



VIRTUAL EXCHANGE

Assessing intercultural impact
on high school students

Stevens
Initiative



“Assessing the intercultural impact of virtual exchange for high school students: An analysis of AFS Intercultural Programs curricula in two contexts”

ABBREVIATED VERSION

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Executive Summary

Virtual exchanges provide opportunities to widen access, lower cost and deliver global competence at scale in a way that is difficult to achieve through in-country global experiences. This study builds on research undertaken in 2021 (Hansel *et al* 2021), which found that participation in a specific virtual exchange program - AFS' Global You Adventurer - had a statistically significant impact on global competence development. This current study seeks to continue to assess the efficacy of virtual exchange in building the global competence of secondary students. We first sought to understand how the participant population in the current study differs from the 2021 study. We also explored where global competence learning was strongest in the current study and compared this with the 2021 study. Finally, we also articulated the implications of this comparative study for those working in the field, including virtual exchange practitioners, secondary school educators, curriculum designers and policymakers.

As in the 2021 study, the current project uses a sequential mixed-method approach, this time incorporating pre-program and post-program assessment with two survey instruments (the Intercultural Effectiveness Scale (IES) and Stevens Initiative (SI) Common Survey Instruments Group B and C), analysis of participants' forum postings and interviews with program qualified facilitators. Study participants were recruited from AFS' Global UP Teen (GU Teen) delivered as part of the Globally Engaged Learners (GELs) program, which was funded by the Victorian Department of Education in Australia. Participants were aged 13 to 17 and located in four countries (Australia, China, India and Indonesia).

Our study finds that both global competence learning and engagement occurred in the 2023 cohort; albeit not as pronounced as for the cohort in the 2021 study. Learning was strongest in the 'world orientation' and 'interpersonal engagement' dimensions of the IES. Our 2021 and 2023 studies represent two different delivery settings for virtual exchanges, that is: extra-curricular, opt-in programs (2021) and co-curricular, opt-out programs (2023). The 2023 cohort reflects settings for delivering virtual exchanges at *scale*: that is, virtual exchanges which are co-curricular and in which students are nominated by their teachers to participate, delivered in a group-based environment in an institutional setting. In such contexts, we can expect to cede stronger intercultural learning to achieve broader participation.

Keywords: Virtual exchange; high school; K-12, teens; COIL classrooms; global competence development; intercultural learning; Intercultural Effectiveness Scale (IES); learning assessment; synchronous learning; asynchronous learning; co-curricular; AFS Intercultural Programs

Introduction

This report builds on a study undertaken in 2021 entitled, *The impacts of virtual exchange for high-school students: An analysis of AFS Intercultural Programs' Global You Adventurer* (Hansel et al 2021).

AFS' Global Youth Adventurer (GYA) program is a virtual, peer-learning program delivered over five weeks which aims to develop global competence among participants aged 14 to 17 years. GYA was launched in 2020 partly in response to COVID-19-related global travel restrictions, which had significantly impacted AFS' in-country global experiences. GYA also built on existing, asynchronous, global competency digital programs which AFS had offered since 2015.

The 2021 study found that participation in the GYA has a statistically significant impact on global competence development in youth. The current study seeks to continue to examine the efficacy of virtual exchange in building the global competence of secondary students. The 2023 study's Global Up Teen curriculum and live session content was almost identical to GYA. Whereas in the 2021 study, GYA was centrally delivered by AFS International and recruited multilateral global cohorts, Global Up Teen was used in bilateral or classroom-classroom settings, and therefore some discussion prompts vary depending on the delivery context.

This study investigates three research questions:

- In what ways does the participant population in the current study differ from the 2021 study?
- Where was learning in relation to global competence strongest in the current study and how does this compare with the 2021 study?
- What are the implications of this comparative study for those working in the field, such as virtual exchange practitioners, secondary school educators, curriculum designers and policymakers?

