



Far From Remote

Survey Evidence of Student Learning in Digital Classrooms

About Global Cities, Inc.

A Program of Bloomberg Philanthropies

Global Cities, Inc. has extensive experience using technology to forge connections among students and educators that promote learning, including through our signature program, Global Scholars. We have also gathered empirical evidence that these connections develop the **skills that students need** to be successful in today's globalized world. We have shown how technology can offer unique opportunities for learning through dialogue and collaboration. Interaction with peers is an incomparable motivator for kids, whether the connections take place in the local classroom or across national borders. We have trained our worldwide network of educators to supervise and guide student learning on digital platforms, and they have provided continuous feedback about what works. What we have learned is relevant to all educators—those who are facing the current challenge of teaching students at home, and those who will continue to benefit from technology as they return to physical classrooms—to ensure every child has access to the education they deserve.

Bloomberg Philanthropies



© Global Cities Inc. 2020. All rights reserved. Not to be reproduced or distributed without the express, written permission of Global Cities, Inc. References to, and excerpts from, this report may be cited as: "Tiven, M. B., Fuchs, E.R., Riegle-Crumb, C., Bazari, A., & Wilhelm, M. (2020). Far From Remote: Survey Evidence of Student Learning in Digital Classrooms. New York, NY: Bloomberg Philanthropies."

Table of Contents

Introduction	3
The Survey	4
Findings	6
1: Dramatic Gains for the Least Confident Students	7
2: Growth in Global Engagement for All Students	8
3: Enduring Enthusiasm for Global Learning	9
4: Professional Development Produced Results	10
Lessons for Remote Learning	11
About Global Scholars	12
Research Methodology	14
Appendix	15
A: Enrollment by Year	16
B: Enrollment by City, 2018-19	17
C: Sample Posts and Replies	18
D: Survey Instrument, 2018-19	21
Authors	28
Acknowledgements	29

"Students who participate in Global Scholars demonstrate at a much higher frequency, and with a much greater authenticity, respect for each other and respect for those who are far away. One of the wonderful things about Global Scholars is that while it absolutely accomplishes its goal of global understanding, it also brings local self-respect. Kids are able to articulate who they are and what communities they are in and speak in a much more appreciative and nuanced way."

DANIEL GOHL

Chief Academic Officer, Broward County Public Schools January 2019

Introduction

What can students learn from a global digital exchange program?

The classroom closures of 2020 happened nearly overnight. Teachers worldwide had to adapt their lessons for unfamiliar online platforms. While many rose heroically to the challenge, some initial reactions focused on the downside—how digital lessons failed to replicate in-person instruction. Remote learning was assumed to be lesser learning, a facsimile that necessarily lost potency with each layer of remove, with particular challenges for students who were already performing behind grade level or disengaged with school.

As educators and policymakers look ahead, a return to in-person instruction alone remains uncertain. It is all the more important to consider the experiences of successful hybrid programs that combine online and in-person learning. Too little is known about the unique potential of such hybrid programs and the new possibilities for student engagement and learning that they offer.

The Global Scholars program, operated by **Global Cities, Inc.**, is an example of such possibility. We are one of the largest providers of global digital exchange, with more than 67,000 students ages 10 to 13 enrolled since 2013-14. Each year, classes of students ages 10 to 13 from schools around the world join our secure digital classrooms, under the supervision of classroom teachers, to complete a shared online curriculum about solving a global problem in partnership with international peers. The nine-month program, which is offered only in English, is typically taught during the regular school day for two hours each week. There are no fees to participate.

The goal of Global Scholars is to develop the knowledge, skills, attitudes, and behaviors students need to become globally competent adults. Global Cities has articulated nine student **learning outcomes** that collectively define global competency for K-12 students. These outcomes are the foundation of the Global Scholars curriculum and program design. Its hallmark is direct peer connections—among students in digital classrooms, and among teachers in live professional development. Students complete collaborative, project-based learning activities in the local classroom, then discuss those assignments with global counterparts in the digital classroom. In discussion boards, students present original work, offer feedback, ask questions, and carry on dialogues that connect them with students the same age in eight to 10 cities around the world. These interactions become an important primary text for learning about global issues and their impact on cities worldwide (For more, see "About Global Scholars" on page 12.)

Global Scholars teachers from all participating countries also engage with one another, through their own Teachers' Lounge discussion boards and required, curriculum-based professional development conducted live by videoconference. These sessions prepare teachers to support authentic, in-depth student exchanges as they explore a **global challenge** like water conservation or protecting biodiversity in their local context.

Unlike many tech-driven "blended" learning models, in which students pursue individualized learning at their own pace with occasional coaching support, the Global Scholars approach puts the teacher in a critical role: guiding students as they encounter new information and consider the perspectives of peers worldwide. Teachers model and nurture the student learning outcomes and indicators we developed. These are the qualities we believe best prepare students for lifelong learning and engagement with their communities and the wider world.

The cities our students call home are vastly different from one another—in terms of culture and language, density and design, climate and natural environment, the racial and ethnic composition of their populations, material wealth, the role of religion, and forms of government. Yet our survey results reveal that student interest in global learning and the impact of our hybrid digital exchange program were remarkably similar around the world. Students enthusiastically engaged with a hybrid digital learning experience, one that connected them to their communities and to one another in an international online classroom. By their own accounts, real learning happened across these settings.

Student Learning Outcomes

Global Outcomes

Appreciation for Diversity Cultural Understanding Global Knowledge

Global Engagement

General Outcomes

Digital Literacy

Language Communication

Self-Efficacy

Academic Engagement

Critical Thinking

Our nine student learning outcomes encompass the knowledge, skills, attitudes, and behaviors students need to become globally competent adults. The student surveys that are the subject of this report were designed as one part of our assessment strategy. They give us a measure of where students were on selected global and general learning outcomes when they began the Global Scholars program and whether they made advances at its conclusion.

he Survey

15,698 [©]

ENROLLED STUDENTS

8,593

SURVEY RESPONDENTS

47

CITIES

24

COUNTRIES

5

CONTINENTS

Measuring the Impact of A Hybrid Approach

As part of our efforts to monitor implementation, assess student learning, and improve our program, we conduct pre- and post-program student and educator surveys each year. The pre-survey establishes a baseline for measuring the program's impact. The post-survey provides a measure of change. We want to know how students rate their understanding of the world and their ability to act on that knowledge after participating in our program. Are we achieving the goals we set forth? Does our hybrid model work? Are students learning what we intended?

In 2018-19, a new data management system made it possible to match individual pre- and post-program responses, allowing us to measure growth over time in attitudes and behaviors. Of the 15,698 students participating that year, nearly 8,600 responded, representing public-school classrooms in 47 cities, 24 countries, and five continents. These students had a broad array of academic abilities, community settings, and initial levels of interest in global issues.

We designed our surveys to measure several specific indicators of learning outcomes that define global competency for K-12 students. We ask questions to assess confidence and curiosity, such as whether students seek opportunities to learn about different cultures and whether they feel they can connect local issues to shared global challenges. Students rate their agreement on a 1-5 scale, from "strongly disagree" (1) to "strongly agree" (5), with statements like, "I look for ways to learn about problems that affect people around the world."

To better understand students' answers, we partnered with University of Texas, Austin education sociologist Catherine Riegle-Crumb, whose analysis forms the basis for this paper. In reviewing the rich set of data created by these responses, Riegle-Crumb focused her work on questions that measure development in four domains: global knowledge, global engagement, attitudes and behaviors that support overall learning, and attitudes and behaviors that enhance students' ability to communicate global knowledge.

