

PROGRAM GUIDEBOOK

# Tech for Good



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## INTRODUCTION

# About WE Schools

*WE Schools empowers students with the knowledge, skills and motivation to create positive change in both themselves and the world. Through our experiential service-learning programs, they explore and take action on critical issues impacting their communities and people around the globe—from access to clean water to bullying and the environment. Along the way, they gain the social and emotional learning skills they need to reach their full potential, such as resilience, empathy and problem-solving.*

### WE SCHOOLS PROGRAM

Our unique online offering includes educational resources, service-learning campaigns, professional learning for educators and mentorship programs to help students become change-makers. Our resources are free to schools and are always evolving to keep learning materials fresh, relevant and inspiring.

All of our program resources can be found in our [Virtual Learning Centre here](#).

### WE SCHOOLS KIT IN ONENOTE

This interactive resource makes collaborating and creating action plans with peers easy and accessible. It includes more than 14 lesson plans and curriculum packages, issue-based discussion cards on topics relevant to students around the world and downloadable, easy-to-use resources associated with service-learning and action campaigns. [Get your WE Schools Kit in OneNote.](#)

### TECH FOR GOOD

WE is providing students with tools and resources to bring the power of technology into the classroom. By incorporating technology into their service-learning actions with WE Schools Tech for Good programming, students can take their actions even further and amplify their voices globally. Along the way, they'll build valuable 21st century digital skills to prepare them for the future.

From creating interactive maps of community resources to combat food insecurity, to creating online resource centers and virtual issues boards to raise awareness, the possibilities are endless.



## INTRODUCTION

# Why service-learning?

*Service-learning empowers students to apply what they are learning in your classroom in a real world setting to solve problems in their local community and the world around them. Students are able to develop a stronger understanding of local and global issues, while engaging in actions that help to make a difference, each experience reinforcing the other.*

For students to see themselves as empowered change-makers in the world, they need learning experiences that:

Respond to interests	Are relevant and timely	Spark and nurture curiosity
Lead to tangible results	Set them up for success	Connect to classroom knowledge

**Research shows a consistent set of positive outcomes for students participating in service-learning, including:**

- Improved social skills and well-being
- Improved university and workplace readiness
- Increased academic engagement
- Increased leadership skills and civic responsibility

## INTRODUCTION

# Tech for Good: how to to get started

**Tech for Good supports students in developing important digital skills by encouraging them to implement technology into their service-learning campaigns. Plus, your students can earn a certificate for completing the campaign!**

### 1. Join WE Schools

To get your classroom started, download the [WE Schools Foundational Module](#) to build a classroom environment that will nurture social-emotional learning and prepare students for their WE Schools service-learning journey.

### 2. Select a campaign

Investigate local and global issues with the Issue Cards and complete the [Issue Compass Activity](#) to help you select a campaign.

### 3. Apply tech tools in your campaign

Throughout your campaign, look for ways to empower and assist students using technology and digital skills. By incorporating at least three of the sub-standards in one of the [ISTE Standards for Students](#), as outlined in this guide, students can earn the Tech for Good certificate.

### 4. Complete the survey

The Tech for Good Survey documents how your students demonstrated progress toward technology proficiency as set by the ISTE Standards for Students. The survey also asks educators to explain how your students were assisted in the use of technology and digital skills, incorporating at least one of the ISTE Standards for Students into each campaign.

### 5. Celebrate!

Share your Tech for Good actions on social media with #TechforGood #WESchools #ISTE #MicrosoftEdu. If you qualify for the Tech for Good certificate (outlined in step 3) contact [weschools@we.org](mailto:weschools@we.org) after you've completed your project to get a copy of the certificate.





## TECH FOR GOOD IN ACTION

# Meet Felisa, Ranjitsinh & Graeme, global educators from the U.S., India and UK



### FELISA FORD

**DIGITAL LEARNING SPECIALIST,  
ATLANTA PUBLIC SCHOOLS, UNITED STATES**

Along with fellow teachers Natasha Rachell and Ken Shelton, Felisa Ford is behind Lessons in Good Trouble, an immersive Minecraft experience that invites students on a journey through historic and present-day social movements around the world. Students begin by meeting Civil Rights leader and U.S. congressman John Lewis, then travel back in time with him to meet other leaders and experience social justice movements—from learning about a peaceful Black Lives Matter protest in modern-day America, to meeting Emmeline Pankhurst, who advocated for women's rights in Victorian-era London.



### RANJITSINH DISALE

**TEACHER, ZILLA PARISHAD PRIMARY SCHOOL  
INDIA**

Ranjitsinh Disale didn't want his students' learning to be limited to the four walls of a classroom or even the borders of their country. So he started a project called Let's Cross The Borders to promote peace among young people in countries that are in conflict, including India, Pakistan, Israel, Iran, Iraq and Palestine. By leveraging the power of technology like Flipgrid, Microsoft Teams, PowerPoint and Skype, and by connecting with other educators online to invite them to participate, Ranjitsinh's project has reached more than 18,000 students to date, with a goal of reaching 50,000 by 2030.



## GRAEME WRIGHT

TEACHER, CHILTON TRINITY SCHOOL  
UNITED KINGDOM

Graeme Wright's students needed to learn about the music industry and how it works. So they came up with the idea of organizing a concert for their school and community that would also raise awareness and funds for a local mental health charity. Though COVID-19 restrictions meant the event had to be held virtually, this only inspired students to be even more innovative. Together, they learned about everything that goes into planning an event: from marketing, to getting licenses, to collaborating with talent. Every step of the way, students used digital tools to help with their project, such as hosting auditions on Flipgrid, keeping track of reference documents with Wakelet and sharing recordings of video meetings on Stream.