Our current study finds that global competence learning and engagement occurred in the 2023 cohort. Learning was strongest in the 'world orientation' and 'interpersonal engagement' dimensions of the Intercultural Effectiveness Scale (IES). Growth in IES scores from pre- to post-program in this Global Up Teen completion was not as pronounced as for the GYA cohort in the 2021 study. These two cohorts, however, represent two different settings in which virtual exchanges and other global competence programs might be delivered, that is, as extra-curricular, opt-in programs (2021) or as co-curricular, opt-out programs (2023). The 2023 cohort reflects settings for delivering virtual exchanges at *scale*: co-curricular programs delivered in a group-based environment in an institutional setting. In such contexts, we can expect to cede stronger intercultural learning so as to achieve broader participation. *See the full report for the Literature Review.*

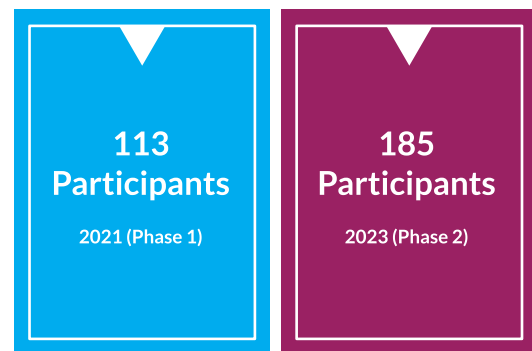


Figure 1: Comparison of key features of our 2021 and 2023 studies

	2021 Study	2023 Study
AFS program/ curriculum	Global You Adventurer (GYA) delivered as an AFS-branded, stand-alone program	Global Up Teen (GU Teen) curriculum delivered within a state (Victoria) government program, 'Globally Engaged Learners' (GELs)
Number of participants	<ul style="list-style-type: none"> - 113 participants completed both the pre- and post-program IES - 112 participants completed the pre-program Stevens Initiative (SI) survey and 113 participants completed the post-program SI survey - The control group comprised 34 participants who completed the post-program SI survey, with 28 participants also completing the pre- and post-program IES 	<ul style="list-style-type: none"> - 250 participants initially enrolled in GU Teen - 172 participants (69%) completed both the pre- and post-program IES - 177 participants (71%) completed both the pre- and post-program SI survey - 185 participants (74%) completed the pre-program SI survey, which includes demographic information
Cohort type	Multilateral cohorts of participants located in a diverse range of countries	Bilateral cohorts of participants located in Australia and China; Australia and India; and Australia and Indonesia
Location of participants	32 countries	4 countries (Australia; China; India; Indonesia)
Gender of participants	70 females; 40 males; 2 gender diverse; 1 non-binary	106 females; 74 males; 3 'other' or did not report
Age of participants	All participants aged over 15 years	27% of participants aged 13 or 14; 73% of participants aged 15+
English skills of participants	26 native English speakers; 93 multilingual participants	56% of participants are native English speakers
Participant motivation	Participants opted-in to the GYA	Participants were nominated by their teachers and could only opt-out of GU Teen
Mode of participation	All participants undertook GYA from a private setting (such as their home), independently and as an <u>extra-curricular</u> activity	Majority of participants undertook GU Teen in a classroom setting (that is, a group setting, alongside their peers), during school hours and as a <u>co-curricular</u> activity
Funding	Participation was self-funded (by participants and/or their families), with some scholarships offered	Participation was funded by the Victorian state government in Australia
Presence of control group	Included a control group comprising 34 participants who completed the post-program SI survey, with 28 participants also completing the pre- and post-program IES	Did not include a control group