¹ Surveys were paused in September 2020 in light of the remote learning setting of most partner schools, which made reliable data collection impossible.



Global Engagement

How much do you agree with these statements?

My actions affect others in my city.

My actions in my city affect people in other countries.

Self-Efficacy for Active Learning

I am confident that I can:

Write and speak in English.

Give a presentation in class.

Share my opinion in class.

Work with my classmates on an assignment or project.

Suggest a plan to complete a group project.

Create a presentation using digital tools.

Give feedback to my classmates about their work.

Global Knowledge

How much do you agree with these statements?

I ask questions to learn more when I hear or read about something I don't understand.

I work to improve things in my school or city.

I look for opportunities to talk to people of different cultures.

I use the internet to learn about other cultures and problems affecting our world.

I look for ways to learn about problems that affect people around the world.

Self-Efficacy for Communicating Global Knowledge

I am confident that I can:

Talk about important events or topics that affect people in other countries.

Talk about important events or topics that affect people in my city.

Talk about how problems in my city are connected to other cities around the world.

Findings

Four major findings emerged from students' responses. The findings are summarized here and explained in the section "What We Learned," which follows. They shed light on the unique potential for student development of global competency in a hybrid academic program, where a live teacher expands the possibilities of the local classroom by actively managing an online platform.

Dramatic Gains for Low-Scoring Students

Students who started the year with low levels of global engagement and knowledge, as well as low confidence, reported remarkable progress in global competency, including in the attitudes and behaviors that support learning. When we looked at just those students who started the year with the least enthusiasm, we found fast-moving progress in all domains. Post-program, those students rated themselves as more globally knowledgeable and more prepared to take action based on that knowledge. In particular, their active learning efficacy grew; they expressed more confidence in foundational academic skills, such as completing group projects, giving feedback, and talking about important events. Although some online environments can be challenging for less motivated students because digital platforms have the potential for isolation and require more self-reliance, in Global Scholars, these students thrived.

Crowth in Global Engagement for All Students

Across the whole population of Global Scholars students, there was a statistically significant gain in global engagement. Post-program, students were more likely to agree that their actions affect others in their city and around the world. This was true across our diverse cohort, with especially large effects for students who were initially disinterested in global learning. The sustained, teacher-led digital learning experience, in which students explored global issues in a local context, empowered all students and bolstered their self-image as capable citizens.

3

Enduring Enthusiasm for Global Learning

Students started the year with very high levels of interest in global issues, and they ended the year with high levels of interest. Students' interest and appetite for global knowledge held fast over the course of the 9-month program, and the majority completed more than half of all assignments and posted them on electronic discussion boards. There is little opportunity for a group with already high ratings to show growth, but such widespread sustained positive attitudes are notable in two ways: first, because it is not unusual for survey results to show declines in such situations; and second, because in some online learning environments, there is actual drop-off in student engagement.

4

Professional Development Produced Results

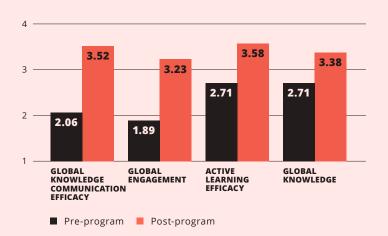
Students did better when their teachers were more involved. The vast majority of teachers followed through on the professional development requirement, which equipped both novices and veterans to enhance student learning. The Global Scholars program provides live videoconference professional development for teachers five times each year, along with curriculum materials and ongoing technical support. Students whose teachers attended all five sessions (65 percent) reported more global engagement and confidence in communicating global knowledge compared to those who attended four or fewer (35 percent). The differences for initially less-engaged students were especially large. By contrast, other teacher characteristics, such as whether they had previously taught Global Scholars, were not associated with such changes.

DING

Dramatic Gains for Low-Scoring and Less-Confident Students

Students with low levels of interest and confidence at the beginning of the year reported remarkable progress in global competency, including in the attitudes and behaviors that support learning.

Gains for Low-Scoring and Less-Confident Students



We investigated the unique experiences of students with low pre-program scores, those who disagreed or were neutral about their beliefs and ability to engage in a digital global learning program. We found large positive differences for these students in all domains of our survey. After participating in Global Scholars, students expanded their global competency skills and interest in global issues, while also gaining new confidence and the mindset that can boost learning overall. This is important because students who consider themselves less capable are generally hardest to reach, and online learning environments are associated with lesser learning for lower-performing students. However, our hybrid digital program had a positive impact on students' learning and mindset about learning.

Initially, five percent, or 433 students, gave themselves low scores in **active learning efficacy**. These students were not confident that they could complete foundational academic tasks, such as share an opinion, plan or contribute to a group project, use digital tools to create a presentation, or present their work to a class. This efficacy scale is important because educational research shows that students need to feel capable of learning in order to learn.

Our data indicate that students' low scores at the beginning of the year did not match their performance. These students made tremendous progress across the board. At the end of the year, the average score in active learning efficacy for this group increased from 2.71 to 3.58. In other words, students who initially thought that they could not be successful in class proved themselves wrong. They ended the year with an expanded sense of confidence and faith in their abilities as learners.

We also looked at changes among the 10 percent, or 872 students, who initially gave themselves low ratings on questions about **global knowledge**. Students were asked whether they sought out new knowledge, such as by asking questions about things they don't understand, researching different cultures or global challenges on the internet, talking to people from different cultures, or working to improve their school or city. The average for low-rated students jumped from 2.71 to 3.38 by the end of the year.

Students showed the most dramatic progress when it came to their confidence in their own abilities to **share and discuss global affairs**. This is an especially important domain, as it draws on critical social and emotional learning competencies that support all learning. We asked three questions to assess communicating global knowledge efficacy, a domain where mindset, skillfulness, and content knowledge meet. Five percent, or 414 students, initially gave themselves low ratings in this domain, with an average of 2.06. They were not confident they could talk about important topics or events that affect their city or the world, and they did not believe they could talk about how problems in their city were connected to problems in other cities in the world. After the program, their mindset changed dramatically, with an average rating of 3.52.

These gains are especially notable for an academic program with a sizeable online component. Less-engaged students often struggle with online learning, which in some environments may be isolating or fail to interest those who lack confidence in their abilities. In addition, student self-efficacy may be especially important in hybrid or remote learning environments, where motivation, faith in oneself to persist through a challenge, and positive expectations for academic success are critical to maintaining momentum.

² For example, see Jessica B. Heppen, Jessica B. et al (2017) The Struggle to Pass Algebra: Online vs. Face-to-Face Credit Recovery for At-Risk Urban Students, Journal of Research on Educational Effectiveness, 10:2.

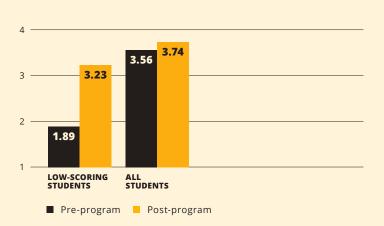
Growth in Global Engagement for All Students

Across the whole population, more students agreed that their actions matter in their city and that they can influence change throughout the world after participating in Global Scholars.

"My actions affect others in my city."

"My actions in my city affect people in other countries."