**FIND OUT MORE ABOUT FELISA,  
RANJITSINH AND GRAEME'S  
PROJECTS AT:**

**[WE.org/techforgood](https://www.wefor.org/techforgood)**



# How to use this guide

*Combine the ISTE Standards for Students with WE Schools campaigns to infuse technology into service-learning.*



## ISTE STANDARDS

The guidebook is organized by the seven ISTE Standards for Students.

- For each standard, there are four sub-standards where real-world application examples provide innovative ways students can apply the specific standard to the campaign they are working on.
- Tech tool suggestions are provided to help springboard student learning.
- Associated WE Schools Learning Framework Skills are identified. (See next page overview.)

## OUTPUT IDEAS









For each of the ISTE Standards for Students, Output Ideas are provided.

- Tech Tools, [Sustainable Development Goals \(SDG's\)](#), Issues, and Action Types articulated for each campaign.
- The Output Ideas are actual deliverables your students can accomplish for specific campaigns.
- The Output Idea summary is loaded with hyperlinked resources to inform and support teachers and students.
- ▶ Output Ideas are meant to give you and your students ideas of what is possible when we thoughtfully apply Tech for Good!

## TECHNOLOGY TOOLS, TRAINING & RESOURCES









With so many tools available, how do educators successfully identify, learn and use them in their classrooms? The answer is the [Microsoft Educator Center \(MEC\)](#). This free global gateway offers training, lesson plans, learning resources and professional engagement in a user-friendly and interactive portal. Browse the whole site or click on any of the MEC Resources and Trainings listed for each standard.

# Standards and skills crosswalk

WE SCHOOLS LEARNING FRAMEWORK SKILLS	1. EMPOWERED LEARNER				2. DIGITAL CITIZEN				3. KNOWLEDGE CONSTRUCTOR				4. INNOVATIVE DESIGNER			
	1.A	1.B	1.C	1.D	2.A	2.B	2.C	2.D	3.A	3.B	3.C	3.D	4.A	4.B	4.C	4.D
 ARGUMENT FORMATION										×		×	×			×
 DIGITAL LITERACY	×				×	×	×	×	×	×	×			×		
 LEADERSHIP		×				×										
 ORGANIZATION	×								×		×	×		×	×	
 ACTION PLANNING	×		×				×					×	×	×	×	
 RESEARCH & WRITING						×	×		×		×	×				
 CRITICAL THINKING		×						×		×		×	×		×	×
 REFLECTION			×		×					×					×	×

Continued...

# Standards and skills crosswalk

WE SCHOOLS LEARNING FRAMEWORK SKILLS	5. COMPUTATIONAL THINKER				6. CREATIVE COMMUNICATOR				7. GLOBAL COLLABORATOR			
	5.A	5.B	5.C	5.D	6.A	6.B	6.C	6.D	7.A	7.B	7.C	7.D
 ARGUMENT FORMATION	✗									✗		
 DIGITAL LITERACY					✗	✗	✗	✗	✗			✗
 LEADERSHIP					✗						✗	
 ORGANIZATION		✗					✗					✗
 ACTION PLANNING	✗					✗					✗	✗
 RESEARCH & WRITING		✗								✗		✗
 CRITICAL THINKING	✗	✗				✗		✗		✗		
 REFLECTION								✗	✗			

# Empowered Learner

*Students leverage technology to take an active role in choosing, achieving and demonstrating competencies in their learning goals informed by the learning sciences.*

## 1. EMPOWERED LEARNER

# Integrating into WE Schools campaigns

**1.A Students articulate and set personal learning goals, develop strategies, leverage technology to achieve those strategies and reflect on the learning process itself to improve learning outcomes.**

- Teachers can create a collaborative space such as Microsoft [OneNote Class Notebook](#) for their WE Schools campaigns. In Microsoft OneNote Class Notebook, in the student's personal section, they can create a personal reflection space and reflect about their contributions, findings and impact as they work on their campaign.

► Tech Tools: Microsoft OneNote Class Notebook



**1.B Students build networks and customize their learning environments in ways that support the learning process.**

- Students work within a collaborative space using [co-author features](#) or [commenting](#) and tagging tools to provide feedback and ideas to one another as they work on their campaigns.

► Tech Tools: Microsoft Teams, Word, Excel & PowerPoint



**1.C Students use technology to seek feedback that informs and improves their practice and demonstrates their learning in a variety of ways.**

- As part of the Reflect and Celebrate phases of their WE Schools campaign, students can use tech tools to seek feedback from classmates and others.
- Tech Tools: Microsoft Forms



**1.D Students understand the fundamental concepts of technology operations, demonstrate the ability to choose, use and troubleshoot current technologies and are able to transfer their knowledge to explore emerging technologies.**

- Within their campaign, students can identify the best technology to fit their purpose. Students demonstrate an understanding of how to use the technologies and the troubleshooting tools available such as: [support.office.com/education](#) and [support.microsoft.com](#).
- Tech Tools: Microsoft Edge Browser



## 1. EMPOWERED LEARNER

# Output ideas



**WE are silent**

**TECH TOOL** [Microsoft Forms](#)

**SUSTAINABLE DEVELOPMENT GOAL (SDG)** 1. No Poverty,  
2. Zero Hunger & 5. Gender Equality

**ISSUE** Children's Rights

**ACTION TYPE** Fundraising

**OUTPUT** Students will create a digital student empathy survey. During the Action Planning phase of the fundraiser, students should reflect on what they've learned in the Advocating Children's Rights lessons and in their fundraising toolkits. They will then come up with an Action Plan to organize an event that celebrates 30 years of children's rights and highlights children standing up for their rights that are being denied and voices that go unheard. The teacher could use Microsoft Forms to create a survey that helps students reflect using questions such as: Why are you going silent? What children's rights are you amplifying? How will you raise awareness? How can other students, teachers, family members and community members support you in reaching your goal? The Form could be embedded on a Microsoft OneNote Class Notebook page and distributed to individual notebooks, or it could be added to Microsoft Class Team.



