

2022 Survey of the Virtual Exchange Field Report

Findings from a survey of virtual exchange programs connecting young people in different countries from fall 2021 through summer 2022

ACKNOWLEDGMENTS

The Stevens Initiative (the Initiative) wholeheartedly thanks Rajika Bhandari, PhD and her associates, as well as Melquin Ramos, for their efforts to design and implement this year's survey, which forms the basis for this report. The Initiative thanks the advisory group of virtual exchange experts who contributed their expertise at multiple stages in the process, including Ana Cristina Biondo Salomão, PhD; Emma Sabzalieva, PhD; Eric Hagley; Francesca Helm, PhD; Maha Bali, PhD; Stephanie Doscher, EdD; and Travis Hardy. Thanks is also due to the virtual exchange practitioners who contributed to case studies in this report, including Brenda García Portillo, Divinia Jithoo, Katherine Blanchard, Nadia Mavrakis, and Nancy Ruther, EdD. Gratitude is also due to multiple members of the Stevens Initiative team at the Aspen Institute for their contributions. Most of all, the Initiative thanks the survey respondents who took time to share information about their virtual exchange programs and without whom this survey effort and report would not have been possible.

ABOUT THE STEVENS INITIATIVE AND THE ASPEN INSTITUTE

The Stevens Initiative is an international leader in virtual exchange, which brings young people from diverse places together to collaborate and connect through everyday technology. Created in 2015 as a lasting tribute to Ambassador J. Christopher Stevens, the Initiative invests in virtual exchange programs between the U.S. and the Middle East and North Africa (MENA); shares research, resources, and promising practices to improve impact; and advocates for broader adoption. Through its 91 grants, the Stevens Initiative will expand its reach by summer 2023 to nearly 75,000 young people in 17 MENA countries and the Palestinian Territories, and in 49 U.S. states, Puerto Rico, five tribal communities, the U.S. Virgin Islands, and Washington, D.C. Learn more: https://www.stevensinitiative.org/

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The Stevens Initiative is sponsored by the U.S. Department of State, with funding provided by the U.S. Government, and is administered by the Aspen Institute. It is also supported by the Bezos Family Foundation and the governments of Morocco and the United Arab Emirates.



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While virtual exchange programs were well underway prior to the pandemic, the past three years have served as a catalyst for the rapid expansion of such initiatives. Despite its proliferation, virtual exchange has eluded easy definition or a clear understanding of what it entails, who participates in it and from where, and how we can understand the impact of such programs. Now in its third year, the Stevens Initiative's Survey of the Virtual Exchange Field plays a critical role in helping fill these gaps in knowledge and evidence. Building upon the first survey that was launched in 2020, the 2022 Survey of the Virtual Exchange Field Report examines virtual exchanges that took place in the 2021-2022 academic year. The report offers a systematic and evidence-based view of virtual exchange, especially during a time of immense

global disruptions to education and the evolving reaction of the field of international education to such disruptions.

The best practices and frameworks of virtual exchange developed by the Stevens Initiative—in particular the Virtual Exchange Typology—have shown that among the key characteristics of virtual exchange are intentionality and a focus on collaboration and reciprocity of knowledge and learning. However, virtual exchange can vary tremendously across contexts and countries. The typology, and accompanying glossary, is an important effort toward developing shared understanding and definitions among virtual exchange practitioners—including what types of exchanges exist, how they are created, and what is required for implementation—and enabling further development of the field. This report includes only those programs that meet the criteria identified in the typology.

WHAT IS VIRTUAL EXCHANGE?

Virtual exchange uses **technology** to connect people for education and exchange. Virtual exchange programs typically serve **young people**. Many virtual exchange programs are international, connecting participants in different countries in order to help them gain **global competencies**, among other knowledge, skills, and abilities. Many practitioners feel **facilitation** by prepared, responsible adults—often, but not always, educators—is an important component of successful virtual exchange.

—The Stevens Initiative

2022 Approach to Surveying the Field

The current survey and report cover virtual exchange programs that were implemented globally from September 2021 through August 2022. The 2022 survey expands on the previous two surveys in at least **two key ways**:

- It captures the important role that many institutions, organizations, and large virtual exchange providers play in offering training to other educators.
- (2) Recognizing the important role that facilitators and educators play in designing and implementing virtual exchange, this year's survey also captures some basic data on the number and level of participation of facilitators in virtual exchange.

The online survey was distributed globally through the Stevens Initiative's contact list of virtual exchange providers and grantees; through virtual exchange networks, such as UNICollaboration, SUNY COIL, and the Asia Pacific Virtual Exchange Association (APVEA); and through organizations and institutions in a wide range of countries. This year, the survey process was also guided by a global advisory group of virtual exchange experts who supported its dissemination in their world regions.

Finally, an addition to the report this year is the inclusion of five case studies of virtual exchange programs from around the world, featuring virtual exchanges in Libya, Mexico, South Africa, and the U.S. This in-depth look reveals the day-to-day functioning of a variety of programs, the opportunities and challenges they face implementing virtual exchange, the type of funding and overall institutional support for their programs, the lessons learned, and their future plans.

The report begins by sharing highlights from the survey, followed by a presentation of findings by major theme. It concludes with key takeaways and recommendations for the way forward for future work and research.

^{*} Throughout this report we use the term "institutions" to refer primarily to higher education institutions (HEIs) and "organizations" to refer to virtual exchange providers and other entities that are not HEIs. Wherever the term "providers" alone is used, it refers to all types of providers, including HEIs.

Highlights



For the third year in a row, **the higher education sector had the highest level of representation in the survey**, whether as the largest group of providers of virtual exchange programs or with postsecondary students being the largest participant group. Nonetheless, other types of virtual exchange practitioners play a crucial role in furthering the overall field through efforts such as training and advocacy: 80% of all providers reported providing some form of training for the field.



While the total number of virtual exchange programs and participants reported is somewhat lower than last year, an analysis of a subset of 71 providers who responded in both years shows that they have **expanded their virtual programming and their participants by 38% and 22%**, respectively.



The **pandemic continues to have a mixed impact on virtual exchange**. While it spurred growth from 2020-2021 and served as a catalyst for many providers to either launch or expand virtual programming, it remains to be seen whether this rapid expansion will be sustained and whether providers will continue to invest in virtual exchange.



In terms of country-level participation in the survey, **North America, particularly the U.S., is over-represented**. There could be many reasons for this, including that the survey itself was conducted in English and by an organization headquartered in the U.S. Another possibility is that there needs to be more representation from virtual exchange providers headquartered outside of North America. At the same time, regional networks of virtual exchange programs are growing, with many institutions and organizations joining collaboratives or networks within their world region.



Similar to last year's findings, **most virtual programs offer a blend of asynchronous and synchronous approaches to deliver their virtual exchange programs**. In practice, it appears that both approaches are important when implementing virtual exchange programs. Further, participants spend an average of 4.7 hours per week on their programs, while facilitators spend an average of 5.5 hours per week. This points to a high level of participation, given that virtual exchange activities often take place in addition to other formal learning or classes.



