia River systems.

All three cases combined virtual exchange with project-based learning (PBL), a pedagogical approach that empowers students to gain knowledge and skills by "establishing connections to life outside the classroom and by addressing real world issues." Research suggests that in addition to providing opportunities to practice teamwork and networking, PBL "can improve student learning."

Participants' acquisition of technology skills, communication skills, and crucial subject matter knowledge were explicit goals of all three programs. All three programs used both synchronous (or real-time) communication, such as videoconference or live text-based chat, as well as asynchronous communication, such as emails or text-based messages or posts shared over time. Using a variety of tools helped participants prepare for workplaces where they will be expected to communicate by e-mail, text, and videoconference with colleagues in different locations and from different backgrounds.

77

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<sup>1</sup> http://asiasociety.org/files/book-globalcompetence.pdf

<sup>2</sup> NNU received Stevens Initiative funding for the Green Futures Exchange and IREX received Stevens Initiative funding for the Global Solutions Sustainability Challenge.

<sup>3</sup> To learn more about Project-Based Learning, visit http://www.nea.org/tools/16963.htm

<sup>4</sup> https://hbsp.harvard.edu/successful-project-based-learning





# **The Case Studies**

|   | Green Futures<br>Exchange  | Global Solutions  | Great Rivers Course  |
|---|--|---|--|
| Participating<br>Institutions                         | Palestinian Territories: An-Najah National University United States: Arizona State University (Arizona)              | Jordan: Balqa Applied University, Khawarizmi Technical College, and Luminus Technical College  United States: Florida Keys Community College (CC) (Florida), Kirkwood CC (Iowa), Montgomery CC (Maryland), Northampton CC (Pennsylvania), Lord Fairfax CC (Virginia), and Northern Virginia CC (Virginia) | Peru: Universidad Nacional Agraria La Molina United States: University of Washington Bothell (Washington)  |
| Education Level                                       | Post-secondary   | Post-secondary  | Post-secondary   |
| How Participants<br>got Involved                      | All students participated via for- credit courses, either as part of the main course curriculum or for extra credit. | Most U.S. students participated via forcredit courses, with a few extracurricular participants. In Jordan, students participated via voluntary clubs.   | UWB (U.S.) and Future University (Egypt) students registered as part of their regular curriculum and for credit in their respective departments. Peruvian students participated voluntarily via a special summer seminar and received a participation certificate. |
| Primary Language<br>of International<br>Communication | English  | English   | English  |
| Program Summary                                       | Bi-national teams<br>developed green<br>building designs<br>for a West Bank<br>refugee camp.                         | Bi-national teams<br>developed business<br>case proposals for<br>sustainability solutions<br>to challenges in the<br>hospitality industry.  | Tri-national teams produced a video outlining an issue of economic, social, and/ or environmental import to one of three river systems, as well as a letter to stakeholders.   |

# **Green Futures Exchange**

# **An-Najah National University**

The Green Futures Exchange was a collaboration in 2017 and 2018 between the Faculty of Engineering and Information Technology at An-Najah National University (NNU) in Nablus, Palestinian Territories, and the School of Sustainability at Arizona State University (ASU) in Tempe, Arizona. The program was started by NNU, a university in the West Bank that serves about 23,000 students. During the program, which was conducted for three cohorts over 18 months, bi-national student teams worked together online to develop green building designs addressing sustainability challenges at the nearby Balata Refugee Camp, the most densely populated refugee camp in the West Bank. The decision to focus the challenge on a refugee camp led students to explore the conditions of those living in the camp and in the West Bank in general. The designs were judged by a panel of Palestinian experts and an ASU professor in a final competition. Palestinian students from the winning teams traveled to the United States to meet their ASU counterparts and learn about green building in the United States.

Green building is the "planning, design, construction, and operation of buildings where central consideration is given to energy use, water use, indoor environmental quality, material selection, and the building's effect on its site." NNU staff saw the program as an opportunity to raise interest in green building among their Building and Architectural Engineering students. Faculty members at ASU were also eager to have their students gain new perspectives on environmental sustainability by connecting with peers in a region thousands of miles away that presented both compelling differences and similarities to the arid Southwestern context with which they were already familiar.