## 1. EMPOWERED LEARNER

# Output ideas



**TECH TOOL** [Padlet](#) & [Sli.do](#)

**SDG** Depends on Campaign Focus

**ISSUE** Depends on Campaign Focus

**ACTION TYPE** Volunteering

**OUTPUT** Students create a virtual issues board to inform and facilitate understanding. After completing the [Community Mapping](#) activity and determining an issue for the class to focus on, students collaborate to create an online bulletin board using a tool like Padlet to highlight the issue that will be the focus of their WE Volunteer Now campaign. The Padlet should include the issue that was identified, the emotions or feelings it brought out, what programs are already in place to help and what more can be done. Students then create a sign-up poll using an online survey poll creator such as Sli.do to sign up volunteers for their event after sharing their Padlet or online bulletin board.

## 1. EMPOWERED LEARNER

# Technology tools, training & resources

TECH TOOL	MICROSOFT EDUCATOR CENTER RESOURCES & TRAINING
Microsoft Excel	<a href="#">Data collection and assessment: Frame data for student learning with Excel</a>
Microsoft Forms	<a href="#">Microsoft Forms: Creating Authentic Assessments</a>
Nearpod	<a href="#">Empowering Every Learner with Nearpod</a>
Microsoft Math Solver	<a href="#">Microsoft Math Solver</a>
Microsoft Class Notebook	<a href="#">OneNote Class Notebook: A teacher's all-in-one notebook for students</a>
Pear Deck	<a href="#">Deliver Powerful Learning Moments with Pear Deck</a>
Microsoft PowerPoint	<a href="#">Building literacy: Build student vocabulary with PowerPoint</a>
Prezi Video	<a href="#">Flip your classroom with Prezi Video</a>
Microsoft Teams	<a href="#">Transform Learning with Microsoft Teams</a>
Wakelet	<a href="#">Surf the 5 C's with Wakelet</a>

# Digital Citizen

*Students recognize the rights, responsibilities and opportunities of living, learning and working in an interconnected digital world, and they act and model in ways that are safe, legal and ethical.*

## 2. DIGITAL CITIZEN

# Integrating into WE Schools campaigns

### 2.A Students cultivate and manage their digital identity and reputation and are aware of the permanence of their actions in the digital world.

- During campaign promotion, students ensure that they are posting and reposting informative content where sources have been verified and facts checked.
- Students get permission to photograph people and disclose the intended use of the photos. The privacy wished of other must be observed and images erased upon request.
- Tech Tools: Smart phones, Researcher in Microsoft Word & social media apps



### 2.B Students engage in positive, safe, legal and ethical behavior when using technology, including social interactions online or when using networked devices.

- Students get permission from school and district network administrators prior to posting campaign specific content to their social media feeds.
- Students who are age 13 or younger do not post campaign specific content from their personal social media account. Rather, they provide content to their teacher to post on official school social media feeds.
- Tech Tools: Social media apps



### 2.C Students demonstrate an understanding of, and respect for, the rights and obligations of using and sharing intellectual property.

- Students ensure that intellectual property used in campaign resources is openly licensed or part of the public domain.
- Tech Tools: Websites like [Creative Commons](#) & [The Noun Project](#)



### 2.D Students manage their personal data to maintain digital privacy and security and are aware of data-collection technology used to track their navigation online.

- While working on campaign Action Planning and Take Action steps, student ensure they are maintaining digital privacy by using secure websites with valid encryption certificates (i.e., "https" and lock icon in address bar).
- Students do not accept application and website navigation and notification requests.
- Tech Tools: Web Browser



## 2. DIGITAL CITIZEN

# Output ideas



# WEwalk for water

**TECH TOOL** [Researcher in Microsoft Word](#)

**SDG** 6. Clean Water and Sanitation & 5. Gender Equality

**ISSUE** [Water](#)

**ACTION TYPE** Fundraising

**OUTPUT** Students use the Researcher Tool in Microsoft Word to verify source credibility and give proper attribution. To launch the WE Walk for Water campaign, students explore the issues related to limited access to clean water. After conversations are launched using the WE Schools [Issues Cards](#), students should conduct their own research to be able to answer the questions: What would your life be like without access to clean water? What are the consequences to not having access to clean water? What do you think needs to be done to make clean water accessible to everyone? Students can conduct their research within a Microsoft Word document using the Researcher tool. The tool can be used to help students sort research into topics, and students can ensure proper credit by using the “add and cite” feature of Researcher.



## 2. DIGITAL CITIZEN

# Output ideas



## WE bake for change

**TECH TOOLS:** Word & Email

**SDG** 2. Zero Hunger

**ISSUE** Hunger

**ACTION TYPE** Fundraiser

**OUTPUT** Students create a school cookbook of favorite family recipes to sell along with their bake sale for WE Bake for Change. As part of the Take Action step, students request use permissions from recipe authors or publishing companies. These requests for permissions will be digitized and kept in a secure folder in case use rights are challenged. For recipes that are original to the student or student's family, students get a Creative Commons License for their recipe and include the appropriate Creative Commons License Icon on each recipe submitted for including in the cookbook.