Growth in Global Engagement, All and Low-Scoring Students



Globally engaged citizens are problem solvers. They believe their actions make a difference. These citizens are interested in their local communities and the world beyond and can apply important skills to understand and address common challenges: research, communicating across diverse languages and cultures, and taking action to affect positive change. As curious and confident lifelong learners, they are able to articulate their local point of view while listening and considering fully the perspectives of others.

Often, efforts to promote global engagement occur at the college level. But our program focuses on students ages 10 to 13. This is a unique and fast-moving stage of student development, when new cognitive skills help young people ask big-picture questions, articulate and challenge values and ideals, and begin to form an independent self-image and idea of their place in the world. Students at this age also are intensely interested in one another and build knowledge through interacting with their peers, which can prepare them for productive collaboration in adulthood.

To learn more about our program's impact on global engagement, we asked students if they think their actions affect others in their city and people in other countries. At the start of the program, students agreed somewhat with these two statements, with an average rating of 3.56 on a five-point scale. After the program, across the whole population, agreement grew to an average of 3.74, a statistically significant difference.

While this overall increase may not seem large, it is notable given how widespread positive student attitudes were at the outset of the program year. In our pre-program surveys, 81 percent, or 6,954 students, said they agreed or strongly agreed with our statements about global engagement, with ratings of 4 or 5. When so many students report such high levels of initial agreement, it is difficult to demonstrate growth and easy to register declines. However, that is not what we experienced. By the end of the year, 57 percent of students moved in a positive direction or stayed in the two highest categories.

Students encountered our program from a variety of starting points—the diversity in our cohort includes academic preparedness and interest, alongside geography and cultural differences. We looked at responses across a range of student groups, such as by age and whether students were from the United States, with mostly similar results.

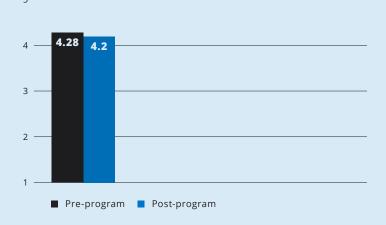
We found one major difference when we looked at just those students who started the year with the lowest ratings in global engagement. Initially, 1,639 students—nearly one in five—did not believe that their actions affect others locally and in other countries. Their score on the global engagement scale averaged 1.89, which is between "disagree" and "strongly disagree." By the end of the year, the average rating for this group had increased to 3.23, which is between a neutral response and agreement. This is large and significant change, particularly for a one-year program.

Participation in a sustained, teacher-led digital learning experience helped all students, and especially those most likely to struggle, enhance their knowledge and belief that what they do matters, locally and globally.

Enduring Enthusiasm for Global Learning

Most students started out cur a global digital learning progra		"I want to learn how people live in different countries."
remained strong at the end of		" I want to learn how people from different cultures see the world."
"People around the world can share idea	s to solve common problems."	"I want to hear the ideas of people from different countries and cultures."
"I am interested in understanding my own culture."	"There can be different perspectives on any topic."	" I want to learn what happens in other countries."

Enduring Enthusiasm for Global Learning



Young adolescent interests often change rapidly, but our students' interest in global learning did not.

We wanted to know whether students were interested beforehand in the sorts of questions they'd be exploring in our program, and whether they were still interested in those questions afterward. Our survey included seven questions about student appreciation for diversity, such as whether they wanted to hear ideas from other cultures, learn how people in different countries live and see the world, or understand more about their own culture.

Students were generally enthusiastic at the start of the year, with an average score of 4.28—between "agree" and "strongly agree." At the end of the program, that enthusiasm largely held fast, with an average score of 4.20. While this does represent a statistically significant decline, it is very small in scope (about 1/10 of a standard deviation).

These measures are notable for several reasons. First, in survey analysis there typically is little opportunity for a group with already strong ratings to show growth and declines in such situations are not uncommon. While students are unlikely to show growth, it is noteworthy that student enthusiasm was overwhelmingly durable.

Second, the Global Scholars program is not easy. It pushes students to encounter unfamiliar places and cultures, research and propose original ideas, and actively engage with their classmates and international peers in cycles of presentation and feedback. Virtually all activities are completed in English, even though many of our students are not native speakers. Yet most students capitalized on their curiosity and rose to these challenges. Some 63 percent completed more than half of all Global Scholars activities.

4

Professional Development Produced Results

Most teachers followed through on the professional development requirement, which equipped both novices and veterans to enhance student learning.

Teacher Participation in Professional Development



In a classroom-based, interactive digital learning program, teachers have a complex role to play. They guide planning and group work, model higher-order tasks like asking respectful questions and giving feedback, and support students to use digital tools and engage international peers in evidence-based dialogue throughout the program year.

We designed Global Scholars to explicitly develop teachers' skillfulness to supervise our hybrid program.

Unlike traditional lessons, this curriculum expects educators to work in partnership with students as they implement the Global Scholars assignments and oversee cycles of discussion board posts and replies where student ideas take center stage. In addition, the digital platform may be initially unfamiliar to many teachers, who encounter our program with different outlooks, types of pedagogical preparation, and familiarity with technology.

To ensure teachers can engage deeply with our curriculum, we require that they participate in ongoing professional development throughout the year. Training sessions are delivered via interactive videoconference at five key moments

in our program before each new curriculum unit. These live professional learning opportunities bring teachers together from a variety of schools, cities, and countries, and provide a platform for educators to share common questions, challenges, and strategies for success. Each session focuses on the upcoming curriculum unit's content, materials and digital tools, as well as important instructional skills like facilitating student-led conversations. During the 2018-19 school year, 65 percent of teachers participated in all five sessions and 90 percent of teachers participated in three or more sessions.

Results from our surveys show that this live, curriculum-based professional development had a positive impact on student learning, particularly for students with low pre-program ratings. In global engagement, students with initial low ratings made strong progress when their teachers participated in all five professional development sessions, from 1.87 at the start of the program, to an average of 3.29 post-program. By contrast, when their teacher participated in four or fewer sessions, the average rating for low-scoring students grew from 1.88 to 3.12. This suggests that the program design requiring professional development, in addition to ample instructional support, can help less confident students take appropriate intellectual risks and build their skills.

Professional development had a lesser but still significant impact for all students. Across the whole population, students whose teachers participated in five sessions reported larger gains in global engagement and active learning efficacy. In global engagement, the average rating for those students grew from 3.55 at the start of the program to a post-program 3.77. By contrast, when teachers participated in four or fewer sessions, the average student rating grew less— from 3.56 at the start of the year to a post-program 3.69.

These impacts on student scores did not meaningfully differ based on whether their teachers were veterans or new to the program. Professional development successfully equipped teachers to enhance learning even in their first year of teaching Global Scholars. Notably, veteran teachers were more likely than novices to participate in all five required sessions, suggesting that they found this opportunity worth their time. Some 67 percent of returning Global Scholars teachers completed all five sessions compared to 61 percent of new teachers.

Lessons From Remote Learning

Students in Global Scholars progressed in terms of both global learning and the skills and behaviors that support all learning. These findings show that a well-designed and effectively implemented digital learning program can facilitate a complex network of human interactions and support student success. We attribute this to several aspects of our program, now in its seventh year.

First

We articulated what students should learn in order to continue to become globally competent adults. This consists of nine student learning outcomes—both global learning outcomes and the skills and behaviors that support all learning, i.e., the general learning outcomes. The surveys that are the subject of this report address some of these learning outcomes. The student learning outcomes provide the foundation of our curriculum and professional development. Classroom teachers played an important role in developing the outcomes and were advocates for integrating Global Scholars into the school day and into core subjects and electives.