Defining global and intercultural competence

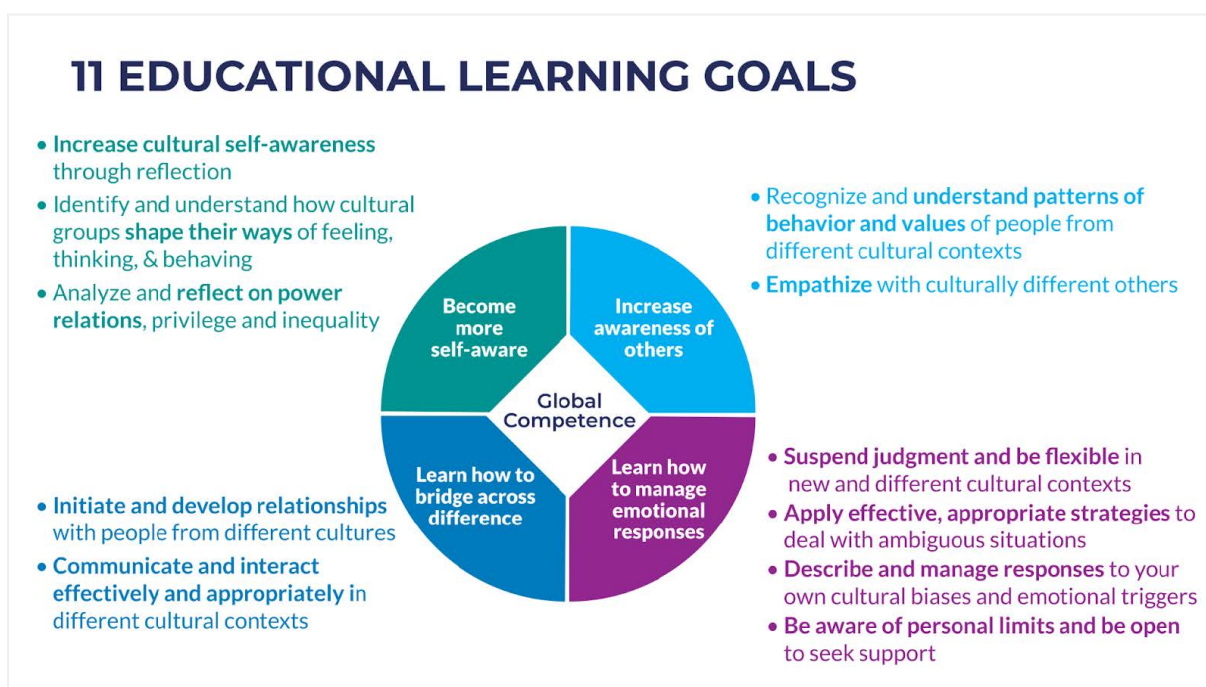
As stated in our 2021 study, there are numerous definitions, models and measures that have been proposed for global and intercultural competence. The discourse on intercultural competence is multifaceted and often considered confusing (Moosmueller and Schoenhueth 2009: 209).

Deardoff and Jones (2012) have identified common threads. They suggest intercultural competence can be defined as ‘effective and appropriate behaviour and communication in intercultural situations’ (2012: 287) and is premised on a series of:

- attitudes (respect, openness, curiosity, discovery);
- knowledge (cultural self-awareness, cultural-specific knowledge, sociolinguistic awareness);
- skills (observation, listening, evaluating, interpreting, relating);
- internal outcomes (flexibility; adaptability; an ethnorelative perspectives; empathy); and
- external outcomes (effectiveness, appropriateness in intercultural situations).

These competencies align with AFS’ education learning goals, which have been developed for both in-person and virtual exchanges (see Figure 2).

Figure 2: AFS 11 Education Learning Goals



Although AFS has developed its own set of definitions and theories of change around intercultural learning and intercultural competencies, in this current study, as well as in our 2021 study, we adopt the models of global competence used in two of our instruments:

- The Intercultural Effectiveness Scale (Kozai Group, 2018); and
- Stevens Initiative Common Survey Items (2020).

The Intercultural Effectiveness Scale (IES) comprises three core dimensions, which each have two sub-dimensions (see Appendix A):

- Continuous learning (self-awareness; exploration);
- Interpersonal engagement (world orientation; relationship development); and
- Hardiness (positive regard; emotional resilience).

The Stevens Initiative (SI) Common Survey Items relate to the dimensions of perspective-taking and empathy (Group B) and cross-cultural communication and collaboration (Group C). Appendix B maps alignment between the AFS Educational Goals; IES dimensions and sub-dimensions; and the SI Common Survey Items.