## 2. DIGITAL CITIZEN

# Output ideas



## ALL CAMPAIGNS

**TECH TOOL:** [Common Sense Media](#) & social media apps

**SDG:** Depends on the Campaign

**ISSUE:** Depends on the Campaign

**ACTION TYPE:** Depends on the Campaign

**OUTPUT:** Students create a class set of norms for safe and responsible use of social media while promoting their WE Schools campaign. Students can participate in Digital Citizenship lessons like those posted by Common Sense Media to serve as a resource in creating their rules. Norms should include topics such as privacy and location settings, messaging and commenting and age restrictions. Once norms are established, they should be posted and practiced prior to allowing students to post to social media to promote their campaign. PLEASE NOTE: Students should not post from their personal accounts and students who are 13 years of age or younger should create the content of the post and provide it to the teacher to who will then post it to the social media account.

# Technology tools, training & resources

TECH TOOL	MICROSOFT EDUCATOR CENTER RESOURCES & TRAINING
MEC Resources	<a href="#">BBC My World Media Literacy</a>
Microsoft Edge Browser	<a href="#">Building literacy: Close reading made digital with Edge</a>
Nearpod	<a href="#">Empowering Every Learner with Nearpod</a>
Microsoft Word Researcher	<a href="#">Reimagine the Writing Process with Microsoft in Education</a>
Digital Citizenship	<a href="#">Digital Citizenship Course &amp; Instructions Resources</a>
Microsoft & TELUS Wise	<a href="#">Learn How to Stay Safe in our Digital World</a>

# Knowledge Constructor

*Students critically curate a variety of resources using digital tools to construct knowledge, produce creative artifacts, and make meaningful learning experiences for themselves and others.*

### 3. KNOWLEDGE CONSTRUCTOR

# Integrating into WE Schools campaigns

## 3.A Students plan and employ effective research strategies to locate information and other resources for their intellectual or creative pursuits.

- Students use web browser tools like [filtering by license type](#) to locate and identify images and videos that are openly licensed and public domain works to use in campaign promotional materials.
- Students use curated collections of creative resources that are openly licensed and public domain works like [Creative Commons](#) and [The Noun Project](#) to create remixed content.

► Tech Tools: Microsoft Bing



## 3.B Students evaluate the accuracy, perspective, credibility, and relevance of information, media, data, or other resources.

- Students use fact-checker skills, like [lateral reading](#), to identify who is behind the information they are reading and the media they are consuming.
- Students use research tools built into their productivity applications to find credible resources and to check their own work for authenticity and attributions.

► Tech Tools: Microsoft Word Researcher & Smart Lookup



## 3.C Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions.

- Students use web-based digital curation tools to collect, annotate, and link resources for campaign research during the Action Plan phase of campaigns.

► Tech Tools: Padlet and Wakelet



## 3.D Students build knowledge by actively exploring real-world issues and problems, developing ideas and theories and pursuing answers and solutions.

- Students use the four steps of WE Schools as the [deliberate design process](#) to scaffold their WE Schools campaign.



### 3. KNOWLEDGE CONSTRUCTOR

## Output ideas



**TECH TOOLS:** [Microsoft Flipgrid](#), Microsoft Word & [GoFundMe Charity](#)

**SDG** 6. Clean Water and Sanitation & 13. Climate Action

**ISSUE** Water & Environment

**ACTION TYPE** Fundraising

**OUTPUT** Students will use digital research tools to curate information used in campaign-focused collaborative video sharing.

Students hold a WE Walk for Water event where participants solicit virtual pledges and then walk a course while carrying a gallon of water. During the Action Plan phase, students will investigate impacts of water retrieval and how these impacts influence gender equality, access to education and sustainable farming practices in developing communities. Students will utilize research tools, like databases and [Microsoft Word Researcher](#), to ensure their findings are factual and substantiated. Students will report these findings using Microsoft Flipgrid. These Microsoft Flipgrid videos can be used to promote the school's event and as a useful resource for the campaign Impact Report.



### 3. KNOWLEDGE CONSTRUCTOR

## Output ideas



**TECH TOOLS:** [Wakelet](#)

**SDG** Depends on campaign focus

**ISSUE** Depends on campaign focus

**ACTION TYPE** Volunteering

**OUTPUT** Students curate a digital collection of organizations and initiatives in their community that need volunteers to serve as a match maker to pair students with groups who need their skill set.

During the Action Plan step of the campaign, students will research and collect specific information for each organization, including contact information, application process, special skills needed, location and organization description. This data will be curated in a virtual tool like Wakelet and shared with community members via social media. During the Take Action step, students will review the curated resources and match themselves with organizations needing student volunteers. Finally, students will take the initiative and contact the organizations to volunteer. For the Report and Celebrate step, students will add a comment in the Wakelet under their organizations post, detailing their experience and offering helpful suggestions to make future volunteer experiences as valuable as possible.



### 3. KNOWLEDGE CONSTRUCTOR

# Technology tools, training & resources

TECH TOOL	MICROSOFT EDUCATOR CENTER RESOURCES & TRAINING
Microsoft Bing Maps	<a href="#">Seven Wonders of the World</a>
Microsoft Flipgrid	<a href="#">Beyond the Basics with Flipgrid</a>
Minecraft EDU	<a href="#">Minecraft EDU In Action</a>
Nearpod	<a href="#">Empowering Every Learner with Nearpod</a>
Microsoft Word	<a href="#">Reimagine the Writing Process with Microsoft in Education</a>
Microsoft Sway	<a href="#">Digital storytelling with Microsoft Sway</a>
Microsoft Teams	<a href="#">Content Creation - Apps for Microsoft Teams</a>
ThingLink	<a href="#">Creating Visual Learning Materials with ThingLink</a>
Wakelet	<a href="#">Surf the 5 C's with Wakelet</a>

# Innovative Designer

*Students use a variety of technologies within a design process to identify and solve problems by creating new, useful or imaginative solutions.*

## 4. INNOVATIVE DESIGNER

# Integrating into WE Schools campaigns

### 4.A Students know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts or solving authentic problems.

- Students use the four steps of WE Schools as the [deliberate design process](#) to scaffold their WE Schools campaign.
- ▶ Tech Tools: Microsoft Word, Excel & Bing



### 4.B Students select and use digital tools to plan and manage a design process that considers design constraints and calculated risks.