Second

We designed Global Scholars with continuous student communication at its core. Unlike many online learning experiences, in which students view lectures and work alone to complete assignments, the Global Scholars curriculum requires interaction—with students' peers in their home classrooms and in digital discussion boards. This promotes engagement by capitalizing on their curiosity about one another. The entire experience is interactive and immersive.

Third

These conversations are grounded in authentic, project-based assignments that promote firsthand observation and personal involvement. Students are given the opportunity to take ownership of their learning and collaborate with others. For example, students might conduct field research to observe pollution in local waterways or survey people in their neighborhood to identify food-security issues. Middle-grade learners enjoy exploring what makes their city unique, working on real-world problems, and getting to be decision makers as they propose solutions.

Fourth

Our program uses technology for a purpose. Unlike just watching a video or reading a static online text to learn about an app, Global Scholars requires students to use apps to complete every discussion board assignment throughout the year. They use different online tools to research, create, and present projects. They get hands-on practice every week.

Fifth

These program features would not be possible without in-depth guidance from well-prepared school leaders and teachers who are willing to modify instructional practices and take an expansive, interdisciplinary approach. Teachers play a critical role in supporting student activities, which include individual brainstorming and reflection, collaborative group projects, and whole-class conversations. We have seen this creativity rewarded by extraordinary engagement, with students highly motivated to complete academic work. We prepare teachers for this critical role with our popular live professional development, where teachers discuss curriculum implementation with colleagues worldwide. This preparation was helpful when schools were closed in spring 2020, as many teachers were able to shift more easily to online learning management systems.

Finally

Technology is not enough, but it is necessary.

All students need access to devices and an internet connection to complete assignments on Global Scholars discussion boards. This is true whether students are attending class in school buildings or instruction is taking place at home. In both settings, the promise of adequate infrastructure is not fully realized. Without it, schools cannot take advantage of the unique possibilities of online learning.

About Global Scholars

Hybrid: Teachers and Technology

Global Scholars is a global digital exchange program for students ages 10 to 13 who live in cities around the world. Its defining feature is using technology to forge connections that drive learning—for students in online discussion boards, and for educators in live professional development.

Over the course of a full school year, students investigate and exchange solutions to a global problem. They collaborate in two stages. First, they work with their classmates at the local level to research the problem and brainstorm solutions. During the pandemic, this is taking place either in person or via a digital platform. Then, students post their original work in the Global Scholars e-classroom discussion boards, where they view and respond to the work of international peers. The subject matter gives students something interesting and substantive to talk about, guided by a five-unit digital curriculum.

Some 17,000 public school students in 52 cities worldwide participated in 2019-20. There are no fees to schools; however, there is a site agreement that sets forth responsibilities including allocating at least two hours per week for program activities.

A Focus on Global Issues

Each year, the curriculum focuses on one global issue, such as ecological preservation, safeguarding the world's food system, or maintaining our supply of clean water. Student conversations are structured around this theme, while the activities they complete advance knowledge and skills applicable to solving any global problem. Such topics are chosen because they are immediately recognized as consequential, interdisciplinary, and with observable impacts everywhere. The engineering design process is used as a framework for problem solving: brainstorm, plan, create, test, revise, and share.

Participating classes are organized into secure online digital classrooms, or e-classrooms, on the PowerSchool platform. Each e-classroom cohort includes approximately 300 students from 8 to 10 cities worldwide. These cohorts have their own e-classrooms where students review and respond to one another's observations and ideas about Global Scholars assignments in discussion boards. It is here that they collaborate to build understanding about the global problem and brainstorm solutions. Then students collaborate with their local classmates to create solutions appropriate for their city.

The assignments encourage students to recognize and describe the unique features of their home city, while interactions in the e-classroom expose them to the diverse experiences of young people around the world. This curriculum fosters an array of opportunities for students to interact with one another—first completing assignments with peers in their physical classroom, then sharing and discussing with classmates around the world in the digital classroom.

Teaching Through Digital Tools

Classroom teachers integrate the curriculum into core academic subjects, or electives, where students complete project-based learning assignments and group projects. Global Scholars assignments require students to complete research and propose solutions drawing on experience from their cities. They learn to use different digital tools throughout the year to investigate, create, and present projects in our secure e-classrooms. Most importantly, students have the unique experience of interacting directly with students from many countries. In this way, the posts and replies of discussion boards become a primary text for learning.

The discussion boards are where students exchange opinions, ideas, and research, but they develop those ideas through in-person activities in their physical classrooms. When students are learning from home, teachers need a way to replicate the collaboration and conversation students would have had in their physical classroom in preparation for discussion board exchanges on the Global Scholars digital platform. Since the pandemic, teachers are conducting these normally in-class activities through text chat, videoconferencing, collaborative documents, and other features of learning management systems.

Curriculum Progression

In Unit 1, students post introductions to themselves and their cities and share local facts related to the global issue they will be studying. They then review and reply to similar introductions from their international peers, both to learn about those cities and to practice respectful communication.

In Unit 2, students examine the year's central global issue on a personal level and compare how it affects their individual lives.

In Unit 3, they analyze city-level impacts and solutions.

In Unit 4, they expand their analysis to include solutions from a worldwide perspective.

In Unit 5, the ever-popular community action project, students develop original local solutions to the global problem and respond to one another's proposals.

Feedback Cycles

Our program model is based on these student discussion and feedback cycles, in which conversation in the local classroom and international peer connections online reinforce one another. Through these interactions, students practice skills and behaviors related to foundational learning outcomes, such as critical thinking, communication, and self-efficacy.

The other continuous feedback cycle comes from educator professional development. These required sessions are conducted live by videoconference five times during the school year, immediately before each of the five curriculum units. Global Scholars staff educators lead the conversation regarding the curriculum and digital tools, while participating teachers lead the conversation about instructional practices in their classrooms to support these assignments. Attendance is high, especially among veteran Global Scholars teachers, who share expertise with their peers around the world.

Student Learning Outcomes

These interactions are guided by our program goal for students—to develop the skills, attitudes, and behaviors that will help them grow into globally competent adults. We map Global Scholars lessons to our nine student learning outcomes that collectively define global competency for K-12 students. For a complete list of all student learning outcomes, see **globalcities.org/slo**.

These include four global learning outcomes traditionally not emphasized in general academic curriculum: appreciation for diversity, cultural understanding, global knowledge, and global engagement. In addition, we defined five general learning outcomes that are foundational and further developed by global learning activities: digital literacy, language communication, self-efficacy, academic engagement, and critical thinking. These student learning outcomes, and related empirical indicators, are the basis of our curriculum, discussion boards, and professional development, and inform all aspects of program design.