AFS' Global Up Teen (GU Teen) Program

Developed by AFS Intercultural Programs in 2020, GU Teen is a five-week curriculum for peer-learning virtual exchanges. Figure 3 (in the full report) provides an overall description of the program and highlights key differences with the GYA which was used in the 2021 study.

GU Teen participants use the customized Bridge Learning Management System to work asynchronously through 18 modules, such as exploring 'stereotypes & generalizations' and practising 'empathy & listening'¹. The modules progressively introduce participants to key concepts, attitudes, and skills within AFS' global competence model² through short videos. These are followed by multiple choice questions or an activity so that participants apply and embed their learning. The 18 modules take approximately 16 hours to complete across five weeks, plus additional individual work time.

In a standard GU Teen program, participants also join four facilitated group dialogue sessions on Zoom, led by qualified facilitators³. Each session has a duration of 90 minutes. GU Teen participants therefore undertake a total of six hours of face-to-face virtual interaction with peers.

The primary difference between GYA (used in the 2021 study) and GU Teen is that GYA is a stand-alone virtual exchange, administered by AFS, which uses the GU Teen curriculum and in which any teen located around the world can participate. GU Teen, on the other hand, is a curriculum that can be used to support virtual exchanges administered by AFS and non-AFS organizations. In our study, GU Teen was delivered within the Victorian Government's GELs program. In 2021, GYA also used the GU Teen curriculum, with some minor adaptations, meaning the participants in both the 2021 and 2023 studies were exposed to the same virtual exchange program content.

¹ See Appendix C in the full report for a complete list of modules.

² See Figure 2 in the full report.

³ In the 2023 study, there were five facilitated group dialogues sessions on Zoom. The first of these was an introductory session to welcome students and to explain the additional testing (IES, SI Survey) that they would undertake as research subjects. The remaining four sessions were similar to the four sessions delivered in the 2021 study.

Research Design and Methodology

As in the 2021 study, the current project uses an explanatory sequential design mixed-method approach⁴, this time incorporating pre-program and post-program assessment with two survey instruments, analysis of participants' forum postings and interviews with program facilitators. This allowed for the collection of both qualitative and quantitative data, while also ensuring that participants' voices and experiences were captured in ways that aligned to our ethics approval and the exacting requirements of the Victorian Government regarding child safety. The project received ethics approval from [HML IRB Research & Ethics](#).

Cohort recruitment and participation rates

Participants were recruited from the Globally Engaged Learners (GELs) program administered and funded by the Department of Education in the state of Victoria, Australia. In 2023, AFS' GU Teen program was delivered by Value Learning, an Australian organization which is certified to deliver AFS intercultural learning programs.

Victorian students are not able to register directly in GELs offerings, instead this is done at the school level. Once schools were registered, students aged 13 to 17 were nominated for participation in GU Teen by their teachers, usually on a class basis, rather than individually. For participants located in China, India and Indonesia, there were two recruitment methods; either through their school or via a third party organization. All student and teacher participation in GU Teen, including those located in Australia and abroad, was funded by the Victorian Department of Education.

Value Learning delivered GU Teen through GELs to 11 bilateral cohorts between May and September 2023, with the duration of each cohort lasting five weeks. Cohort sizes ranged from 9 to 32 participants. Classroom teachers as well as two AFS qualified facilitators engaged by Value Learning were present during each 'live session' which was conducted online with the majority of participants joining from a classroom or school setting, during school hours.

The final GU Teen cohort for this study comprised 185 participants of whom 172 participants completed both the pre- and post-program IES; 177 completed both the pre- and post-program SI Survey and all 185 completed the pre-program SI survey which includes demographic information. There were 78 participants located in Australia (42.2%); 45 in China (24.3%), 13 in India (7%) and 49 in Indonesia (26.5%). Fifty one participants (27%) were aged 13 or 14 years.