The three content, topic, or subject areas that are covered most frequently in virtual exchange programs include **intercultural dialogue or peacebuilding; Science, Technology, Engineering, and Mathematics (STEM); and entrepreneurship or business**. Beyond these key areas, virtual exchange providers indicated that they cover a wide range of content, topic, or subject areas, often reflecting current issues, such as sustainable development, climate change and sustainability, and human rights and social justice.

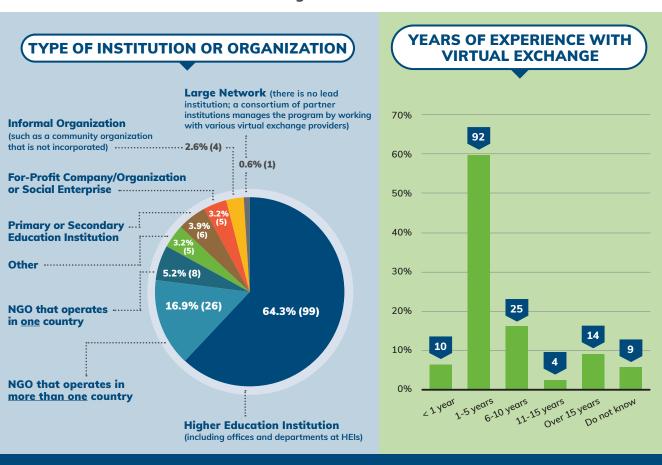


Key Findings

Who Participates in Virtual Exchange Programs?

Of the 155 institutions and organizations from around the world that reported implementing virtual exchange programs, most were higher education institutions (HEIs) (64%), followed by non-governmental organizations (NGOs) that function in more than one country (17%). Most virtual exchange providers (60%) have been offering virtual exchange programs for one to five years, with only 7% for whom this was a newer activity offered for less than a year. By contrast, in 2021, there appeared to have been a surge in the number of new providers, which is likely a result of many organizations beginning to explore virtual exchanges during 2020 and 2021 at the peak of the coronavirus pandemic.

Institutional and Organizational Characteristics







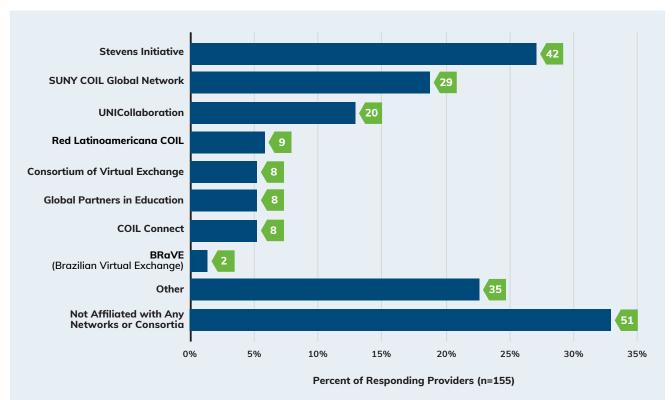


THE IMPORTANCE OF NETWORKS AND COLLABORATION

Virtual exchange networks or consortia are increasingly playing a role in aiding virtual exchange providers with program implementation, training, knowledge sharing, and other activities, with 81% of respondents indicating that they were part of one or more such consortia. Those included the Stevens Initiative's own network (27%), the SUNY COIL Global Network (19%), UNICollaboration in Europe (13%), and Red Latinoamericana COIL (6%). Other such networks include BRaVE (Brazilian Virtual Exchange), the Consortium of Virtual Exchange, COIL Connect, Global Partners in Education, Virtual Exchange Coalition, and JPN-COIL Association.

As noted in the 2021 report, even though respondents reported their affiliation with these networks, the networks themselves can be different from each other in their purpose and structure. For example, those who reported an affiliation with the Stevens Initiative might be part of the Initiative's wider network or could be grantees/sub-grantees that receive financial support for their virtual exchange programs (19% of this year's respondents were current or former Stevens Initiative grantees).

On the other hand, UNICollaboration is a network of educators and researchers with some institutional members, and the SUNY COIL Global Network brings together HEI members. Yet another network–the Virtual Exchange Coalition–is a largely informal gathering of practitioners who share knowledge and information without necessarily participating in formal and structured virtual exchange activities.

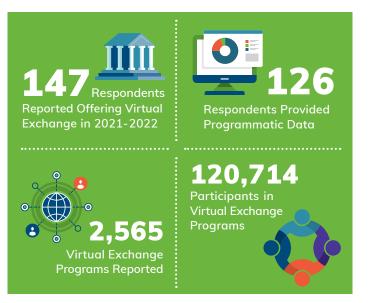


Association with Virtual Exchange Network or Consortium

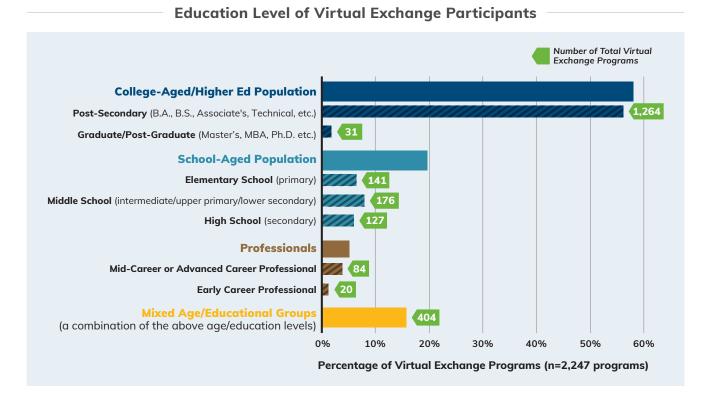
Note: the total exceeds 100% because some respondents reported being associated with more than one virtual exchange network or consortium.

PROGRAMS AND PARTICIPANTS

Of the 155 surveyed providers, 147 indicated they offered virtual exchange programs in 2021-2022. Among that subset of 147, 85% (126) were able to provide detailed data about their programs. These 126 providers reported offering a total of **2,565 programs** that served a total of **120,714 participants.**^{**} Overall, this is a lower level of response compared to last year's survey, which included data for 3,073 programs that served 224,168 individuals. Elsewhere in this report, we discuss potential reasons for this lower response.



Similar to last year's survey, most participants were students enrolled in higher education, primarily at the undergraduate level, with over half of all virtual exchange programs serving this population. About 20% of all programs serve a school-aged population ranging from elementary school to high school, and 5% serve adult professionals ranging from early career to advanced. A key finding is that 18% of programs reach a mix of these populations, suggesting that some providers serve a range of individuals rather than just one age or educational group.



This year's survey also gathered information about **those who facilitate virtual exchange programs**, with respondents reporting a total of 7,088 educators or facilitators who delivered programs between 2021 and 2022. The Stevens Initiative defines a facilitator as a person who plays a present role in enabling constructive engagement among virtual exchange participants. Facilitators are sometimes, but not necessarily, educators.