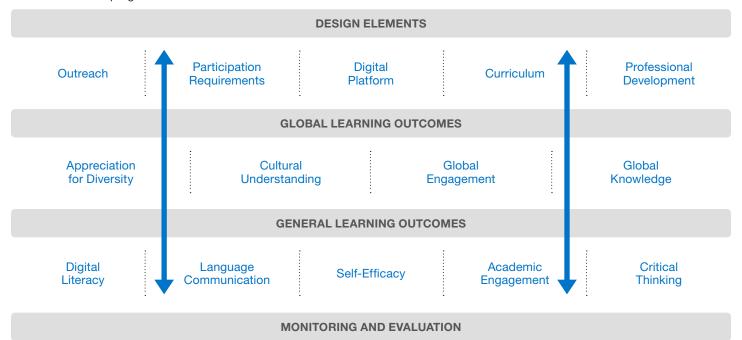
Analytic Model

To make the Global Scholars approach accessible for adaptation by program designers, implementers, and evaluators, Global Cities Inc. developed an analytic program model based on the Global Scholars model. It identifies the elements that all digital exchange programs share: outreach, participation requirements, a digital platform, curriculum, and professional development, and monitoring and evaluation. To underscore the importance of defining what students should learn, student learning outcomes are placed at the core of this model.

For more details about Global Scholars, including overviews of recent curricula and samples of student work, visit **globalcities.org/global-scholars**

ANALYTIC PROGRAM MODEL

This analytic program model was developed by Global Cities, Inc. based on the Global Scholars program and an examination of 51 global digital exchange programs. It identifies the core elements that all global digital exchanges share, and the expected student learning outcomes for such programs.



Research Methodology



Global Scholars enrolled 15,698 students in the 2018-19 school year. More than half of all students, or 8,593, completed both our pre- and post-program surveys. For the analysis, only matched sets were used.

All data analysis for this report was developed and conducted by Catherine Riegle-Crumb, a sociologist of education at the University of Texas, Austin. She described the process below.

"Factor analyses were conducted on survey items to determine whether combinations of items reflected one or more latent variable. Varimax rotation was used, and only factors with eigen values greater than one were retained. After factors were identified, alpha reliability analyses were conducted to determine the overall strength of the scale and to identify whether the inclusion of each item strengthened the scale. If the inclusion of an item resulted in a lower alpha, it was not included in the final scale. All scales reported had alphas that were 0.7 or higher. The final scales were created by averaging responses across all items in the scale.

To assess whether there were statistically significant changes from pre- to post-survey on a scale, paired t-tests were performed. Mixed-design analysis of variance tests were conducted to determine whether any groups of interest, such as international students versus domestic students, had significantly different patterns over time. Independent sample t-tests were conducted to test whether groups had significantly different scores at one time point, such as in pre-program surveys." 3

³ Riegle-Crumb, Catherine. Summary of research methodology reported to Global Cities, June 2020.

Appendix

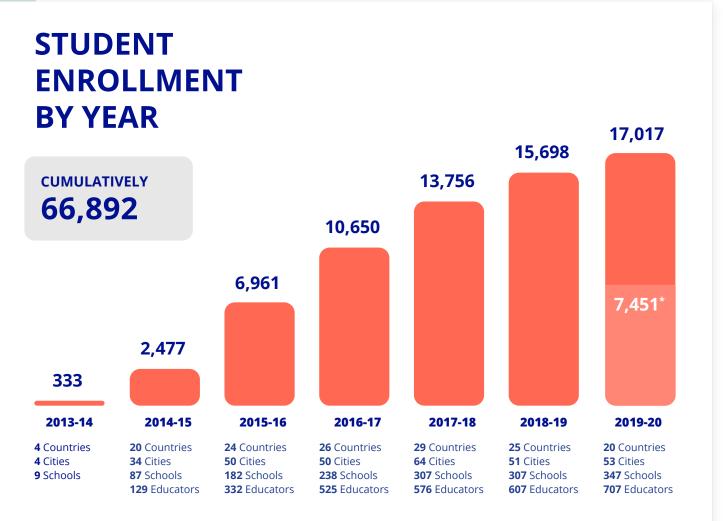
A: Enrollment by Year	16
B: Enrollment by City, 2018-19	17
C: Sample Posts and Replies	18
D: Survey Instrument, 2018-19	21

"As a digital learning platform, Global Scholars trains students and teachers on the use of digital tools for communication, cooperation across distances, and collaborative learning. Nowadays, all of these skills are essential for personal, academic, and professional growth. You very rightly point out that digital platforms are here to stay. And that teachers are irreplaceable. We need to help our students trust more in their own abilities and become aware of the power they have to generate positive changes both locally and globally. In my opinion, the Global Scholars program contributes very positively to the accomplishment of these aims."

MONTSERRAT MONTAGUT

Ministry of Education of the Catalan Government, Spain July 2020

Enrollment by Year



^{*} Post-pandemic student return as of May 29 – June 26, 2020.

Enrollment by City, 2018-19

15,698

ENROLLED STUDENTS

307

SCHOOLS

51

CITIES

25

COUNTRIES

U.S. 6,626

СІТУ	STUDENT
Boston, City of	315
Boston/Chelsea	41
Boston/Everett	544
Boston/Medford	283
Buffalo	825
Detroit	62
Fort Lauderdale/Broward	1168
Hawaii	341

CITY	STUDENTS
Houston	106
Jacksonville	1311
Miami-Dade	382
New York City	1058
Oakland	19
Philadelphia	21
San Diego	87

International

9,072

CITY	STUDENTS
Abu Dhabi	80
Astana	404
Barcelona/Catalonia	1548
Buenos Aires	261
Craiova	61
Flint	63
Genoa	63
Gorzow	22
Hyderabad	28
Istanbul	34
Jakarta	548
Johannesburg	41
Karaganda	78

CITY	STUDENTS
Kokshetau City	20
Krasnoyarsk	25
Liverpool	124
London	297
Madrid	1892
Manchester	33
Medellin	126
Moscow	16
Mumbai	297
Nanchang	25
Paris	257
Petropavlovsk	21
Recife	13
	•

СІТУ	STUDENTS
Semey	18
Seoul	222
Shanghai	118
Singapore	143
Taipei	1144
Taldykorgan City	13
Tbilisi	33
Tel Aviv	227
Tokyo	93
Toronto	279
Volgograd	22
Warsaw	339

Sample Posts and Replies

The Global Scholars curriculum encourages students to think about how global resources feature in their lives and share those observations with peers around the world. Students are then able to see how their communities are similar, different, and connected to one another. Below are examples of Global Scholars Student Message-Board Exchanges.



Boston.Umana.2 JoseLon 15 days ago My water footprint

Dear peers,

I was surprised by my water footprint because I did not know that I used more than 16,884 liters each week. I think the challenges to being water-wise is being in the shower for too long and by not shutting the faucet off while brushing your teeth. This week, I will be more water-wise by spending less time in the shower and not drinking too much water every day and to be more responsible with the water that is being used.



Warsaw.Sp82.2 Zuzannak 10 days ago

I was surprised by my water footprint too! Your idea to spending less time in the shower is great but I don't think so it is healthy to limit water you drink every day:)



Broward.Silvertrail.8 Daniel5 3 days ago

Dear JoseLon

The challenges of being water-wise in your city are similar because we both need to conserve water to help our city. This way, we are both able to save water for the future of our city. Something I would like to know about how people use water in your city is how clean or purified is the water you use for daily things? This past week, I tried to be more water-wise by taking shorter showers and turning off the sink when washing my hands. I was successful because I was able to conserve a lot of the water I used every day at home, and at school.

Sincerely,

Daniel

"I was surprised by my water footprint."

In this exchange, students from Boston, Warsaw, and Florida consider their personal impact on the environment and share how they can change their behavior to conserve water.