- Students use collected data to determine campaign constraints during the Action Plan phase, like student transportation or funding. Then, students use this feedback to shape their campaign's targeted impacts.
- Students use spread sheet and flow chart applications to capture and analyze information during the Action Plan and Take Action phases of their WE Schools campaigns.
- ▶ Tech Tools: Microsoft Excel & MindMeister



### 4.C Students develop, test, and refine prototypes as part of a cyclical design process.

- Students develop campaign output prototypes during the Take Action step of their campaigns. These prototypes are tested, and data is collected to determine needed improvements. Students make small systematic changes to their prototype, then repeat, test and refine the process.



### 4.D Students exhibit a tolerance for ambiguity, perseverance and the capacity to work with open-ended problems.

- Students Record and Reflect during and after each of the steps in their WE Schools campaign. Students maintain a log of activities and complete written reflections throughout their project. Students grow to recognize every problem has variables they may or may not have influence over. This recognition helps students build perseverance. These challenges and successes are recorded and used in the Campaign Impact Survey and Tech for Good Survey completed at the end of each campaign.
- ▶ Tech Tools: Microsoft Word, Excel, [Flipgrid](#)



#### 4. INNOVATIVE DESIGNER

## Output ideas



## WE are innovators

**TECH TOOLS:** Microsoft Paint 3D or [TinkerCAD](#)

**SDG** 12. Responsible Consumption and Production

**ISSUE** Environmental Sustainability

**ACTION TYPE** Awareness Raising

**OUTPUT** Students create reusable face shields using 3D printed and recycled materials. Students ideate using computer aided drafting (CAD) applications.

Once virtual designs are perfected, students create prototypes of face shields as part of the Action Plan phase of the campaign. Prototypes are evaluated and improved based on testing. Next, students Take Action by 3D printing components or building shields from recycled everyday objects, like 2-liter plastic bottles, upcycled sunglasses or 3D glasses with lenses removed, sheet protectors, clear plastic food containers and cardboard. Students can even recycle plastic bottles to create their own filament for 3D Printing. Classrooms can also investigate industrialization practices, like assembly line and lean manufacturing, by working to make face shields as an entire class.

#### 4. INNOVATIVE DESIGNER

# Technology tools, training & resources

TECH TOOL	MICROSOFT EDUCATOR CENTER RESOURCES & TRAINING
Buncee	<a href="#">Creative Expression and Social Emotional Learning with Buncee</a>
Draw and Sketch in OneNote	<a href="#">Getting Started with OneNote</a>
Lego Mindstorms	<a href="#">LEGO® MINDSTORMS® Education EV3</a>
Microsoft Flipgrid	<a href="#">Beyond the Basics with Flipgrid</a>
Microsoft MakeCode & micro:bit	<a href="#">Introduction to Computer Science, with MakeCode for micro:bit</a>
Meet Code Creators	<a href="#">Meet Code Creators Series: Watch ON-DEMAND</a>
Minecraft: Education Edition	<a href="#">Minecraft EDU In Action</a>
Hacking STEM	<a href="#">Hacking STEM Lessons &amp; Hands-On Activities</a>
Paint 3D	<a href="#">Introduction to Paint 3D</a>

# Computational Thinking

*Students develop and employ strategies for understanding and solving problems in ways that leverage the power of technological methods to develop and test solutions.*



## 5. COMPUTATIONAL THINKING

# Integrating into WE Schools campaigns

**5.A** Students formulate problem definitions suited for technology-assisted methods such as data analysis, abstract models, and algorithmic thinking in exploring and finding solutions.

- Students use mind map and brainstorm applications to capture and analyze information for the [Community Mapping](#) and [Issue Compass](#) activities from the WE Schools Kit.
- Tech Tools: Padlet, Wakelet & MindMeiser



**5.B** Students collect data or identify relevant sets, use digital tools to analyze them and represent data in various ways to facilitate problem-solving and decision-making.

- Students use spreadsheet and flow chart applications to capture and analyze information during the Action Plan and Take Action phases of their WE Schools campaigns.
- Students collect feedback from stakeholders through digital surveys and video discussion boards.
- Tech Tools: Microsoft Excel, Microsoft Forms, Flipgrid & MindMeiser



**5.C** Students break problems into component parts, extract key information and develop descriptive models to understand complex systems or facilitate problem-solving.

- Students use a digital curation application to facilitate problem-solving for identified community needs. The curation tool can be used to collect and share defined campaign objectives, compile information and break down needs relevant to future actions.
- Tech Tools: Wakelet



**5.D** Students understand how automation works and use algorithmic thinking to develop a sequence of steps to create and test automated solutions.