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^{**} The number of programs and respondents might vary in the analysis as not all providers were able to provide detailed data for all survey questions.

What Does Virtual Exchange Look Like?

THE HOW OF VIRTUAL EXCHANGE

Organizations and institutions were asked about the **most common type of virtual exchange program** they administer. As reported in the last two surveys, most programs (43%) are Collaborative Online International Learning (COIL) courses, developed by pairs or small groups of educators working together to develop a virtual exchange that connects two or more academic courses in different places. The second most frequent type of program (32%) was single virtual exchange programs run mostly the same way across several sites/locations/classrooms. An example of this type of program is Soliya's Connect Program. The third most common program type (12%) was a single virtual exchange program run between two sites, locations, or classrooms. Examples of this include Seattle University School of Law's Transitional Justice Legal Exchange and Culturingua's Global Social Entrepreneurship Journey.

PERCENT OF VIRTUAL EXCHANGE PROGRAMS	PROGRAM ADMINISTRATION TYPE
43.1% 1,105	A collaborative online international learning (COIL) course, developed by pairs or small groups of educators working together to develop a virtual exchange that connects two or more academic courses in different places (e.g., those developed at <u>SUNY COIL</u>)
31.7% 812	A single virtual exchange program run mostly the same way across several sites/locations/classrooms (e.g., Soliya's <u>Connect Program</u>)
11.7% 300	A single virtual exchange program run between two sites/locations/ classrooms (e.g., Seattle University School of Law's <u>Transitional Justice</u> <u>Legal Exchange</u>)
8.3% 212	An open enrollment virtual exchange program where there is no single site/location/classroom hosting participants in person (e.g., World Learning's <u>The Experiment Digital</u>)
5.9% 151	A virtual exchange program in which multiple sites/locations/classrooms conduct related, but varied activities (e.g., Empatico's <u>Coding with</u> <u>Empathy Challenge</u>)

Virtual Exchange Program Adminstration Type

Total Number of Reported Virtual Exchange Programs: 2,565

Note: the total exceeds 100% because some respondents reported programs that fit more than one category.

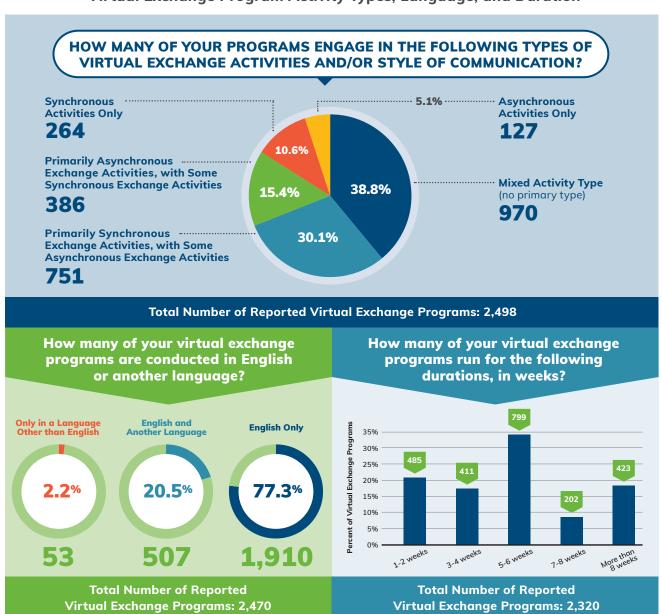
The survey also captured data on virtual exchange **activity types**. The Stevens Initiative defines activity type as a holistic or collective description of the activities and learning cycle undertaken by participants throughout the virtual exchange program. Among the different activity types that providers reported offering, most were collaborative project-based learning (35%), followed by paired courses that included a final project or capstone (30%), and videoconference dialogue, sometimes with an associated project component (19%), among others.

PERCENT OF VIRTUAL EXCHANGE PROGRAMS	ΑCTIVITY TYPE
35.1%	Collaborative project-based learning (e.g., World Learning's
781	The Experiment Digital)
29.8% 663	Paired courses with group project/s (e.g., William Davidson Institute at the University of Michigan's Business and Culture)
18.7%	Videoconference dialogue, sometimes with associated project
416	(e.g., Empatico's <u>Coding with Empathy Challenge</u>)
7.0%	Asynchronous learning and international communication modules
155	(e.g., Global Nomads Group's <u>Student to World</u>)
5.3% 119	Mixed Activity Type
3.8% 85	One-on-one language learning practice Asynchronous learning and international communication modules (e.g., Global Nomads Group's <u>Student to World</u>)
0.3%	Pitch competition, sometimes with an associated MOOC (e.g., National
6	Democratic Institute's <u>Civic Tech Leadership Program</u>)
0.1%	Hackathon (e.g., Johns Hopkins University Center for Bioengineering
2	Innovation and Design's Designing Solutions for Humanitarian Crises)

Virtual Exchange Activity Types

Total Number of Reported Virtual Exchange Programs: 2,227

As virtual exchange programs continue to grow, institutions and organizations use a variety of **communication methods and forms of delivery**. The most common approach adopted by 39% of programs embeds a blend of asynchronous (in which participants share information and engage at different times) and synchronous (in which the engagement is in real-time). Almost a third of programs (30%) employ primarily synchronous approaches, with some asynchronous exchange activities.



Virtual Exchange Program Activity Types, Language, and Duration

The survey asked about **languages** used in virtual exchange programs. Most programs (77%) were offered in English only, with about 21% being offered in English and another language, and 2% offered solely in a language other than English. Other than English, the most common languages used in virtual exchange programs are Spanish, French, Portuguese, Mandarin Chinese, Japanese, and Arabic. As was noted in the 2021 report, the predominance of English probably reflects the fact that English is now the lingua franca of most global exchange programs—virtual or otherwise—but also probably underscores the role of the U.S. in virtual exchange (discussed subsequently in this report), where English would be the dominant language. It should also be noted that the survey was conducted in English only.

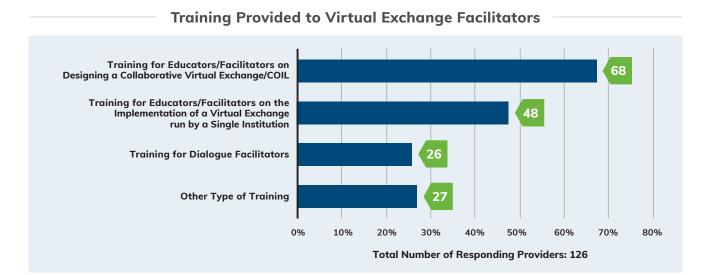
To better understand the **intensity and duration** of virtual exchange, this year's survey included an additional measure of the **dosage** of virtual exchange. Along with reporting on the duration of their virtual exchange programs, providers also reported on the average number of hours that both participants and facilitators/educators spend per week on such programs. On average, participants spend 4.7 hours per week on their programs while facilitators spend an average of 5.5 hour per week. Similar to last year's findings, the most common duration of programs was five to six weeks (34%), followed by one to two weeks (21%), by more than eight weeks (18%), and by three to four weeks (18%).