BOSTON, MA, USA BROWARD COUNTY, FL, USA WARSAW, POLAND





Warsaw.Korczak SlawekB 7 days ago

From Nature to Faucet

Dear peers,

I learned about Warsaw's water system from my parents and the internet.

Warsaw accesses its water from the river Wisla.

I was surprised to learn that filters, which treat water, are 130 years old.

I can help my local water supply stay safe and clean by minimizing throwing away sewage to river Wisla and clean water.

Sincerely,

Slawek



NYC.Motthall.6 JasonT 1 day ago

Do you think the filters will get damaged or fall apart since there old.



NYC.Motthall.7 HeavenH 1 day ago

Do you think the filters will still be able to consume water they they really old or it will still be able to filter your water?



Warsaw.Korczak SlawekB about 7 hours ago

in reply to NYC.Motthall.6 JasonT

I think Filters never fall apart, because they will be rapaired, when they are damaged.

"I can help my local water supply stay safe and clean."

Students also look at the systems in their cities that they have may have taken for granted. In this exchange, students from Warsaw and New York City think about the infrastructure created in the past and wonder how it will endure into the future.

NEW YORK CITY, NY, USA WARSAW, POLAND





TelAviv.Benavie ArikG 2 months ago

hello

My name is Arik, I'll talka bout the waters of Tel Aviv. The water comes from the Sea of Galilee, but now there's no water. So they started from the Mediterranean Sea, just take out the salt.



Paris.Manuel.4 ElsaC 2 months ago

Thank you for your posting is it very interesting. But we want to know why there is no more water?

Elsa and Noemie



Paris.Manuel.4 UnaiG 2 months ago

Hello Arik.

Thank you for your post it is very interesting. we did the water quiz and we learned a lot, next time we will think before throwing something in the sink. We would like to know how you take out the salt from the sea?

Yours sincerely, Paris friends,Lucille and Unai



Paris.Manuel.4 TristanT 2 months ago

Dear Arik.

we wanted to say think you for making me learn new things about the water in Tel Aviv i really liked it .In paris we have a big source of water that we called the Seine but it sources doesn't come from the Mediterranean Sea Sincerily Tristan & Ava



TelAviv.Benavi.ArikG 2 months ago

Isa and Nom

There is not alot of water because it is very hot in the summer and the water is drying up. And when it rains, there is hardly any rain.



TelAviv.Benavi.ArikG 2 months ago

in reply to Paris.Manuel.4 UnaiG

To Lucille and Unai,

The salt is found using the desalination process.



NYC.Ms74.2 MiaY 2 months ago

Really? That's so cool! Is your country surrounded by two seas?



Tbilisi.Ps165 SalomeK 4 days ago Dear peers,

There is special company from city hall that works for cleaning our city. They use swiping machines in the morning, in the central streets. The weather in my city is not heavy rainy, but sometimes when it rains heavily, streets are flooded and as I know a flood water system is getting better. My city is not near the sea, but we have a lake, but it is polluted and there is not any special machine t clear the water. Unfortunately we don't have storm water management, but it would be really good for my city.

Sincerely,

Salome



Barcelona.Casanova.4 SergiS 3 days ago Dear Salome,

We share the same solution because our rivers and seas are very polluted and in our city we also have sweeping machines to clean our streets. Do you agree that humans are responsible for polluting our natural waterways?

Sincerely,

Aleix and Sergi



Tbilisi.Ps165 SalomeK 15 minutes ago

Dear Sergi and Alex

thank you for your question, humans are responsible for everything in the world, because our action becomes the start of a chain reaction. If you throw a litter in the street it pollutes environmen then it pollutes waterways and the air. It is public duty that everyone should learn from childhood.

"Next time we will think before throwing some thing in the sink."

These students from Tel Aviv, Paris, and New York City deepen their understanding of water by exchanging personal experiences, asking questions and clarifying ideas.

TEL AVIV, ISRAEL
PARIS, FRANCE
NEW YORK CITY, NY, USA



"Our action becomes the start of a chain reaction."

Through this exchange, students in Tbilisi and Barcelona share firsthand observations and a sense of responsibility as they examine how human activities everywhere affect the natural world.

TBILISI, GEORGIA BARCELONA, SPAIN



APPENDIX C Sample Posts and Replies



Broward.Margate NiaB 15 days ago Our Community Action Project

Hello my global peers!

My class has decided to come up with a community action goal to assist our community in becoming a safer and cleaner place to be. So, one way we can take action into our own hands is to reuse things that we would usually throw away. For example, my class is taking old books and is turning them into miniature notebooks and turning loose-leaf paper into journals. We also had another idea which was to collect recycling materials to donate to our local nature center. Our project will be presented using "Sway" as our digital tool. That is our plan for the community action project.



Jacksonville.Landon AzalyaB 12 days ago Hi friends, from Broward

Thank you for sharing your project with us. Your project is interesting because it shows creativity and gives multiple ways that you are able to help. Our advice to you is to show focus towards one action project and try to provide more information on who will be recieving the notebooks.

One idea we got from learning about your project is to make things out of recyclables that we may find.

Could you please tell us more about what would happen to the materials you would donate to the nature center.

Sincerely, Azalya, Grace, Haley, Sam, Henry, James, Sai, Siddo, Hassan, and Yousef Your friends at Landon in Jacksonville



Broward.Margate NiaB about 6 hours ago Hello friends from Jacksonville,

We wanted to answer your question about our gifts that we are giving to the Nature Center. You asked who will be receiving the notebooks and I'm not sure if we made it clear or not but, The Nature Center and the Zookeepers who are in charge of the animals will be receiving the notebooks. In addition, some kids who come throughout the summer during a camp that the Nature Center hosts every year, will benefit from receiving these items. Also, we appreciate the fact that you took it onto yourselves to also start recycling in your school so, we thank you. That is all!

Вуе

Best Regards, Nia, Samuel, Cahjae and Shiloh

Taking action: the "Sway" project

Global Scholars create a community action project at the end of each year. Using a digital tool called "Sway," students in Broward County, Florida, started a recycling program and created a new way to reuse classroom materials. Some 300 miles away, their peers in Jacksonville explain what they have learned from the project and thank them for recycling—now that they know how actions elsewhere can affect their lives.

BROWARD COUNTY, FL, USA
JACKSONVILLE, FL, USA



Survey Instrument, 2018-19

The pre- and post-surveys completed by Global Scholars students were identical from questions 1-20. Questions 21 and 22 appeared on the post-program survey only.

Global Scholars 2019 Student Post-Program Survey



Thank you for participating in Global Scholars this year. We are so glad you could be part of the program. This survey asks about your experience and thoughts. There are no right or wrong answers.