⁴ See Dawadi, S., Shrestha, S. and Giri, R. A. 2021. Mixed-methods research: A discussion on its types, challenges, and criticisms. *Journal of Practical Studies in Education* 2(2), 25-36.

Figure 3: Cohorts within the GU Teen sample

	Country location of participants	Setting	Number of participants	Participation dates	Younger participants present? (13 and 14 year olds)
Cohort 1	Australia + Indonesia	Classroom-based	32 participants	May 2023	No
Cohort 2	Australia + Indonesia	Classroom-based	12 participants	May - June 2023	Yes (2)
Cohort 3	Australia + Indonesia	Classroom-based	14 participants	May - June 2023	Yes (2)
Cohort 4	Australia + Indonesia	Classroom-based and private settings	9 participants	May - June 2023	Yes (8)
Cohort 5	Australia + Indonesia	Classroom-based	16 participants	May - June 2023	Yes (5)
Cohort 6	Australia + China	Classroom-based and private settings	12 participants	July - August 2023	Yes (1)
Cohort 7	Australia + China	Classroom-based and private settings	14 participants	July - August 2023	Yes (2)
Cohort 8	Australia + China	Classroom-based and private settings	17 participants	July - August 2023	Yes (9)
Cohort 9	Australia + China	Classroom-based and private settings	28 participants	August - September 2023	No
Cohort 10	Australia + India	Classroom-based	22 participants	August - September 2023	Yes (17)
Cohort 11	Australia + Indonesia	Classroom-based	9 participants	August - September 2023	Yes (5)

Surveys

As in the 2021 study, two survey instruments were administered to participants both pre- and post-program to gather quantitative and qualitative data. The first instrument was the Intercultural Effectiveness Scale (IES), which has been used widely in research and education since 2012. Individual items have been validated as scales by the Kozai Group that developed the instrument (Kozai Group 2012). The language used in the IES is clear and unambiguous, which is an important consideration for teenage participants. The IES was used as our primary quantitative measure of participants' global competence development throughout their participation in the five-week GU Teen virtual exchange.

The second instrument was the Stevens Initiative (SI) Common Survey Items⁵. Fourteen of these questions were administered to all participants both pre- and post-program. The SI questions offer participants the opportunity to evaluate their attitudes and behaviours both before and after their virtual exchange. Participants are also able to retroactively revise their evaluations post-program to reflect how they now believe they should have evaluated themselves before starting the virtual exchange.

⁵ See Stevens Initiative 2019 and Appendix D of the full report.

Forum postings

We conducted a qualitative analysis of participants' responses to the discussion prompts within the GU Teen learning platform. These were short responses to reflective questions posed in the modules, typically a few sentences to a paragraph in length. These offered insights into participant engagement with the course material in terms of whether participants engaged (that is, a response provided) and how participants engaged (information included in their response).

Interviews with facilitators

Individual in-depth interviews were held with two GU Teen 'live session' facilitators who were engaged by Value Learning. Both facilitators also had additional responsibilities which extended beyond facilitation to include program administration, such as recruiting schools into the GU Teen, providing information to teachers and scheduling various components of the program including start/end dates and live sessions. Both facilitators led live sessions for more than one of the 11 cohorts and have in-depth experience in facilitating AFS curricula in a range of settings outside of GELs. This allowed facilitators to provide informed responses to questions about facilitating (1) in extra-curricular, opt-in versus co-curricular, opt-out settings; (2) for bilateral versus multilateral cohorts; and (3) in private versus group-based settings.

"Learning is shaped by participants' starting points. Participants really do start at a different point and move at a different pace."

*Qualified Facilitator,
Cohort 4*

Key Findings

Research Question 1: In what ways does the participant population in the current study differ from the 2021 study?