- Students utilize an [Agile](#) tool to project and manage campaign outputs. Steps are identified, broken into definable, actionable steps and assigned to team members. Students ask for support, assist others and check off steps as they are completed.
- Tech Tool: Microsoft Planner



## 5. COMPUTATIONAL THINKING

# Output ideas



**WE** are one 

**TECH TOOLS:** Microsoft Forms & PicsArt Photo Studio

**SDG** 4. Quality Education & 10. Decreased Inequalities

**ISSUE** Accessibility

**ACTION TYPE** Advocacy

**OUTPUT** Students meet virtually with community members with disabilities to determine accessibility barriers within the community, then use this information to inform and educate others using social media. Students Investigate and Learn about issues and obstacles people with disabilities face within their community by convening a diverse virtual focus group to discuss and collect information. Students take their qualitative findings from the focus group and create a series of survey questions to determine the overall level of general knowledge and understanding of universal design, accessibility and mobility obstacles on campus. Students use Forms in Office 365 to create, administer and analyze the survey data. Survey findings are used to Take Action and drive change on campus through student-created social media posts using PicsArt Photo Studio. Topics of these informative posts could include addressing mobility obstacles and general use of Microsoft's inclusive classroom tech tools, like Read Aloud & Immersive Reader, for text to speech and Dictate for speech to text.

## 5. COMPUTATIONAL THINKING

# Output ideas



**WE**go  
green

**TECH TOOLS:** Wakelet

**SDG** 6. Clean Water and Sanitation, 11. Sustainable Cities and Communities & 13. Climate Action

**ISSUE** Environmental Sustainability

**ACTION TYPE** Behavioral Change

**OUTPUT** During the Take Action phase of the campaign, students create a Public Wakelet serving as a community resource guide for teaching and learning practices that promote environmentally responsible behaviors within the school and community.

Students identify available and needed resources in their community for recycling, waste minimization, composting, waste-water management, worm bins and battery collection. Next, students create, curate and post information in a collaborative Wakelet. Finally, the Wakelet is shared with families through digital classroom and school newsletters and on the school's website.



## 5. COMPUTATIONAL THINKING

# Output ideas



**TECH TOOLS:** Spreadsheet

**SDG** 2. Zero Hunger

**ISSUE** Hunger & Nutrition

**ACTION TYPE** Material Support

**OUTPUT** Students Take Action by hosting a school-wide food drive and use a spreadsheet application to record, track and sort food collected. As food is collected each day, students use a spreadsheet application to record the volume of food, classroom or grade level donating, food group classification and number of expired items donated. Students use the data from the spreadsheet to report food-drive progress with charts and graphs. This data can also be used to encourage students to donate more protein rich foods and check expiration dates before donating. Educators can also use this daily data to teach math concepts including: basic arithmetic, ratios, percentages, weigh, measure and volume.

## 5. COMPUTATIONAL THINKING

# Technology tools, training & resources

TECH TOOL	MICROSOFT EDUCATOR CENTER RESOURCES & TRAINING
Microsoft 3D Viewer	<a href="#">Explore 3D Models</a>
Microsoft Excel	<a href="#">Building Machines that Emulate Humans</a>
Microsoft Flipgrid	<a href="#">Engage and Amplify with Flipgrid</a>
Microsoft MakeCode	<a href="#">Hands on Computing Education</a>
Minecraft: Education Edition	<a href="#">Building Challenge: Inspired by History</a>



# Creative Communicator

*Students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats and digital media appropriate to their goals.*

## 6. CREATIVE COMMUNICATOR

# Integrating into WE Schools campaigns

### 6.A Students choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.

- Students create digital presentations to showcase their learning and outcomes during the Report and Celebrate phase of their WE Schools campaign.
- Tech Tools: Microsoft Sway, Microsoft PowerPoint & Microsoft Flipgrid



### 6.B Students create original works or responsibly repurpose or remix digital resources into new creations.

- Students take inspiration from [copyright-free resources](#) from sources such as [Creative Commons](#) to create new presentations using the Microsoft Sway Remix and/or Power Point Designer tool.
- Tech Tools: Microsoft Sway & Power Point



### 6.C Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations.

- During the Take Action phase of their WE Schools campaign, students can recruit supporters to their cause by creating models or 3D representations to convey information in a simplified format.
- Tech Tools: Microsoft Word, Minecraft Education Edition & Paint 3D



### 6.D Students publish or present content that customizes the message and medium for their intended audiences.

- Once students have identified their intended audience, student can use [Rehearse Your Slide Show with Presenter Coach](#) in Microsoft Power Point in order to prepare for presenting their outcomes during the Report and Celebrate phase of their WE Schools campaign.
- Tech Tools: Microsoft Power Point



## 6. CREATIVE COMMUNICATOR

# Output ideas



# WE scare hunger

**TECH TOOLS:** [Canva](#), Microsoft Bing Maps & Social Media Applications

**SDG** 2. Zero Hunger

**ISSUE** Hunger

**ACTION TYPE** Material Support

**OUTPUT** Students create an interactive map of community resources to ease food insecurity and create promotional items to get the word out with web-based graphic design applications.

As part of the Action Planning phase, students use Microsoft Bing Maps to identify food banks and distribution centers in their community. Students investigate each location to identify what that organization needs most. Students Take Action by creating posters to advertise their campaign using Canva. Students can use their designs to begin a social media campaign to raise awareness of their cause with #WEScareHunger.