As you answer the questions, please think about the following parts of your Global Scholars experience:

- Your exchanges with your international peers in the e-classroom discussion boards
- · In-class conversations with your teacher and classmates
- The learning activities you completed as part of Global Scholars, including online research, interviews, community surveys, digital projects, and the Community Action Project

1. What is your e-classroom username?*
2. What is your first name?
3. What is the first letter of your last name (surname)?
4. What is the name of your Global Scholars teacher?
5. What is the first letter of your city? Please select ▼
6. What is the name of your city? Please select ▼
7. What is the name of your school?
Please select ▼

APPENDIX D Survey Instrument, 2018-19

8. How old are you?

9					
10					
11					
12					
13					
14					
Key Terms:	nared chara		s of a group of peo	ple.	
Culture: The beliefs, customs, arts, foods and other sh Example: The water festival we have in my city every Fe Perspective: The way a person understands the world is a person's point of view. Example: My friend and I have different perspectives also the body much do you agree with these statements?	because o	of their ex	xperiences, beliefs,	and cultur	
Example: The water festival we have in my city every Fe Perspective: The way a person understands the world is a person's point of view.	because o	of their ex	xperiences, beliefs,	and cultur	
Example: The water festival we have in my city every Fe Perspective: The way a person understands the world is a person's point of view. Example: My friend and I have different perspectives also also be a second of the control of	because o	of their ex	xperiences, beliefs,	and cultur	
Example: The water festival we have in my city every Fe Perspective: The way a person understands the world is a person's point of view. Example: My friend and I have different perspectives also also be a second of the control of	because of bout school	of their ex	periences, beliefs, e we grew up in diff Neither agree nor	and cultur	Strongl
Example: The water festival we have in my city every Fe Perspective: The way a person understands the world is a person's point of view. Example: My friend and I have different perspectives also also also also also also also als	because of bout school	of their ex I because Agree	periences, beliefs, e we grew up in diff Neither agree nor disagree	and cultur erent cities Disagree	Strong disagre

0

0

0

0

0

0

0

0

0

0

I want to hear the ideas of people from different

I want to learn what happens in other countries.

There can be different perspectives on any topic.

People around the world can share ideas to solve

countries and cultures.

common problems.

Strongly				
Strongly				
agree	Agree	Neither agree	Disagree	Strongly
0	0	0	0	0
0	0	0	0	0
	0		0	0
0	0	0	0	0
Ctrongly		Noither eares		Ctropalu
agree	Agree	nor disagree	Disagree	Strongly disagree
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
	0	0	0	0
0	0	0	0	0
0	0	0	0	0
nfamiliar to	you, wha	t do you do? C	hoose	
	Strongly agree	Strongly agree O O O O O O O O O O O O O O O O O O	Strongly agree O O O O O O O O O O O O O O O O O O	Strongly agree Neither agree nor disagree nor disagree o o o o o o o o o o o o o o o o o o

APPENDIX D Survey Instrument, 2018-19

		ngly ree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Write and speak in English.	()	0	0	0	0
Give a presentation in class.			0	0	0	0
Share my opinion in class.	()	0	0	0	0
Work with my classmates on an assignment or project.	(0	•	0	0
Suggest a plan to complete a group project.	()	0	0	0	0
Create a presentation using a digital tool such as PowerPoint or video software.	(0	0	0	0
Give feedback to my classmates about their work.	()	0	0	0	0
-	ent that I Strongly agree			the following: ither agree nor disagree	Disagree	Strongly disagree
4. When researching a topic online, I am confide	nt that I	can de	o each of	the following:		
	Strongly agree	Agı	ree Ne	ither agree nor disagree	Disagree	disagree
Find information I need through online research.	Strongly		ree Ne	ither agree nor		
Find information I need through online research. Decide if the information I find online is correct.	Strongly agree	Agı	ree Ne	ither agree nor disagree	Disagree	disagree
Find information I need through online research.	Strongly agree	Agı	ree Ne	ither agree nor disagree	Disagree	disagree
Find information I need through online research. Decide if the information I find online is correct. Decide whether information presents only one	Strongly agree	Ag	nee Ne	ither agree nor disagree	Disagree	disagree
Find information I need through online research. Decide if the information I find online is correct. Decide whether information presents only one side of an issue. Tell other people where information I researched	Strongly agree	Agi	ree Ne	ither agree nor disagree	Disagree	disagree
Find information I need through online research. Decide if the information I find online is correct. Decide whether information presents only one side of an issue. Tell other people where information I researched came from.	Strongly agree	Agg	Ne Ne	ither agree nor disagree	Disagree	disagree
Find information I need through online research. Decide if the information I find online is correct. Decide whether information presents only one side of an issue. Tell other people where information I researched came from.	Strongly agree	Agg	Y Agree	Neither agree nor disagree	Disagree O O O O O O O O O O O O O O O O O O	disagree

I world events. I read newspapers or news websites to learn about world events. I talk about important events happening in the world with my peers. I tuse the internet to learn about problems affecting our world. I work on projects to improve my school or community. 17. When you want to learn more about a global topic, what approaches do you use? Choose all options that make sense. Use the internet to do research Ask questions Look for opportunities to hear from other people Read information from multiple sources Discuss the global topic with my peers Read about the topic on social media 18. When you want to solve a difficult problem, which of the following steps would you try? Choose all options that make sense. Do research to learn more Take the first idea I think of Brainstorm different ideas Ask other people to solve the problem for me Make a plan Test out my solution		Every day	Often (2-3 times a week)	Sometimes (2-3 times a month)	Rarely (2-3 times a year)	Never
websites to learn about world events. I talk about important events happening in the world with my peers. I use the internet to learn about problems affecting our world. I work on projects to improve my school or community. 17. When you want to learn more about a global topic, what approaches do you use? Choose all options that make sense. Use the internet to do research Ask questions Look for opportunities to hear from other people Read information from multiple sources Discuss the global topic with my peers Read about the topic on social media 18. When you want to solve a difficult problem, which of the following steps would you try? Choose all options that make sense. Do research to learn more Take the first idea I think of Brainstorm different ideas Ask other people to solve the problem for me Make a plan Test out my solution						0
the world with my peers. I use the internet to learn about problems affecting our world. I work on projects to improve my school or community. 17. When you want to learn more about a global topic, what approaches do you use? Choose all options that make sense. Use the internet to do research Ask questions Look for opportunities to hear from other people Read information from multiple sources Discuss the global topic with my peers Read about the topic on social media 18. When you want to solve a difficult problem, which of the following steps would you try? Choose all options that make sense. Do research to learn more Take the first idea I think of Brainstorm different ideas Ask other people to solve the problem for me Make a plan Test out my solution	websites to learn about world	0	0	0	0	0
affecting our world. I work on projects to improve my school or community. 17. When you want to learn more about a global topic, what approaches do you use? Choose all options that make sense. Use the internet to do research Ask questions Look for opportunities to hear from other people Read information from multiple sources Discuss the global topic with my peers Read about the topic on social media 18. When you want to solve a difficult problem, which of the following steps would you try? Choose all options that make sense. Do research to learn more Take the first idea I think of Brainstorm different ideas Ask other people to solve the problem for me Make a plan Test out my solution		0	0	0	0	0
community. 17. When you want to learn more about a global topic, what approaches do you use? Choose all options that make sense. Use the internet to do research Ask questions Look for opportunities to hear from other people Read information from multiple sources Discuss the global topic with my peers Read about the topic on social media 18. When you want to solve a difficult problem, which of the following steps would you try? Choose all options that make sense. Do research to learn more Take the first idea I think of Brainstorm different ideas Ask other people to solve the problem for me Make a plan Test out my solution		0	0	0	0	0
that make sense. Use the internet to do research Ask questions Look for opportunities to hear from other people Read information from multiple sources Discuss the global topic with my peers Read about the topic on social media 18. When you want to solve a difficult problem, which of the following steps would you try? Choose all options that make sense. Do research to learn more Take the first idea I think of Brainstorm different ideas Ask other people to solve the problem for me Make a plan Test out my solution		0	0	0	0	0
 Do research to learn more Take the first idea I think of Brainstorm different ideas Ask other people to solve the problem for me Make a plan Test out my solution 	Ask questionsLook for opportunities to hear from other	r people				
 Brainstorm different ideas Ask other people to solve the problem for me Make a plan Test out my solution 	 Ask questions Look for opportunities to hear from other Read information from multiple sources Discuss the global topic with my peers Read about the topic on social media When you want to solve a difficult pro 		h of the follov	ving steps would	you try? Choos	e all
 Ask other people to solve the problem for me Make a plan Test out my solution 	 Ask questions Look for opportunities to hear from other Read information from multiple sources Discuss the global topic with my peers Read about the topic on social media 18. When you want to solve a difficult prooptions that make sense. 		h of the follov	ving steps would	you try? Choos	e all
☐ Make a plan ☐ Test out my solution	 Ask questions Look for opportunities to hear from other Read information from multiple sources Discuss the global topic with my peers Read about the topic on social media 18. When you want to solve a difficult prooptions that make sense. Do research to learn more 		h of the follov	ving steps would	you try? Choos	e all
☐ Test out my solution	 Ask questions Look for opportunities to hear from other Read information from multiple sources Discuss the global topic with my peers Read about the topic on social media 18. When you want to solve a difficult prooptions that make sense. Do research to learn more Take the first idea I think of 		h of the follov	ving steps would	you try? Choos	e all
	 Ask questions Look for opportunities to hear from other Read information from multiple sources Discuss the global topic with my peers Read about the topic on social media 18. When you want to solve a difficult propoptions that make sense. Do research to learn more Take the first idea I think of Brainstorm different ideas 	blem, whic	h of the follov	ving steps would	you try? Choos	e all
	 Ask questions Look for opportunities to hear from other Read information from multiple sources Discuss the global topic with my peers Read about the topic on social media 18. When you want to solve a difficult prooptions that make sense. Do research to learn more Take the first idea I think of Brainstorm different ideas Ask other people to solve the problem for 	blem, whic	h of the follov	ving steps would	you try? Choos	e all
Collaborate with others Get feedback on my ideas	 Ask questions Look for opportunities to hear from other Read information from multiple sources Discuss the global topic with my peers Read about the topic on social media 18. When you want to solve a difficult prooptions that make sense. Do research to learn more Take the first idea I think of Brainstorm different ideas Ask other people to solve the problem fo Make a plan 	blem, whic	h of the follov	ving steps would	you try? Choos	e all