There are a number of areas of difference between the 2021 GYA and 2023 GU Teen participants that are worth noting:

- The 2023 study included participants aged 13 and 14 years (28% of the overall cohort). In the 2021 study, there were no participants in either the control group or the GYA participant group aged under 15 years.
- Participants in the 2021 GYA cohort were located in 32 countries⁶. In the 2023 GU Teen cohort, there are four countries of location: Australia, China, India and Indonesia. This lower number of locations, however, masks diversity in terms of cultural background. For example, many Indonesian participants identified their sub-national cultural background, such as 'Javanese' or 'Acehnese'. The Australian cohort reflects the multicultural diversity of Australian society⁷ with participants reporting diverse

⁶ 'Country' as used here does not reflect citizenship, nor nationality. Rather, it represents the location where the student lives and attends school.

⁷ Almost 50% of Australians have a parent born overseas and the Australian population continues to be drawn from around the globe with over 25% reporting a birthplace overseas (Australian Bureau of Statistics 2022).

cultural backgrounds including Afghani, American, British, Canadian, Filipino and South Korean.

- Because of the large number of participants located in Australia in the 2023 study, the GU Teen cohort reported a much higher level of native English ability, measured across 'understanding', 'speaking' and 'writing', than the 2021 cohort and control group.
- In terms of parents' education levels, the 2021 control group reported having the largest number of parents whose highest level of education was high school. The 2021 GYA and 2023 GU Teen participants were much more

similar in terms of parents' education levels. The 2021 control group is small in size, particularly for those who completed both pre- and post-program testing. For this reason, although statistically significant, the practical significance of this difference is low.

- The 2023 GU Teen cohort reported only 25% as having no friends from other cultural backgrounds, which is significantly lower than the 2021 GYA and control group participants. This suggests that 75% of GU Teen participants have at least one of their five closest friends being from another cultural background, compared to just over two thirds of the 2021 GYA and control group cohorts. This may be attributed to the highly multicultural composition of three of the four countries of location in the 2023 study (Australia, India and Indonesia).

"However I find the modules to be very insightful and helps initiate topics that I don't often talk or think about to spark in my mind. Talking to the Australian counterparts in the meetings is also very impactful as I don't often communicate with people outside of my community for that amount of time.."

Participant, Cohort 8

Research Question 2: Where was learning in relation to global competence strongest in the current study and how does this compare with the 2021 study?

In the 2021 study, the pre- and post-program IES scores of the GYA cohort were compared to those of a control group. In the current study, the IES scores of the GU Teen cohort are compared to the cohorts in the previous study.

In terms of differences in the pre- and post-program IES test scores within the GU Teen cohort only, increased scores significantly outnumbered decreased or no change scores for these IES scales: The Overall IES Scale, Self-Awareness, Exploration, World Orientation, Continuous Learning, Interpersonal Engagement.

> **Younger participants**

We also wanted to understand how other factors might affect the scores, particularly since the GU Teen cohort includes participants as young as 13 years. When we split the sample into younger participants (aged 13 and 14 years) and older participants (aged 15, 16 and 17), some interesting findings emerge:

"I feel that more confidence has emerged within me and I feel more comfortable talking to people I don't know.."

*Participant
Cohort 10*

- **Self Awareness:** A significant difference was found in the post-program test scores for the younger group. Pre-program survey scores were slightly lower, but not quite significantly so, and growth was also lower, but, again, just outside the range of statistical significance.
- **Exploration:** Here the younger group showed significantly lower scores in the pre-program survey. Their post-program test scores on this scale were also somewhat lower, but outside the range for statistical significance. However, the **level of growth is too close to that of the older participants to confirm any difference.**
- **World Orientation:** Younger participants show much lower scores than the older participants in the pre-program survey, but the difference dissipates at the post-program test and in the amount of growth in this area.
- **Continuous Learning:** Again, younger participants show significantly lower pre-program and post-program survey scores, but the amount of growth is more similar to that of older participants.
- **Interpersonal Engagement** and the **Overall IES** scores show some evidence for a difference among the younger participants, but the impact is not strong enough to be significant.