Average Number of Hours Per Week Spent on Virtual Exchange

THE ROLE OF TRAINING

One of the key learnings from the 2021 survey was the important role that many organizations play in providing training on virtual exchange to other providers and colleagues. This year's survey captures this information: 80% of providers indicated offering at least one type of training for educators and facilitators. Of those providing training, the most frequent type of training was for designing a collaborative virtual exchange/COIL course (67%), followed by implementation of a virtual exchange run by a single institution (48%), and dialogue facilitation (26%). Other types of training include intercultural competence, podcast training, managing online environments, and educator professional development.



THE CONTENT AND SUBSTANCE OF VIRTUAL EXCHANGE

Respondents were asked about 10 content or topic areas in which virtual exchange programs are often offered. The top three content, topic, or subject areas are intercultural dialogue or peacebuilding (23%); Science, Technology, Engineering, and Mathematics (STEM) (18%); and entrepreneurship or business (12%). This year, entrepreneurship or business replaced global or international affairs as the third-place content or topic area. Beyond these 10 key areas, respondents indicated several other topics were in their programming, including Sustainable Development Goals (SDGs), tourism, human rights and social justice, media literacy, game design, combating cybercrime, and climate change and sustainability.



Top 10 Content or Topic Areas

Note: the total exceeds 100% because some respondents reported offering programs that fit into more than one category.



Which Countries Participate in Virtual Exchange?

Most virtual exchange providers who participated in this year's survey were based in North America and/or their programs originated in North America (United States and Canada) but involved other countries (68%), followed by the Middle East (11%). This was a shift from the prior year (2021), where Europe was the second most predominant region. Although administering the survey globally remains a key priority, the data in this year's survey are skewed towards the U.S. Capturing global data remains a challenge.



Respondents were asked about the **top countries or territories** where their virtual exchange program participants reside, as well as their numbers. Many respondents continue to struggle with reporting this granular data point and were only able to offer the name of the country or territory represented but not the number of participants. Therefore, these data should be interpreted with caution, as it is not clear whether this reflects the predominance of participants in these countries, or whether it is a function of the organizations that were able to respond to the survey, two-thirds of which were headquartered in North America. Nonetheless, the available data indicate that the top ten countries in terms of number of programs serving participants in those countries are (in descending order): United States (63), Brazil (25), France (22), Mexico (21), Japan (20), Colombia (20), India (19), Morocco (19), China (18), and Germany (17).



Growth in Virtual Exchange Over Time

With three years of survey data now available, the current report allows an examination of trends and changes over time for a subset of 71 virtual exchange providers who responded to both the 2021 and 2022 surveys. Most of these providers were either HEIs or nonprofits/NGOs that operate in multiple countries, which suggests that such providers are the most able to consistently report data over time.

- Between 2021 and 2022, the total number of virtual exchange programs implemented by this subset of 71 providers increased by 38%, from 1,464 to 2,022 programs. During this same time, the number of participants in their programs increased by 22%, from 80,737 to 98,750.
- Within the group of 71 providers, most of this growth was seen among HEIs whose programs and participants increased by almost 50% and 19%, respectively. However, for other types of providers, the numbers remained mostly flat or saw a small decline over this time.

While providing a preliminary look at shifts over time, the above findings should be interpreted with caution as they are likely affected by some of the broader limitations of the survey such as the over-representation of HEIs, as well as the ongoing challenges that virtual exchange programs face in reporting granular data.



(14)

Lessons Learned and Key Takeaways

The 2022 Survey of the Virtual Exchange Field points to a growing, complex, and evolving field of virtual exchange globally. When the first survey was launched in 2020, it was an opportunity both to enumerate virtual exchange activity around the world and to surface the inherent challenges of, and learnings from, gathering and reporting data on virtual exchange programs. This concluding section highlights five key lessons and takeaways for the field, while also addressing the constraints of the current survey.

Defining and classifying virtual exchange: Despite a detailed typology developed by the Stevens Initiative, virtual exchange programs and initiatives around the world continue to be defined and understood differently. This challenge perhaps exists because virtual exchange programs are complex and varied, resisting easy and simple classifications or definitions. Another factor at play could be that the Stevens Initiative's typology, while applicable to many programs, might reflect a U.S.-centric approach to virtual exchange, while other countries and individual practitioners might approach the virtual exchange framework and notion of a "program" differently, especially given the innovative and dynamic realities of the intersection of education and technology. The survey effort continues to evolve each year to capture different types of virtual exchange, yet gaps remain. Another observation based on all three surveys is that classifications for concepts such as virtual exchange activity types or even the types of learners (students, adults etc.) do not apply to every program as many are employing a combination of approaches or serving a mixed group of learners.

Building a pool of consistent respondents: When it comes to annual surveys, the Survey of the Virtual Exchange Field is still nascent and only in its third year. As such, the pool of respondents has shifted somewhat from year to year, with many new providers responding each year and others not responding, likely due to the fluctuations in their virtual exchange programming. This impacts the survey's ability to accurately capture data for a consistent pool of respondents. Nonetheless, significantly improving the quality and reliability of global virtual exchange data over time remains a focus of the survey effort. It is, therefore, critical that virtual exchange providers around the world respond to the survey each year.

Understanding virtual exchange around the world: For the second year in a row, the survey focused on obtaining data from virtual exchange providers around the world. Yet the U.S. continues to be over-represented in the survey both as the country where the program originates or as a key partner in a program. It is not clear whether this is an indication of virtual exchange being more established in the U.S. as a practice, whether organizations and programs in other countries are still building their capacity to report data, or whether it reflects an overarching limitation of the survey in its ability to reach a wider set of practitioners.



Understanding the context of virtual exchange programs: A key learning of last year's report was the need to develop a deeper, qualitative understanding of how virtual exchange around the world functions. To address this gap, the 2022 report features case studies that reveal the complexity of virtual exchange. These vignettes detail issues such as lack of access, inadequate infrastructure, and digital divides that significantly impact the delivery of virtual exchange in the Global South in countries such as South Africa and Libya; the importance of strategic planning and support from the top when designing and implementing programs; the role of language and communication; and the impact of limited resources and funding.

The important role of training: As shared elsewhere in this report, this year's survey attempts to capture the important role of training and professional development in various aspects of virtual exchange—in design, teaching, facilitation, and strategy—to support institutions and organizations in running their own virtual exchange programs and to ensure quality experiences for participants. As such, these initiatives play a critical role in building the capacity of the virtual exchange sector worldwide.