APPENDIX D Survey Instrument, 2018-19

- 19. Mary is reading a Global Scholars discussion board. She sees that a student from another country has shared a picture of a food that she does not recognize. How should Mary reply? Choose the best option.
- Ask a question to learn more about the food.
- Do online research to find more information.
- Reply that the food looks weird.
- Share foods that she eats.
- Not respond.
- 20. Juan's class is discussing water pollution. Juan proposes that his city stop using plastic straws because they pollute the ocean. However, his friend thinks that straws do not have an effect on water pollution. How should Juan respond? Choose the best option.
- Ask his friend to explain their opinion.
- Ask questions to learn more about his friend's opinion.
- Tell his friend to research water pollution more online.
- Think about why his friend might have that opinion.
- Tell his friend that their opinion is wrong.

21. I am confident that I can do each of the following	in the e-cla	assroom:	*		
	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree

	agree	rigice	nor disagree	Disagree	disagree
Share my ideas and perspectives and support them with evidence.	0	0	0	0	0
Ask respectful questions to learn more about ideas and people.	0	0	0	0	0
Share and discuss my opinion positively and respectfully with my international peers.	0	0	0	0	0
Share information about my culture and city with my international peers.	0	0	0	0	0
Write in English to share my ideas and perspectives.	0	0	0	0	0

22 1	l would	recommend	Clobal	Coholaro	to.	othor	ctudonte
44.	would	recommend	Global	Scholars	w	other	students.

- 0 = Strongly Disagree
- 0 1
- 0 2
- 0 3
- 0 4
- 0 5
- 0 6
- 0 7
- 0 8
- 0 9
- 10 = Strongly Agree

Please finish the survey by clicking on the SUBMIT button below.

Thank you for completing the Global Scholars survey.

^{*}Questions 21 and 22 were included in post-program surveys only.

Authors

Marjorie B. Tiven is the founder and president of Global Cities, Inc., a Program of Bloomberg Philanthropies.

Ester R. Fuchs is a professor of international and public affairs and political science at Columbia University's School of International and Public Affairs (SIPA).

Catherine Riegle-Crumb is a sociologist of education at the University of Texas at Austin.

Anissa Bazari is executive director for strategy at Global Cities, Inc., a Program of Bloomberg Philanthropies.

Megan Wilhelm is an education program manager at Global Cities, Inc., a Program of Bloomberg Philanthropies.

Acknowledgements

We are grateful for the opportunity to be part of Bloomberg Philanthropies' important work to ensure better, longer lives for the greatest number of people, and especially for the commitment of Michael Bloomberg, whose continuing encouragement has made Global Cities' work possible.

This report relies on the contributions of Global Scholars worldwide network of teachers, principals, administrators, and district leaders who facilitated the piloting of questions and data collection. We especially appreciate these efforts from some of our longest-standing partners in Barcelona, Buenos Aires, Buffalo, Jacksonville, Fort Lauderdale, Houston, Jacksonville, Madrid, Medellin, Mumbai, and Warsaw.

I am grateful as well for the ongoing advice of professionals and leaders in education and digital learning. Jennifer Bell-Ellwanger, Joy Frechtling, Adam Gamoran, Kevin Guthrie, Mary McCormick, LaVerne Srinivasan, and Morris Vogel provided encouragement and thoughtful feedback.

Global Cities is fortunate to have perceptive and dedicated education staff who design curriculum, conduct professional development, and collect feedback from our international network. The analyses reported in this document depend on the contributions of these very committed and highly skilled educators. I especially want to recognize Tara Welch for her leadership in the creation and implementation of annual Global Scholars pre- and post-program surveys. I also want to thank Colleen Khachatourians and Claire DeChant.

Professor Catherine Riegle-Crumb, a sociologist of education at University of Texas at Austin, developed and conducted the analysis of our student surveys. Her dedication to the data and her rigorous standards made this collaboration a privilege and a pleasure. We appreciate the contribution of Ester R. Fuchs, a professor of international and public affairs and political science at Columbia University's School of International and Public Affairs (SIPA). It has been an extraordinarily rewarding experience to work with Ester and our other committed and talented co-authors and Global Cities colleagues, Anissa Bazari and Megan Wilhelm. We are also indebted to our writer and editor, Kathleen Carroll, for helping us share the story of student learning in the Global Scholars program.

I am profoundly thankful to everyone.

MARJORIE B. TIVEN

Marjone S.

Founder and President of Global Cities, Inc., a Program of Bloomberg Philanthropies



One Rockefeller Plaza Suite 1134 New York, NY 10020 (01) (212) 618-6345

info@globalcities.org









www.bloomberg.org

www.globalcities.org

© Global Cities Inc. 2020. All rights reserved. Not to be reproduced or distributed without the express, written permission of Global Cities, Inc. References to, and excerpts from, this report may be cited as: "Tiven, M. B., Fuchs, E.R., Riegle-Crumb, C., Bazari, A., & Wilhelm, M. (2020). Far From Remote: Survey Evidence of Student Learning in Digital Classrooms. New York, NY: Bloomberg Philanthropies."