## 6. CREATIVE COMMUNICATOR

# Technology tools, training & resources

TECH TOOL	MICROSOFT EDUCATOR CENTER RESOURCES & TRAINING
Microsoft Flipgrid	<a href="#">Beyond the Basics with Flipgrid</a>
Microsoft Accessibility	<a href="#">Microsoft's Inclusive Classroom Experiences</a>
Microsoft Immersive Reader	<a href="#">All About the Immersive Reader</a>
Microsoft Sway	<a href="#">Building literacy: Visual summarizing in Sway</a>
Microsoft PowerPoint	<a href="#">Introduction to PowerPoint</a>
Microsoft Video Editor	<a href="#">Meet Video Editor</a>
Microsoft Word	<a href="#">Introduction to Word</a>
Whiteboard	<a href="#">Introduction to Whiteboard</a>

# Global Collaborator

*Students use digital tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in teams locally and globally*



## 7. GLOBAL COLLABORATOR

# Integrating into WE Schools campaigns

**7.A** Students use digital tools to connect with learners from a variety of backgrounds and cultures, engaging with them in ways that broaden mutual understanding and learning.

- Students can connect to other classrooms by exchanging videos with one another related to the issues they take action on within their campaigns.

► Tech Tools: Microsoft Stream & Microsoft Flipgrid



**7.B** Students use collaborative technologies to work with others, including peers, experts or community members, to examine issues and problems from multiple viewpoints.

- Teachers schedule guest speakers for the students to interact with during the Investigate and Learn phase of their WE Schools campaign. Students can prepare questions prior to the speaker's "visit" to engage in conversation around their campaign issue.

► Tech Tools: Skype in the Classroom



**7.C** Students contribute constructively to project teams, assuming various roles and responsibilities to work effectively toward a common goal.

- In the Action Planning phase of their WE Schools campaign, students work in project teams, outline goals and responsibilities, and can use collaborative technologies to complete tasks.

► Tech Tools: Microsoft Teams & Microsoft Planner



**7.D** Students explore issues and use collaborative technologies to work with others to investigate solutions.

- As part of their WE Schools campaign, students take virtual field trips to learn more about their campaign focus and work with others to find solutions to the focus issue.

► Tech Tools: Skype in the Classroom & PenPal Schools



## 7. GLOBAL COLLABORATOR

# Output ideas



## WE bake for change

**TECH TOOLS:** [Microsoft Stream](#), [Microsoft Video Editor](#) & social media

**SDG** 12. Responsible Consumption and Production

**ISSUE:** Food Security

**ACTION TYPE:** Fundraising

**OUTPUT:** Students produce an informative baking show about food insecurity and WE Villages.

After students Investigate and Learn about Food Security, they can work in small groups to develop an online cooking show. Students will create teams made up of a videographer, a director, an anchor and a baker. The anchor will share facts related to food insecurity and WE Villages while the baker works to bake their favorite sweet treat. The director will work with the anchor and baker to develop their commentary. The videographer will record the show, edit it using an editing tool such as Microsoft Video Editor, and upload it to the class's Microsoft Stream channel. The video link will be shared via social media outlets to kick off their WE Bake for Change fundraiser.

# Technology tools, training & resources

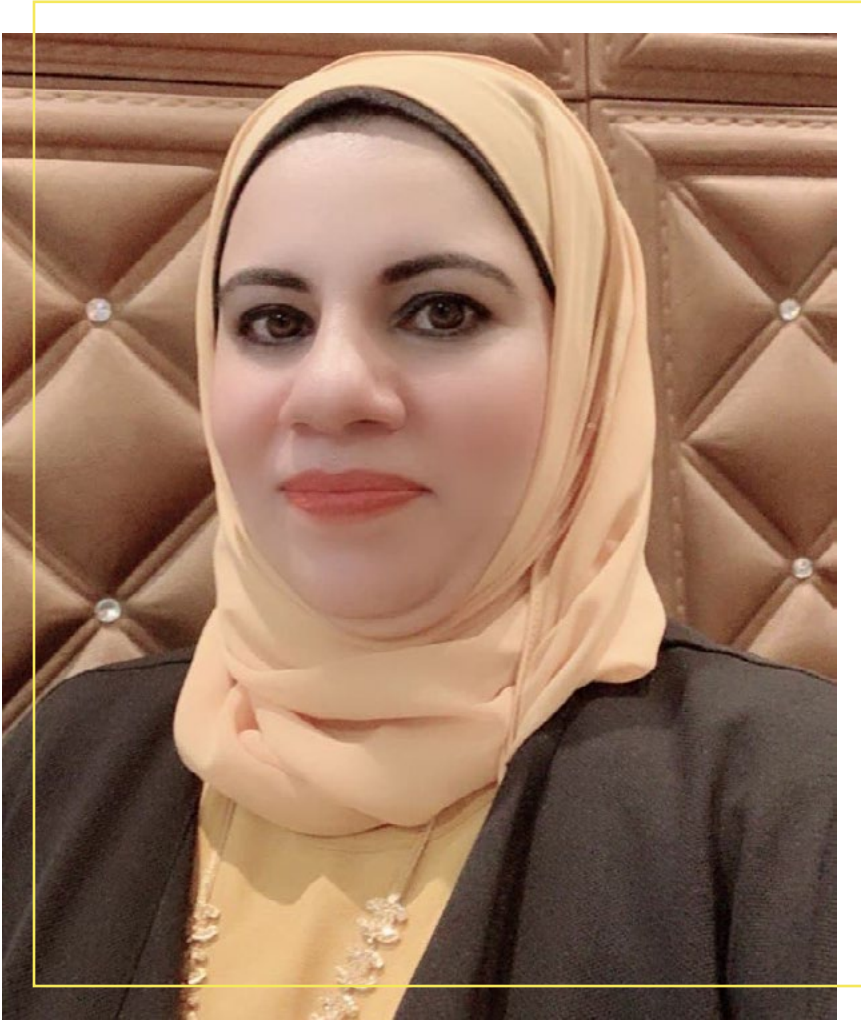
TECH TOOL	MICROSOFT EDUCATOR CENTER RESOURCES & TRAINING
Microsoft Flipgrid	<a href="#">Engage and Amplify with Flipgrid</a>
Genial.ly	<a href="#">Interactive Bird Watching with Genial.ly</a>
Skype in the Classroom	<a href="#">Getting Started with Skype in the Classroom</a>
Video Editor	<a href="#">Meet Video Editor</a>

# Educator profiles

*Meet educators around the world championing tech for good!*

## PROFILE 1

# Meet Amani, a global educator from Kuwait



### WHAT ISSUE DID YOUR STUDENTS FOCUS ON?

My students, who are 13 and 14 years old, took part in the WE Rise Above campaign, which focuses on the problem of cyber-bullying in the community.