#### **Program Summary**

#### **GREEN FUTURES EXCHANGE**



<sup>5</sup> https://www.usgbc.org/articles/what-green-building







## **Program Implementation**

The program launched with a kick-off webinar lecture presented by one ASU professor and one NNU professor. Following that full-group session, students were broken into 20 bi-national teams, typically including five or six NNU students and two or three ASU students. Using Facebook Messenger, FaceTime, and Skype, the teams shared feedback on each other's proposals for sustainable building ideas that would benefit the Balata Refugee Camp. In the first cohort, teams worked on issues like waste, energy, and water. All teams had access to and regularly used a private Facebook group to ask and answer questions about technical, socio-political, and cultural issues. In the second cohort, teams were asked to design a community center on a specific plot of land; each team had latitude to address sustainability challenges they felt were most pressing. During the second cohort, teams mostly communicated through Facebook and Skype. Ultimately, each team was responsible for developing a green building proposal for a new community center for the Balata Refugee Camp. During the third cohort, participants learned about circular economy (to reduce waste) and were given weekly challenges and assignments to complete with their bi-national teams. The students used the online learning management system Canvas to communicate. Faculty members serving as facilitators posted weekly assignments—including reading materials, videos, and discussion questions—to Canvas to spur dialogue within the teams. Students were encouraged to record short videos introducing themselves and to share other online video clips related to the course content.

In October 2018, NNU hosted the Green Building Virtual Exchange Symposium, a day-long event that included a virtual roundtable with project alumni from ASU and NNU, a certificate ceremony for participants, a panel discussion on project recommendations with green buildings experts, and an analysis of how virtual exchange tools can be utilized in green building efforts. More than 100 Palestinian students, university staff and administrators, and engineering leaders from the public and private sectors attended in person. News of the event reached thousands of Palestinian viewers through a newspaper article, news broadcast video segment, and widely shared social media posts. ASU hosted a closing ceremony in January 2019 to give certificates to American participants.

### **Key Components and Lessons Learned**

**Draw on participants' unique knowledge and perspectives:** Palestinian team members were able to conduct field work in and around the refugee camp, which informed project design and ensured that the work was grounded in the community's current needs. For ASU students thousands of miles away, access to field work that would be otherwise unavailable helped make the project even more interesting. ASU students learned more about living conditions in the camp and in the West Bank in general through their interpersonal communication with their NNU teammates. Alia Gilbrecht, project manager for the Green Future Exchange at NNU, shared that it was particularly exciting for NNU students to see "how much investment these American students who have never been to the Palestinian Territories" had in the project.

**Address an area of shared knowledge:** Working on architecture and engineering—with which participants on both sides were already familiar—made communication easier. One American participant said, "Using architectural drawing [and] being able to draw out our ideas as a form of communication enabled us to overcome any language barriers."

Encourage participation through competition: NNU staff reported that a competition component "increased student motivation and the amount of time invested into the projects and exchanges." In April 2018, 18 of the 20 teams presented their project models to a panel of Palestinian judges specializing in green building architecture and construction. Each team gave an oral presentation and answered judges' questions. Judges scored the teams on several criteria, including project concept, innovation, energy efficiency, water efficiency, materials, and presentation. ASU professor Harvey Bryan reviewed and scored the six highest-scoring teams to determine the winning team. Palestinian members of winning teams were invited on an in-person exchange to the United States for a week in July 2018. The delegation traveled to Washington, DC, to visit American landmarks, then traveled to Arizona to meet with their project team members at ASU, attend workshops about green building, and meet with experts in sustainability and green building.

**Plan for alumni at the start:** NNU staff said virtual exchange implementers should develop an alumni strategy before the program starts and take steps during the program to be ready for the post-participation phase. Programs can help alumni find more opportunities to build knowledge, skills, and connections related to the program topic, and alumni can help the program recruit future participants.