> See the full report for more on logistic regression predictive modeling results for younger students and the impact of participant location

Comparisons with the 2021 study

While there were significantly more participants in the 2021 study with positive results on all of the IES scales, in our current study we find that half of the IES scales do not show significant growth for a majority of participants. In the current study, the top scales are ‘world orientation’ and ‘interpersonal engagement’, both of which were among the scales with the greatest improvement for the 2021 cohort. ‘Continuous learning’, however, was also a strong area of improvement for participants in 2021, but the 2023 participants showed no significant growth overall in this area.

Figure 4: Percentage of participants with higher IES scales in the post-program survey

IES Scale	GYA Cohort (2021)	GU Teen Cohort (2023)
Self awareness	63.2%	50.9%
Exploration	62.3%	55.6%
World orientation	67.9%	60.8%
Relationship development	56.6%	under 50%
Positive regard	60.4%	under 50%
Emotional resilience	54.7%	under 50%
Continuous learning	68.9%	under 50%
Hardiness	60.4%	under 50%
Interpersonal engagement	67.9%	61.4%
Overall IES Score	66.0%	58.5%

The GU Teen cohort in 2023 includes younger participants who scored lower on items such as self-awareness and continuous learning, as detailed above.

> **Findings from the Stevens Initiative survey**

Both the 2021 and 2023 cohorts displayed similar growth in this scale, though the 2021 group is slightly (but not significantly) higher. For all six items, the preferred direction was likely quite clear to participants and there is some indication that they overrated their communication behaviors in the pre-program survey. When we run the comparison again on the difference between the post-program survey scores and the score participants now think they should have given themselves pre-program, we find an increase of over 3 points for the 2021 group and an increase of 2.4 for the 2023 group. This phenomenon is an unusual measure, but in the case of the overestimation of pre-program scores, it provides a way for participants to self-report how much they think they really grew in these items by the time of the post-program survey.

While these results look small, we can assume that participants in both studies believe that they are now more competent in an important aspect of global competence than they were before they participated in their virtual exchange.

> **Engagement**

In both the 2021 and 2023 studies, engagement refers to the number of participants posting responses into online forums. Engagement is apparent in both the 2023 and 2021 studies, and the pattern of engagement is similar, in terms of stronger engagement in the beginning of the program and a tapering off throughout.

“Throughout the program, participants found their voices, spoke up, connected with each other and found common ground.”

Qualified Facilitator, Cohort 1

As with ‘learning’, we were also able to analyse the cohort in the 2023 study who were aged 13 and 14. Engagement from these participants was highest in: Who am I? (Prompt 6, 30 participants), Metaphors of culture (Prompt 4, 28 participants), Suspending judgment (Prompt 16, 27 participants).

Engagement from these younger participants differed from older participants aged 15+ years in: Roadmap (Prompts 2 and 3), Metaphors of culture (Prompt 4).

The difference in engagement of younger participants in the ‘Roadmap’ introductory module (prompts 2 and 3) may indicate that these participants felt less confident at the start of the program than participants aged 15 years and over. This could be overcome through tweaks in program design targeted at making younger participants feel more at ease and comfortable in the learning environment.

Implications

In this section we address research question 3 which asks what are the implications of this comparative study for those working in the field, such as virtual exchange practitioners, secondary school educators, curriculum designers and policymakers.

This current study differs from the 2021 in a number of key areas including participant motivation, financial cost of participation (and who was responsible for this), location of participation and age of participants.

The 2021 study and the current study represent two different settings in which virtual exchange and other online global learning experiences might be delivered: that is (1) an 'opt in' setting in which individual participants voluntarily engage in a virtual exchange as an extra-curricular activity; and (2) an 'opt out' setting, in which groups of participants are nominated by their teachers and required to participate in a virtual exchange as a co-curricular activity during school hours as a class-based activity. The 'opt-out' setting is highly relevant to education practitioners and policymakers who wish to deliver virtual exchanges and other online global experiences *at scale*.