Areas for Future Focus

Looking to the future, five key areas need more examination:

- **Measuring the quality of virtual exchange**, including how programs themselves ensure quality in their delivery of virtual exchange;
- Developing a deeper understanding of the role of virtual exchange facilitators and educators, especially with a view to supporting their growth and professional development. It would also be helpful to know the ratio of facilitators to participants in a program, and the number of programs–if any–that do not have facilitators;
- Disentangling the distinct nature of implementing virtual exchange programs vs. **training** that is provided to those who will implement virtual exchange programs;
- How to build the capacity of providers to gather and report data on virtual programs, especially for smaller organizations with limited resources; and
- Related to the previous recommendation, the need for programs to assess their own outcomes and impact.



Will Virtual Exchange Continue to Grow?

The Impact of the Coronavirus Pandemic on Virtual Exchange

The fluctuation described in this report can perhaps be attributed to the complex global impact of the pandemic. On the positive side, the pandemic has provided a boost to virtual exchanges that were already underway, with 58% of respondents indicating that they increased their programming due to the pandemic. That means the sharp increase in virtual exchange observed in the second survey in 2021 could have been a result of the pandemic, with many

organizations and institutions exploring virtual exchange programs for the first time while traditional mobility programs were inactive. As in-person mobility programs resumed rapidly in 2022, those providers who had adopted virtual exchange merely as a stopgap measure to fill a void might have pivoted back to their earlier programming. In summary, the pandemic perhaps led to a spike in virtual exchange that some providers are either not inclined or have struggled to maintain over time.

Given this mixed picture, **the trends for the 71 providers who responded to two surveys in a row offer a clearer view of change over time**. As presented elsewhere in this report, the proportion of both virtual exchange programs and participants increased over a one-year period between 2021 and 2022 (although most of this growth was among HEIs). Further, when asked about their plans, of the group of 71, a large and almost equal proportion of respondents (43%) expected they would expand their programming or that it would continue at the current level. "Virtual exchange programming has increased; however, as we move farther along, interest is clearly decreasing."

— For-profit company/organization

"We lost pre-pandemic virtual exchange teachers and projects but added new ones during the pandemic. On balance, we grew but have not recovered those lost during the pandemic."

 NGO that operates in more than one country





Looking Ahead

The above analysis suggests that virtual exchange will continue to grow, albeit in ways that are complex and that require the sort of sustained and nuanced exploration made possible through the Stevens Initiative's annual Survey of the Virtual Exchange Field, which offers a useful snapshot and metric for the virtual exchange sector. This survey is an early effort to sensitize the field to the need to capture data on virtual exchange programs and to encourage more providers to report their data each year. The three surveys have taken place at a time of significant shifts in education and exchange globally. While technology opened doors during the pandemic, it also sharpened digital divides and surfaced global inequities. Looking ahead to an altered landscape, it is possible that virtual exchange programs will have an even stronger role to play in addressing some of these shifts, in diversifying teaching and learning, and in enabling students and educators from a range of backgrounds to develop global competency and to do so in an equitable, accessible, and just way.







CASE STUDIES _______ Journeys through Virtual Exchange

Five case studies of virtual exchange programs in Libya, Mexico, South Africa, and the U.S. explore the versatility of virtual exchange programs, challenges to implementation, the importance of buy-in, and approaches to evaluation, among other characteristics. The programs included in this section were selected for their diversity in type of providers, geographic location, program partners, and youth populations served. The first-person narratives of the providers reveal important context that complements the quantitative and broad findings of the survey. Taken together, they present a more comprehensive global view of virtual exchange.

Universidad de Monterrey (UDEM), Mexico

Brenda Garcia Portillo | Director of Internationalization at Home Projects

THE VIRTUAL EXCHANGE JOURNEY

The Universidad de Monterrey (UDEM) launched our virtual exchange activities in 2011 after hearing about the Collaborative Online International Learning (COIL) model of virtual exchange at a NAFSA conference in the U.S. We felt that this would be the answer to developing our internationalization-at-home activities. We joined the SUNY COIL program as a partner and the Global Partners for Education (GPE), a consortium run by East Carolina University. We subsequently expanded into running bilateral COIL projects with different institutions around the globe. We have been eager to learn and to acquire more experience with COIL and, as we have continued to grow, have looked for more partners, presented at and attended conferences, and participated in training programs from several organizations and through our bilateral partnerships in the U.S. and Europe. Over time, we have also focused on training in virtual exchange by adopting a "train the trainers" approach, in which we first participate in a training ourselves and then design our own training program for our faculty. Now, we're working in a very strategic manner institutionally, leading our own training, recruitment, incentivization structure, and assessments for improvement and continuity.

GROWTH OF VIRTUAL EXCHANGE IN MEXICO AND THE REGION

UDEM is one of the leading institutions in Mexico and Latin America for virtual exchange planning and implementation. But the idea of virtual exchange is catching on in other Mexican institutions and across Latin America because universities are trying to look for different internationalization-at-home alternatives to student mobility. They are realizing that virtual exchange is the perfect answer to developing intercultural competencies among students at home. While it is not a substitute for studying abroad, virtual exchange gives a taste for and is a real experience in engaging with someone from another country.

ENGAGING FACULTY

Prior to the pandemic, we struggled with conveying the importance of virtual exchange to faculty members and with getting their buy-in for these programs. Some department leaders and faculty embraced virtual exchange rapidly and have been eager to participate, but this is not true for all of them. During the pandemic, we saw many faculty members suddenly show interest in virtual exchange because they were looking for alternatives to diversify their classes and to make them more dynamic using technology. Faculty members became more sensitive to the importance of technology and international interactions.

To ensure that all students have a virtual exchange experience a couple of times before

"

Since the pandemic, I no longer have to focus on technology adoption (they don't have technophobia anymore!) and can instead strengthen the message about building an international dimension into their courses, and the responsibility they have as faculty members to develop intercultural competencies among their students. That's the message right now.

they graduate, we are moving towards making virtual exchange mandatory. We are also developing approaches to incentivizing faculty members, including frequent communication, one-on-one debriefing sessions, public acknowledgement for their time and contributions, showcasing the best COIL projects, and a special end-of-year recognition luncheon.

BEST PRACTICES AND RECOMMENDATIONS

- Set up a strategic plan to develop COIL at your institution. Research the latest international trends in education to develop a plan to convince institution leaders to invest resources in virtual exchange. Start by looking at the basics:
 - What programs do we have right now?
 - What resources does the institution have that would be helpful in starting a virtual exchange?
 - Which faculty members are already engaged in international activities?
- Buy-in from senior leadership is important in order to sustain the virtual exchange program over time. Once there is support from the top, it is easy to expand virtual exchange in many directions—bottom-up, transversal, etc.—while also engaging all groups, including students, faculty, and administrators. We share information with leadership frequently, informing them of what we are doing in virtual exchange so they have a clear sense of what is going on.

UNDERSTANDING PROGRESS AND IMPACT

We currently have pre- and post-assessment of students using a quantitative and qualitative approach, as well as interviews of faculty to reflect on their COIL experience. However, we have realized that while pre- and post-assessments are good, this is not enough. We also want to do research comparing the same course taught with and without virtual exchange, almost like a comparison group or quasi-experimental design. We are partnering with an education professor for this research.