**Address cultural norms and power imbalances:** NNU staff feel that the Green Futures Exchange would be stronger if it helped participants understand and overcome rigid gender norms that marginalize women in the traditionally male-dominated fields of engineering and architecture.

**Prepare facilitators:** NNU staff were reminded that facilitators should be carefully selected and should go through training and orientation conducted by people with past virtual exchange experience, so they are prepared for the new and challenging experience. Facilitators must also have the time and personal interest to support and guide the participants' learning process throughout the program.

# **Measuring Success**

NNU administered surveys of participants' global competencies based on a template developed by the Stevens Initiative and the Initiative's independent evaluators from RTI International. Participants in the Green Futures Exchange reported a significant increase in their knowledge

of the other country and culture involved in the program and in their cross-cultural communication skills. American participants reported a significant increase in their ability to see the world from new perspectives and in their cross-cultural collaboration skills. Palestinian participants reported that their interest in sustainability increased, and their global competencies improved over the course of the program. The proportion of Palestinian participants who said they would focus their senior project on green and sustainable design went up 25% from before to after the program. Through interviews, participants also expressed increased awareness of the importance of developing the green building field in Palestinian society, as well as interest in pursuing green building professionally, Additionally, many participants from both the U.S. and Palestinian Territories felt "far more confident in their abilities to work internationally and with people from different backgrounds [and different] expertise [after the program]," said Gilbrecht.

Participants in the Green Futures Exchange reported a significant increase in their knowledge of the other country and culture involved in the program and in their cross-cultural communication skills.

The program also helped participants recognize the value of diversity. Gilbrecht said many participants did not have much experience before the program working with peers from outside of their field of study, let alone from another country, and so "they saw diversity as a barrier to success, or maybe something to be avoided." One Palestinian student shared that she was hesitant to join the program because she expected differing political and religious views to lead to clashes within the bi-national teams. She said the experience helped her "become more open to dealing with people from different backgrounds." Another Palestinian student shared that not only are "cultural differences not as much of a barrier as I thought, [but also] difference can actually be an asset when working on a project."

# **Next Steps**

NNU is seeking funding to continue the Green Futures Exchange. The project "has been instrumental in drawing further attention to the importance of green building" in the Palestinian Territories, according to Gilbrecht. Informal feedback from community stakeholders, such as the Palestinian Engineers Association, credits the Green Futures Exchange for contributing to an increase in green and sustainable building educational programming. Student participants have also continued to build on their experience. Alumna Ola Bara credits her experience in the Green Futures Exchange for her selection to participate in a start-up accelerator administered by the Hult Prize in London for youth working on social innovation and entrepreneurship. "If I had not been challenged to complete such a rigorous project of gathering research and working on a new building model focused on sustainability and innovation, I would not have been aware of the many innovations in green buildings and how I can apply them to similar humanitarian efforts." Bara said.

#### LEARN MORE

Impact Story: www.stevensinitiative.org/impact/designing-a-community-center-throughvirtual-exchange/

Alumni Success Story: www.stevensinitiative.org/impact/from-virtual-exchange-tointernational-accelerator-designing-green-buildings/

# Global Solutions Sustainability Challenge

#### **IREX**

From September 2017 to April 2019, the IREX<sup>6</sup> Global Solutions Sustainability Challenge (Global Solutions) connected 152 American community college students and 163 Jordanian university students through two cohorts to work together to develop business proposals for sustainable practices in the hospitality industry. Global Solutions prepares students for a workforce landscape that requires employees to communicate across cultures.

**Program Summary** 

#### **GLOBAL SOLUTIONS SUSTAINABILITY CHALLENGE**



# **Program Implementation**

Participants were divided into bi-national teams of approximately 14-25 students and given the following challenge prompt:

"Many of the world's most visited places face natural resource challenges. At the same time, ecotourism is becoming more popular around the globe. Your challenge is to either design a sustainable solution for a tourist attraction or hotel in an area that is experiencing environmental degradation or use tourism as a means to protect a community's natural resources."