"I was able to gain a new sense of empathy and new perspective about people from other countries and backgrounds"

Participant, Cohort 2

This current study has found that positive changes in IES scores for participants were not as pronounced as for the participants in the 2021 study. In some ways, this is to be expected. Participants in the 2021 study chose to participate and funded their participation in their virtual exchange as an extra-curricular activity, which suggests high levels of motivation. We can expect that these teenagers, and their parents, were motivated by the stated goals of the program and a desire to increase their own global competence. The fact that these participants were all aged 15+ also indicates a level of maturity. On the other hand, participants in the current study completed their virtual exchange as an in-school activity. While they may have selected the subject in which they completed the virtual exchange as an 'elective' and their parents could withdraw them from IES pre- and post-program testing, their motivation to complete the program was entirely different to the participants in the 2021 study. These teenagers had far less personal choice regarding their participation in their virtual exchange.

Despite this, participants in the current study demonstrated both learning (through growth in their pre-program and post-program IES scores) and engagement (through posting responses into an online platform). If practitioners, curriculum designers, policymakers and other advocates of global competence wish to achieve scale through virtual exchanges⁸ which target school-aged participants, they can expect settings and participant motivation to be more similar to the current study than the 2021 study. That is, participation is likely to occur in a group-based environment in an institutional setting as a co-curricular activity. When any program is delivered at scale, program designers usually 'trade off' higher rates of learning and engagement to achieve broader participation. It is not only highly motivated students who will participate, but rather participants will be far more representative of entire school-aged populations within certain school systems.

⁸ Which is common, because by their very nature, virtual exchanges are more 'scalable' and less costly than in-country global experiences.

Our research also suggests a number of new lines of enquiry regarding the efficacy of virtual exchanges. For example, the inclusion of co-curricular settings for virtual exchanges highlights the importance of new research which focuses on participant motivation and the role of group dynamics and pre-existing connections between participants, including peer pressure, on learning and engagement. Further research which focuses on younger teens, such as those aged 13 and 14 years, is also needed. This group, who are likely to be in lower secondary schooling classes, are a primary target for virtual exchanges in school settings as there tends to be greater flexibility within their timetables and curriculum and less focus on examinations and preparation for university entry.

Recommendations

- **Continue to design research which engages a mixed methods approach.**

IES is one tool for measuring intercultural effectiveness among a limited number of alternatives. Likert scales can be problematic for measuring growth, especially when participants rate themselves at a high level in the pre-program survey. In addition to this participants may have cultural tendencies to choose extreme ends of the scale, or to hover in the middle. This can be amplified in bilateral settings with fewer countries of location, such as in the 2023 study.

This highlights the need and importance for research design which engages a mixed methods approach. Our 2021 and 2023 studies demonstrate that using some type of scale to quantify learning is helpful and allows cohorts and programs to be compared, despite their differences.

- **Collect information about virtual exchange settings as part of research design, for example via the SI survey.**

Currently, participants are not asked about the settings of their virtual exchange. For example, what is their physical location (such as a school classroom or a private space at home); what is the level of familiarity with other participants (such as classmates who they know; other students from their school; 'sister school' classmates; or are they meeting other participants for the first time); and whether the virtual exchange is extra-curricular or co-curricular.

Capturing this information through pre-populated answer choices will enable future research of these settings, which are likely to have significant impact on participants' motivation as well as program design.

- **Flexibility is key to designing virtual exchanges for co-curricular settings.**

We can expect a range of structural, 'scheduling' issues to emerge when virtual exchanges are delivered as co-curricular activities as teachers attempt to 'find time' for students to participate. Program designers need to ensure that virtual exchanges can be adapted for a range of school settings, including content that is appropriate for students aged under 15 and which can be delivered in a group environment as well as live sessions that can be delivered in a range of time frames, including time frames that match with a single class or period.

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Appendices

Appendices included in the full report:

- Appendix A: Defining IES model dimensions
 - Appendix B: Comparison of AFS Educational Goals, IES Dimensions and SI Scales
 - Appendix C: Overview of AFS Global Up Teen (GU Teen) Module Content
 - Appendix D: Pre and Post-Program Survey (including SI Scales)
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About Stevens Initiative & Aspen Institute

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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; shares research, resources, and promising practices to improve impact; and advocates for broader adoption. Learn more:

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