Smithsonian Science Education Center, United States

Katherine Blanchard | Assistant Division Director, Professional Services

THE VIRTUAL EXCHANGE JOURNEY

Launched in September 2021 and focusing on high school students, our virtual exchange program, France in Focus, is a collaboration between the Smithsonian Office of International Relations. The Smithsonian Science Education Center, and the U.S. Embassy in Paris on issues of climate change and sustainability. The program leverages a set of curricular materials developed by the Smithsonian Science Education Center called Smithsonian Science for Global Goals that focus on helping young people understand the science underlying the United Nations (UN) Sustainable Development Goals (SDGs) and then act upon these in their local community. The structure of the program includes alternating live sessions and asynchronous engagement through an Erasmus and European Union (EU) platform called

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Had it not been for COVID-19, we would probably never have thought to do this kind of an exchange program. So, because of the things that we learned over the initial phase of the pandemic and because of our ability to adapt to the virtual space, we were set up really well to engage students in a program like this. And that just would not have been the case if it was business as usual.

eTwinning. In the 2021-2022 school year, the program served 850 students in France, French territories, and the U.S. Some classes opt to participate in a capstone project, where they apply their learning by implementing a project in their community and then share the work with their program peers and a panel of experts in the field.

IMPLEMENTATION CHALLENGES

This program was designed so that any interested U.S. teacher would be able to participate and bring the program to their school. Because we were not focusing on one state or school system in the U.S. and because anyone could participate, one of the biggest challenges was the variability of teachers and schools, their educational expectations, and their ability to take the program forward. Once educators opted into the program, it was up to them what they did with the content outside of the synchronous sessions. We had some classes that worked on incredible projects and others that lost momentum over the course of the program. It is possible that these retention challenges were due to the limited capacity and support of educators in the U.S. during this particular school year. French teachers fared much better, as there appears to be more support for engaging in these kinds of programs, and they were recruited and selected ahead of time based on their interest and engagement in the program.

The other challenge in both the U.S. and France is finding a good platform for minors to engage virtually, primarily due to the strong student and data privacy protections in the EU, as well as at the Smithsonian.

THE IMPORTANCE OF BUY-IN

Even though the Smithsonian is a large organization, two things have allowed us to garner support and goodwill from senior-level administration. The first is that education is one of the five key priority areas for the Smithsonian, so anything that engages K-12 students is of interest to our leadership. Second, the content of our virtual exchange program is aligned with the Smithsonian's "Life on a Sustainable Planet" initiative and the UN SDGs and has really put us at the forefront of how we engage young people around these issues. However, organizational bureaucracy and lengthy processes within a large organization are a barrier to student engagement.

BEST PRACTICES AND RECOMMENDATIONS

- Strive for balance between being very clear about goals, expectations, roles, and structure at the outset and being inclusive of different stakeholders and voices.
- Be clear with students from the start about whether the program is strictly a group and classroom-based initiative, or whether it offers opportunities for students to engage and interact virtually on a one-to-one basis. Some students may be eager for the individualized interaction, so finding a way to offer both can be appealing for some students.

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We would like to have a larger assessment in the future that helps us get at issues such as how students are developing a sustainability mindset and their sense of agency in their community—issues that are really hard to measure. We can certainly ask students probing questions about these areas, but we need to really be able to see and assess the student outcomes and 'soft' skills that students are building. Part of it is also needing to figure out what exactly we want to be able to measure over time.

UNDERSTANDING PROGRESS AND IMPACT

Now that the program is in its second year, we've become a lot more intentional about how we collect information from students. This includes a pre- and postassessment focused on learning the content that is part of the curriculum materials, but also their experiences and shifting mindsets due to participating in the virtual exchange program. We are also able to assess students' projects both qualitatively and quantitatively, which provides tangible data around how students engage with the content and how they leverage the content to drive action. Additionally, we administer teacher and educator evaluations at the end of the program.

THE ROAD AHEAD

Going forward, we are fine-tuning the program through better coordination, setting clear goals and expectations, and expanding the content by adding the topic of biodiversity. Future funding and available expertise permitting, we would also like to focus on better understanding the longitudinal impacts of the program. This would mean not just focusing on how students' mindsets shift from September through May, but how the experience impacts what they choose to study in college and their future job or career trajectory.

Durban University of Technology, South Africa

Divinia Jithoo | Specialist International Education

THE VIRTUAL EXCHANGE JOURNEY

Durban University of Technology (DUT)

began to explore COIL in 2012 as an approach to internationalizing the curriculum and to increasing global exposure for the large percentage of the student population that does not get to study abroad in the traditional sense. The first project launched in 2016, and it took time to get buy-in from DUT staff and the South African higher education sector. But disruptions to in-person education and exchange during the pandemic reinforced the need for virtual exchange. There is strong support at DUT from leadership, and virtual exchange is now woven into our internationalization strategy and has been embraced by faculty. This has been made possible with internal funding through the international office and other campus

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I might have a department head say to me: 'But my field is already international. Why should I implement a COIL project?' I respond to that by saying, 'Okay, it could be international, but is it truly international? Are the perspectives included in your texts mainly from the Global North, or do they represent different countries and perspectives?'

departments, such as technology and curriculum development, due to a drive for equity in internationalization. Support from external initiatives, such as Erasmus, has allowed for capacity building and increased participation in the practice of virtual exchange.

Through a professional development program offered to our staff on COIL, DUT doubled its COIL projects from 21 to 42 between 2020 and 2021. It is estimated that the total number of projects will soon reach 86, with several being designed and launched at the time of this writing. DUT is also focusing on going beyond COIL to leverage virtual exchanges for deeper internationalization. This includes the Virtual Learning Campus through which nine virtual global learning projects have been developed with partner institutions across the world, including institutions from Australia, New Zealand, the United Kingdom, and the West Indies. The idea is to put modules into a "basket" or shared space that can be co-taught by academics across these partner institutions, thus providing access to their students. All of this falls outside of the formal curriculum yet is part of comprehensive internationalization.

IMPLEMENTATION CHALLENGES

Translating strategy into implementation is not always easy, and there are administrative hurdles, procurement delays, and structural issues that often come with introducing new programs in higher education. DUT has been transparent with its partners about challenges and the need for flexibility.

A key challenge in implementing virtual exchange is students' access to equipment and access to WiFi when off campus, with many not having their own computers. Solutions have included helping students on an individual basis by loaning them laptops. Some students who needed to use their smartphones were unable to access sessions because their phones were incompatible with the platforms that instructors were using for asynchronous work. Other

challenges are caused by infrastructure, where a scheduled synchronous meeting would not take place because of a lack of power due to "load shedding" and power cuts.