The program was facilitated by faculty who had gone through an in-depth training conducted by IREX on how to use technology to facilitate virtual exchange and support project-based learning. Over the course of the 10-week program, participants tuned in to webinars with experts on sustainable business and sustainable hospitality and worked with teammates to design prototypes of their proposed projects, write business plans, and produce a video demonstrating how their prototype would work.

<sup>6</sup> IREX is a global development and education organization



The 10-week design challenge curriculum, shared with faculty and students online and as a handbook, was adapted from a program IREX had previously conducted for high school students. The program was flexible; facilitators were allowed to supplement required activities with optional activities to adapt the experience to their particular circumstances. Organizers customized the learning management system ObaWorld to serve as a "virtual classroom," where, each week, they posted announcements, photos, and webinar links. Facilitators and students received training on how to use ObaWorld, and IREX also recommended that participants use Skype, Zoom, and WhatsApp for supplemental communication. Team members decided amongst themselves how to divide up their work and how to communicate synchronously and asynchronously to complete each stage of the project.

At the end of each cohort, participants posted their videos and business concepts on ObaWorld. IREX selected three high-performing teams from across the cohorts to present their business proposals at a Global Solutions Summit in March 2019. Thirty-four members of these teams and six facilitators attended the Summit event co-hosted by IREX and the Stevens Initiative in Washington, DC, as part of an in-person exchange. The Summit was also accessible as a live online event for those unable to attend in person. Telling participants that they were competing for the opportunity to participate in the in-person exchange was likely a significant incentive for many young people to make a sustained effort throughout the virtual exchange program, and the trip was also an extra learning opportunity for those invited to travel. "When you can combine an in-person experience with virtual exchange, it becomes so much more meaningful," said Sarah Bever, Technical Advisor at IREX.

77

Working with peers in a different country gives young people a chance to develop the cross-cultural communication and collaboration skills they will need to thrive professionally in a sector that brings people from different places and backgrounds into daily contact.

IREX had been working with community colleges on other initiatives, and staff realized how few students at these institutions were able to have any type of international experience. Community college students make up 40% of U.S. undergraduates<sup>8</sup> but account for just three percent of U.S. students who study abroad.<sup>9</sup> Expanding virtual exchange at community colleges would provide a global learning opportunity to students who have work or family obligations, who can't afford to go on an in-person exchange, or who can't find a study abroad program that fits their course of study, among other common impediments. IREX chose to focus on American and Jordanian partner institutions that run robust hospitality management programs. Hospitality is an important

<sup>7</sup> The high school program, World Smarts, was a virtual exchange program between U.S. and Ghanaian secondary students. The program focused on STEM learning.

<sup>8</sup> https://www.aacc.nche.edu/research-trends/fast-facts/

<sup>9</sup> https://www.iie.org/Research-and-Insights/Open-Doors/Open-Doors-2018-Media-Information

sector of the economy in both countries, and the sector faces challenging questions about how to improve its practices to minimize local environmental impact and address broader issues of climate change. Working with peers in a different country gives young people a chance to develop the cross-cultural communication and collaboration skills they will need to thrive professionally in a sector that brings people from different places and backgrounds into daily contact.

**Team Name: Rangers** 

**Product:** Sustainable Water Solutions

17 team members from Kirkwood Community College (Cedar Rapids, Iowa) and Al Quds College (Amman, Jordan)

#### **Business Proposal Summary:**

Large- and small-scale grey water systems that recycle water from sinks, showers and laundry machines. This system is designed to be implemented in larger hotels, conference centers, arenas, and larger restaurants.

**Team Name:** Agents of Change

**Product:** BottleBot

29 team members from Lord Fairfax Community College (Fairfax, Virginia) and Khawarizmi College (Amman, (lordan)

#### **Business Proposal Summary:**

A stationary machine that recycles single use plastic bottles in order to reduce plastic pollution within the hospitality and tourism industry.

**Team Name:** Triple R

**Product:** Green Vacation Location

40 team members from Kirkwood Community College (Cedar Rapids, Iowa), and **Luminus Technical University** College (Amman, Jordan)

#### **Business Proposal Summary:**

A bed and breakfast-type setting in which all materials from the carpet on the floor to the artwork on the walls—are recycled or reused.

## **Key Components and Lessons Learned**

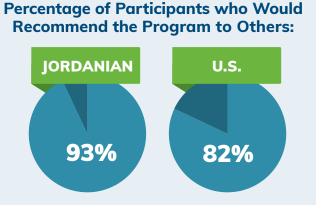
Not just the technology: IREX gave participating institutions stipends for equipment such as portable high-speed modems, webcams, and video cameras. Global Solutions staff found that helping participants learn to adjust when technology faltered was a greater challenge than setting up technology in the first place. "You can fix technology that doesn't work with money, as long as there's a cell tower," said Bever. "But the communication piece is a soft skill that really needs attention."

**Preparing professors for facilitation:** After the first cohort, IREX realized the professors needed more training and support to be effective facilitators. The IREX team added a training week for facilitators, with in-person sessions in Washington, DC, for U.S. facilitators and in-person sessions in Amman, Jordan, for Jordanian facilitators. The training included modules on design thinking, cross-cultural collaboration, and technology skills. IREX also differentiated support over the course of future cohorts depending on the needs of that professor and their students.

# **Measuring Success**

IREX administered surveys of participants' global competencies based on a template developed by the Stevens Initiative and the Initiative's independent evaluators from RTI International. Global Solutions participants reported statistically significant increases in their knowledge of the other countries and cultures involved in the program and in their cross-cultural communication skills. In addition, 88% of students felt the program was beneficial to their future career and 82% of participants agreed or strongly agreed with the statement, "I feel more globally competent because of the Global Solutions Program." Ninety-three percent of Jordanian participants and 82% of U.S. participants said they would recommend the program to others.





This virtual exchange program also helped some students secure jobs in the hospitality field. Four Jordanian participants were hired by the Four Seasons Hotel Amman after engaging with the hotel while developing their business proposal; and one U.S. participant said the Global Solutions program led her to get a job as a Front Office Manager at a local hotel. At least one pair of schools have maintained their relationship following completion of the program: the co-facilitators from Northampton Community College and Al Balga Applied University have maintained a partnership, presenting at a conference together on the benefits and impacts of the program.

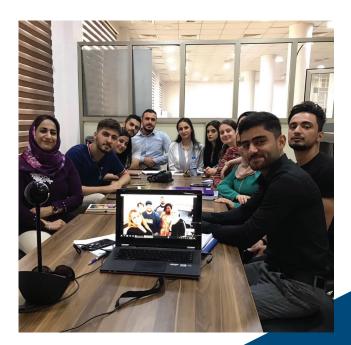
## **Next Steps**

IREX received a grant from the Stevens Initiative to scale the Global Solutions program and focus more broadly on sustainability challenges in a range of business sectors rather than just focusing on the hospitality sector. This will allow more students and institutions to participate.

#### LEARN MORE

Video: youtu.be/JgmREILgr7Q

Impact Story: www.stevensinitiative.org/impact/untapped-talent-unleashed-throughbinational-virtual-exchange/







# **Great Rivers Course**

# **University of Washington Bothell**

Dr. Ursula Valdez, a field biologist and faculty member in the Environmental Sciences program at the University of Washington Bothell (UWB), had long been interested in providing international experiences for her students. "Education for me personally has been an incredible experience, to live in and work in and study in different countries," said Valdez, who was raised in Peru and completed her Master of Science and PhD studies in the United States. "Having a multicultural, multilanguage approach [helped] me see the world with bigger eyes and with a wider, unique perspective. Having that opportunity makes me think, 'How do we expand this opportunity to students?'" She then got involved in a recently-started initiative to offer Collaborative Online International Learning (COIL) courses at UWB. COIL programs connect students in different countries to learn with and from each other. This case study focuses on the 2018 Great Rivers COIL course, which examined the social, environmental, and economic issues of three great rivers of the world: the Nile in Egypt, the Amazon in Peru, and the Columbia of the U.S. Pacific Northwest. The Great Rivers COIL course was integrated into for-credit courses being taught by professors at UWB and Future University in Egypt and was offered as a summer seminar with a participation certificate at the Universidad Nacional Agraria La Molina in Peru.