Despite these challenges, students have positive attitudes towards these sorts of experiences. During an orientation program for a COIL project, one of the students asked me, "Ma'am, do you think I'll meet my future wife here?" This highlights the fact that students themselves do not necessarily see the virtual space as a barrier to creating a lifelong friendship or network. I had to be introspective and realize that our students' enthusiasm is an asset that we can leverage, while making sure that we remove the barriers that get in their way and offer them the space and environment to easily engage virtually.

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We would have to step in there to say, 'Okay, even though they have equipment, it's not the right equipment,' so we'd have to give out loans. We can't turn away from the fact that even with the use of technology there's still that digital class divide. So, even though we tried to make it more inclusive, it's still a lot of work.

BEST PRACTICES AND RECOMMENDATIONS

- Be flexible and open-minded.
- Leverage a wide range of communication tools to share information with students and faculty and maximize participation.
- Be open to new technologies and how to understand and effectively use them.
- Be open to new perspectives, and leverage virtual exchange to explore the rest of the world that we may not have been exposed to. For me, this has meant being able to engage with other institutional partners in the Global South, something I had not been exposed to before.

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It would be interesting to do a comparative study of virtual exchange vs. physical mobility because it is often assumed that you don't benefit from cultural immersion with the former. But that's not necessarily true; you can have a student that participates in a physical exchange that stays in a room all the time. How are we ensuring that students are culturally immersed? Cultural immersion must be purposeful through carefully embedded cultural moments, as it often is in COIL.

UNDERSTANDING PROGRESS AND IMPACT

We use a simple tracking system to maintain basic data on the number of virtual exchange projects and the number of students in each project. Because COIL requires a cycle of evaluation, reflection, and evaluation, we conduct a student evaluation to understand their experience, such as assessing whether the friendships and networks they have formed will be sustainable long term and whether their cultural understanding of the partner's country has changed.

THE ROAD AHEAD

As part of a long-term, 10-year strategy, our goal is to have 100% of our students participate in at least one international or virtual engagement experience during their student career. But even though our COIL numbers are rapidly growing, it is a big goal to reach our entire student body of 33,000 students. We are working to make sure that our COIL programs reflect our broader internationalization and global learning principles and include elements of intercultural learning and intercultural exchange. We're also expanding this to scholarship, teaching, and learning to ensure academics understand this a new pedagogy that can also inform their research agenda.

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We are never going to have enough money to send them all abroad, but it's our responsibility to make sure they have the skills and the necessary tools to thrive in a globalized world in a multicultural setting when they graduate.

Culturingua, United States

Nadia Mavrakis | CEO

THE VIRTUAL EXCHANGE JOURNEY

The <u>Global Social Entrepreneurship Journey</u> virtual exchange program connects high school students in San Antonio, Texas, with high school students in Libya. Students work over the course of two months, both synchronously and asynchronously, to develop a social enterprise idea to address a UN Sustainable Development Goal. Piloted from 2020-2021, the program expanded the following year with support from the Stevens Initiative. By the end of the 2022-2023 school year, the program will have reached nearly 500 young people in both the U.S. and North Africa.

The program aligns with Culturingua's broader work which focuses on elevating the people and heritage of the MENA region and South Asia. We have intentionally partnered with specific schools in both the U.S. and in Libya that are traditionally underserved by international exchange opportunities. In the U.S., we partner with San Antonio Independent School District (SAISD), where 95% of the students are Hispanic; in Libya, we have partnered with schools who teach a majority of the school day in Arabic. The virtual exchange is an opportunity for both sets of students to learn and build global competencies and for the Libyan students to practice their English. Additionally, both sets of students bring their expertise to their teams when developing their solutions. The U.S. students bring economics and business skills from their social studies courses while the Libya students bring their STEM-focused skills.

IMPLEMENTATION CHALLENGES

Technology remains a key challenge when working in a country such as Libya, where the availability of the internet, reliable electricity supply, and overall technology is limited. The civil war and political disruptions over the past decade have also had an impact. We have tried to overcome these challenges by making investments in schools' technology infrastructure and adopting a schedule that accounts for electricity shortages.

Synchronous activities are challenging because of the students' different time zones, varying school schedules and school breaks, and with Friday and Sunday observed as days off or holidays in Libya and the U.S., respectively. We have overcome these challenges by creating synchronous meeting times during the first period of the day in the U.S. and right after school in Libya, working diligently to align schedules between the two countries, and communicating any additional changes to schedules with ample time.

THE IMPORTANCE OF LOCAL PARTNERSHIPS

San Antonio is a bi-cultural city that celebrates its strong Mexican and American roots, while also moving towards being an international city that values emerging new

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In large metropolitan schools in the U.S., scheduling elective courses can be problematic. Some students opted into the program, and others were placed in the program because it aligned with their schedules. We are leaning increasingly towards an opt-in model because we have realized that students who have opted in have a lot more buy-in, are more engaged, and are, therefore, more committed.

influences from a diversity of global cultures. As such, our work contributes to larger efforts within the city to build global competencies and the ability of students to work effectively with colleagues from other parts of the world. One of the strengths of our organization, which also relates to the work that we do with virtual exchange, is how well embedded we are within the city as part of a collective impact initiative for K-12 youth called Excel Beyond the Bell, which also includes other youth-serving nonprofit organizations. Because of this partnership, we are able to obtain additional outcome data and be part of conversations with other key players impacting youth development across local government, school districts, and higher education to support San Antonio's youth to be prepared for the future.

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We are very much embedded in the fabric of the San Antonio ecosystem. This helps us be more responsive to how we develop and deliver programming, expand our partnerships, and amplify our impact in different ways. Our partnership with SAISD, which serves about 47,000 students across more than 90 schools, has yielded 16 cohorts across six campuses since it began in 2020. In Libya, we have a strong partnership on the ground with the NGO Think Creative. Our leadership's deep connection to Libya has helped secure strong partnerships both with our NGO partner and our school partners, while also sorting through infrastructure issues, as well as understanding the difficulties related to the geopolitical situation.

UNDERSTANDING PROGRESS AND IMPACT

In addition to what the Stevens Initiative measures through its data collection, we have incorporated additional survey questions related to an entrepreneurial mindset: skills related to innovation, self-determination, and being able to take risks. We also measure cultural self-efficacy, which is the ability to thrive in an environment that is culturally different than your own. We want students to feel comfortable in different places across the U.S. and Libya, as well as abroad. Many students may be hesitant to even venture outside their immediate city or town. Because we feel we are also influencing students' social and emotional learning, we have mapped our competencies to the CASEL (<u>Collaborative for Academic, Social and Emotional Learning</u>) framework of competencies, which helps show how our program also influences students' social and emotional learning.

THE ROAD AHEAD

We plan to grow our program by expanding to students who have not typically had the opportunity to participate in these programs due to disabilities. For example, for spring 2023, we are creating a deaf and hard of hearing cohort, pairing students in the U.S. and those in Libya who are all deaf and hard of hearing. This program will utilize certified deaf interpreters and interpreters fluent in American Sign Language and/or Libyan Sign Language to ensure the ability for both geographies to communicate effectively with each other. We are also interested in expanding the program to additional cities within Libya, although there are many considerations, such as infrastructure and access to electricity, to consider for such an expansion.