#### **Program Summary**

#### **GREAT RIVERS COURSE**



The concept of COIL was developed by the State University of New York (SUNY) in the early 2000s as an approach to "foster cross-cultural student competence through development of multicultural learning environments that link university or college classes in different countries." Faculty using the COIL model co-teach and create "co-equal learning environments," not just an online classroom led by one faculty member but populated by students from different countries. The COIL model places emphasis on empowering students to communicate with each other and to work on shared projects focused on a topic that relates to the subject of the linked courses.

<sup>10</sup> http://coil.suny.edu/page/about-coil-0

<sup>11</sup> Ibid.

In 2014-2015, Valdez was one of eight professors named a COIL Fellow by UWB. Fellows received a small stipend, participated in community of practice meetings, and taught a COIL course at UWB or one of the two other UW campuses. (The University of Washington COIL program is housed at the Bothell campus and welcomes faculty from all three UW campuses.) UWB had hired COIL trainer and facilitator Greg Tuke to support the new program and teach COIL courses. In each subsequent year, between five and 11 faculty members have participated as COIL Fellows. By the 2016-2017 academic year, more UWB students were participating in COIL courses than studying abroad. In the past five years, at least 18 COIL courses have been offered on such topics as nursing, global labor markets, and graphic novels, connecting UW students with peers in Asia, Europe, the Middle East, Africa, Central America, and South America. Two UWB staff members, one from the Global Initiatives office and the other a department chair working with freshman core courses, work to recruit faculty. UWB offers a \$1,000 stipend to faculty members who add COIL to their course, \$500 to support the planning phase and \$500 upon implementation of the course.

## **Program Implementation: Great Rivers Course**

Valdez had previously incorporated a COIL course on environmental issues in Peru and the Pacific Northwest into an advanced seminar in 2015. Later, she worked with Tuke to plan a more complex COIL course that would involve a university in a third country. As the team of professors in Egypt, Peru, and the United States designed the COIL course, they sought to have students develop social, economic, and environmental answers to this question: "How could we have international teams with members from all three countries working on these three rivers and proposing solutions for environmental sustainability?"

The Great Rivers course was a collaborative learning experience where students worked in "global teams" and took a leading role in communicating with each other. Nine teams of four to six students were expected to connect multiple times each week. Over the 10 weeks of the program, a global team typically connected synchronously with all members approximately three times, and sub-teams working on specific pieces of the assignment connected more frequently.

The program started with an icebreaker and introductory assignment for each team. Each team was assigned either the Amazon, the Nile, or the Columbia River system as the focus for a main project, ensuring that at least some team members would have local access to people or organizations connected with that river system. The teams worked over several weeks to

explore and develop recommendations related to an economic, social, and environmental issue impacting their assigned river, such as an issue related to water quality or biodiversity conservation. Students based near their group's assigned river spoke with impacted parties or non-governmental organizations working on similar issues and reported their findings to the team. Each team finished the project by recording a video summarizing their proposal and writing a letter to stakeholders.

Valdez explained that it was important for students to see parallels between problems and solutions across the globe. Students or professors in Washington may never have heard of a particular lake in Egypt, but fishermen in Egypt have parallels with fishermen in the Pacific Northwest. "Struggles, problems, and potential solutions are similar. [These are] new topics but they can bring similarities." she said.