Gazelle International, United States

Nancy Ruther | Principal and Founder

THE VIRTUAL EXCHANGE JOURNEY

The main program of Gazelle International—an organization that helps connect colleges through exchange initiatives—is <u>CLICK</u> (Collaborative Learning for International Capabilities and Knowledge). CLICK is designed as a turnkey system to help universities and colleges that want to get started with virtual exchange. We use a backward design, goal-based teaching methodology which starts with an "Exploratory" workshop in which educators from different countries get familiar with CLICK's goals-based pedagogy, share their home curriculum learning

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We assume that teachers know how to teach, but creating a truly collaborative third learning space in the context of virtual exchange is new for them. Most teachers don't really think about cross-cultural skills in their normal teaching.

goals, and explore together how collaborative and cross-cultural teaching could work for them as individuals and potential partners. This is followed by a "Connect" workshop in which campus leaders review and finalize partner matches and educators explore partnering compatibilities as they probe and discover possible mutual CLICK learning goals. The process culminates in a "Design" workshop, in which first-time teaching partners learn to design their CLICK projects together. The first-time support and design piece is critical, as it allows educators from different countries to align their teaching goals, pedagogy, and expected outcomes to help students persevere in their program.

IMPLEMENTATION CHALLENGES

Existing research reveals that the single largest barrier to adoption is lack of awareness among higher education leaders of virtual exchange and how to implement it. Administrators are often concerned that their educators are already too busy or that virtual exchange will require significant curriculum changes. This is where our turnkey solution comes in: we help them see that incorporating virtual exchange does not mean changing the requirements in their curriculum. It is similar to adding any other high-impact practice: you're teaching in a different way to get better results, with more students involved with this experiential, problem-based project approach. Educators tend to grasp the concept right away, and we've had community college educators say, "I've wanted to be able to get some kind of global experience for my students. I can put this right in my own classroom."

THE IMPACT OF THE PANDEMIC

Heading into the pandemic, we had eight projects. Some of them paused temporarily, because they were run by senior faculty with other responsibilities who had to shift their focus to respond to the crisis. Over time, and especially with training new educators, we eventually sustained our growth, but we would have grown more had it not been for educator attrition. Overall, COVID had a unique impact on our program in that every educator now has some exposure to technology. Those who resist it might continue to do so, but most have found good uses for it. Technology is no longer the barrier to recruiting educators to implement virtual exchange. However, there are so many more tools, and educators must know how to use them well for the kind of teaching needed in virtual exchange.

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Classes were shutting down and teachers were sitting at their kitchen tables, and the students were in bedrooms and really isolated. This gave all of them that socioemotional connection they had lost. The teachers found support in each other, and the students had fun while learning. COVID showed us the importance of collaboration and socio-emotional support, since teaching is otherwise a very solo endeavor.

VIRTUAL EXCHANGE AND COMMUNITY COLLEGES

Our work has intentionally focused mainly on community colleges and technical institutes in the U.S., as they are the least likely to have any other international exposure. Our programs have been supported by the French government, which is eager to promote transatlantic mobility, especially with community colleges. Virtual exchange is now seen as an intrinsic form of internationalization and mobility in the French system and across most of Europe. The new baccalaureate degrees in the French University Institutes of Technology or IUT (Institutes Universitaires de Technologie) system need to have a serious international component, and virtual exchange is a great way to give every student their international credentials while also motivating longer term mobility.

U.S. community colleges suffered declining enrollment during COVID and have seen enrollment continue to decline. Virtual exchange meets the need for experiential problem-based learning at community colleges and can be a high-impact practice—there's real potential here to use virtual exchange as a recruitment tool. Unfortunately, this critical aspect of virtual exchange is not often seen as a persuasive recruiting tool by university administrators, and families don't realize that their child could have a global experience in their community college classroom.

MAKING A CASE FOR FUNDING

Funding is always a challenge, especially if educators are trying to adopt our program on their own or are using their professional development funds for it. Allocations on campuses are typically segregated into specific areas such as student mobility or study abroad, diversity training, or professional development in high-impact areas. But virtual exchange does not fit neatly into any one category, which makes it difficult for educators to advocate for resources for virtual exchange. This again comes back to the issue of awareness of virtual exchange and its potential as a high-impact practice. We need more data and examples of how this has worked successfully at different institutions, which can then speak to its value.

UNDERSTANDING PROGRESS AND IMPACT

Assessment and developing common indicators of cross-cultural learning is the biggest gap in virtual exchange. Most of the information gathered is anecdotal and through instruments like the Intercultural Development Inventory (IDI), but there is nothing at the institutional level. Also, there is the need to assess multiple skills and outcomes, including individual skills, 21st century skills, communication and collaboration skills, ability to work with technology, workforce readiness skills, and cross-cultural and global awareness more broadly. We have five years of pre- and post-data for 1,300 students, but it is difficult to track outcomes over time, as we are a small nonprofit. It is easier for larger institutions to track nuanced outcomes by student demographics and countries. We are often only able to prioritize assessment and evaluation with support of external partners, such as the National Science Foundation and the Connecticut College of Technology.

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An ongoing challenge is how to talk about the impacts of virtual exchange and the need to move beyond the focus on cross-cultural gains. These are easily understood by an international education audience but not necessarily valued by others as necessary or useful. Yet if we talk about the ability to conduct a transnational project and work in a team, or how we've managed to overcome technology problems, leaders and employers will take notice. The whole argument for virtual exchange and its value proposition still needs to be made.





Appendix: Methodology

The third survey of virtual exchange programs was implemented by the Stevens Initiative between June and August 2022 and conducted in partnership with Rajika Bhandari Advisors. The online survey captured virtual exchange programs globally that were implemented from September 2021 through August 2022. The survey effort was also guided by a global advisory group of virtual exchange experts.

Survey administration: To ensure consistency across reports, survey questions from prior two surveys were used, with additional questions incorporated as relevant. The survey was pilot tested with a small group of respondents from last year's survey before being widely disseminated. To ensure the widest reach possible, the survey was distributed through the Stevens Initiative's network of over 9,000 individuals and organizations, shared globally through large virtual exchange networks such as UNICollaboration, SUNY COIL, and the Asia Pacific Virtual Exchange Association (APVEA), and disseminated to organizations and institutions in a wide range of countries. A total of 155 virtual exchange providers responded to the survey, with 147 reporting virtual exchange programs that occurred in 2021-2022. Among the subset of 147, 85% (126) were able to provide detailed data about their programs.

Data management and analysis: Survey data was cleaned, validated, and analyzed following standard protocols and best practices. Extensive follow up was conducted with respondents to clarify responses and complete missing information. Due to significant global variations in how virtual exchange is defined and captured through program data, validating responses required an intensive and iterative process.

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