A team working on the Nile focused on pollution of Lake Qarun, which is fed by the Nile. High levels of pollution heavy metals, wastewater, and garbage—and damming have taken a toll on fishing catches and the income of fishermen. The team conducted a strong analysis of the situation and compared it to the impact of damming on the salmon and people who rely on the Columbia River.





## **Key Components and Lessons Learned**

**Practice videoconferencing:** While none of the institutions experienced significant issues with technology or internet access, they did encounter some problems with "how to use technology effectively," said Tuke. Valdez and Tuke spent considerable time running videoconference simulations so students would know what to expect, what might go wrong, and what they might struggle with during the program. In other words, this multidisciplinary course also taught students how to use technology and to communicate internationally, giving them skills they will use throughout their academic and professional lives.

**Seek balanced participation:** Participants were at different stages in their education. UWB participants were mainly first-year students, Peruvian participants were in their final year of university, and Egyptian students were first-year graduate students. In future iterations of this course, Valdez would try to involve students at a more uniform level of education, though she also recognizes COIL can be valuable for first-year students.

# **Measuring Success**

American students were given a pre- and post-course survey of their experience and knowledge gained about the course topics, and they reported significant improvements in their crosscultural understanding. UWB heard from their partners that students in Egypt and Peru credited the experience with helping them improve their technology and English communication skills and helped them gain new content knowledge. Faculty members felt that students' high level of engagement—far beyond what was required—in online discussions on the course's closed Facebook page was also a sign of the success of the program. UWB organizers are also mindful that the impact of a virtual exchange program often emerges over time. "Sometimes, it's even a year or two down the road [when you see] how students are thinking differently, acting differently," Tuke said. Some of this longer-term impact can be tracked by following up with alumni months or even years later to ask whether they remain in touch with any of their international counterparts, whether they have undertaken any international travel, or whether they have participated in other COIL or virtual exchange programs.

# **Next Steps**

Valdez says she will continue pursuing opportunities to bring international experiences to her students, including through COIL courses. During the 2019-2020 academic year, UW COIL Fellows are offering courses such as Project Management with a university in the Czech Republic and Cross-Cultural Business with a university in Thailand; courses in nursing, biology, journalism, and more are in development.

# Conclusion

These three programs exemplify how virtual exchange can empower young people from different places and backgrounds to work together on projects to address pressing, real-world issues such as environmental sustainability. "It is validating when you see [students from a different country] caring about your world, and your life," said Alia Gilbrecht of NNU. Participants not only practice skills and gain knowledge they might need as they enter the workforce, but they can also see themselves and their international peers as capable of making a difference. "Sometimes we get stuck on [environmental] problems, or what we hear from the media," explained Valdez of UWB. "When we offer students the opportunity to learn how people in other places are struggling, and to see what they are doing, and what we can all do together, they become empowered. They know that we can all do something together. By joining other people around the world, it gives them hope that they can make change. To do so within a global classroom means we are promoting change in society through common learning."



Sometimes we get stuck on [environmental] problems, or what we hear from the media," explained Valdez of UWB. "When we offer students the opportunity to learn how people in other places are struggling, and to see what they are doing, and what we can all do together, they become empowered. They know that we can all do something together. By joining other people around the world, it gives them hope that they can make change. To do so within a global classroom means we are promoting change in society through common learning.



**The Stevens Initiative** is an international effort to build global competence and career readiness skills for young people in the United States and the Middle East and North Africa by growing and enhancing the field of virtual exchange. Created in 2015 as a lasting tribute to Ambassador J. Christopher Stevens, the Initiative is committed to helping to expand the virtual exchange field through three pillars of work: investing in promising programs, sharing knowledge and resources, and advocating for virtual exchange adoption. The Stevens Initiative has awarded 60 grants and, by summer 2022, will expand its reach to over 43,000 young people in 16 MENA countries and the Palestinian Territories, and in 45 U.S. states, Puerto Rico, three tribal communities, the U.S. Virgin Islands, and Washington, D.C. Learn more: www.stevensinitiative.org.

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