During the COVID-19 pandemic, there has been an increase in students, kids and teens using digital platforms. And it's not just for their personal use; they're using digital platforms for educational purposes. Kids are online more than ever before, creating tons of opportunities for both positive and negative interactions with peers, adults, and strangers. Because of this, the phenomenon of cyberbullying has increased heavily. Many students are becoming nervous to use social media or digital platforms, which are a main source of education these days. They want to learn, but are afraid of being victims, so they need a secure platform to receive their education, where there is respect, love and peace.

Just like any other victim of bullying, cyberbullied students experience anxiety, fear, depression, and low self-esteem. They also may experience physical symptoms, mental health issues, and struggle academically. That's why we needed to investigate this

*“Throughout this project, students learned how to be successful problem-solvers and were empowered to change negative attitudes into positives ones.”*

– AMANI MOHAMED RASMA FARRAG

## **HOW DID YOUR STUDENTS UTILIZE TECHNOLOGY IN DEVELOPING A PLAN TO ADDRESS THE ISSUE?**

First, students used Forms to identify the most common problem affecting the school community, which they concluded is cyberbullying.

They then used Planner to distribute work between themselves, as well as to manage their time. They collected statistics and information about cyberbullying, noting it on Excel, and used Forms again to collect people's opinions about the causes and effects of bullying.

Using Flipgrid, students held interviews with people including social workers, psychologists and school leaders, as well as people who had experienced cyberbullying.

After collecting all the data, students collaborated using OneNote to document their findings, develop ideas and suggest solutions. Using Teams, they held meetings, and hosted seminars for other students to raise awareness about the consequences of bullying. They also made a song on Flipgrid to encourage other students not to bully. During meetings, students used Nearpod to present their ideas. Finally, they used Minecraft to build an imaginative world which reflects respect, peace and love.

## **WHAT LEARNING GOALS AND PROCESSES WERE ACCOMPLISHED BY LEVERAGING TECHNOLOGY? (ISTE STANDARD: INNOVATIVE DESIGNER)**

Students developed and worked innovatively on Sustainable Development Goal 4 (quality education) and goal 16 (peace, justice and strong institutions). Students integrated different means of technology in an innovative way, helping them look at the issue of bullying from different perspectives such as psychological, social and behavioral. Students also used the six-step problem-solving model for smart goals to help solve the issue of cyberbullying.

## **HOW DID STUDENTS DEMONSTRATE RESPONSIBLE DIGITAL CITIZENSHIP? (ISTE STANDARD: DIGITAL CITIZEN)**

Students learned how their digital identity affects their reputation both online and offline. They learned how to respect others' work and copyrights and learned the importance of time management.

Before carrying out any plan as part of their project or publishing information, students ensured they asked for permission. Throughout this project, students learned how to be successful problem-solvers and were empowered to change negative attitudes into positives ones.

## **WHAT STRATEGIES DID YOUR STUDENTS USE TO HELP DEVELOP UNDERSTANDING AND PROBLEM-SOLVING SKILLS? (ISTE STANDARD: CREATIVE COMMUNICATOR)**

Students communicated with me and with one-another using Teams, OneNote and Flipgrid. They also used the six-step problem-solving model and different media platforms to understand the issue of cyberbullying and its root causes. We met once a week for two months to discuss their findings, which they presented on Nearpod and documented on OneNote.

Students made sure to check their solutions to the issue to see how they were working—they made surveys for the school community and held meetings with school social workers.

## **IS THERE ANYTHING ELSE YOU WANT TO SHARE ABOUT THE PROJECT?**

My students are enthusiastic about sharing their work globally. Also, they would like to continue developing campaigns like this as they grow up, and coming up with more and more solutions.



## PROFILE 2

# Meet Gunjan, a global educator from India



*“Our students witnessed firsthand how no issue is isolated to a region or a country or a race. Our projects offered them the opportunity to learn how to build and create awareness on issues, how to collaborate amongst their comfort groups and with students across the globe and think critically to come up with viable solutions.”*

– GUNJAN TOMAR

### WHAT ISSUE DID YOUR STUDENTS FOCUS ON?

All leaders and facilitators in our school led this project together as a team, with students from grades 3 to 12. Our students focused on ensuring the planet's health and promoting sustainable action practices through initiatives called the Climate Action Plan and Project Dharohar.

### HOW DID YOUR STUDENTS UTILIZE TECHNOLOGY IN DEVELOPING A PLAN TO ADDRESS THE ISSUE?

Through the Climate Action Plan, students interacted with others from across the globe on Microsoft Teams, and shared their own local concerns about the planet using tools like Padlet, Trello and PowerPoint. This global interaction helped them establish how local environmental issues add up to affect climate concerns on a global scale. Online meetings helped them share their concerns and possible solutions through mediums such as images, videos, presentations, surveys and discussions.

Project Dharohar was a school-led initiative during Diwali where students advocated to reuse and recycle products and skills handed down to them by their parents and grandparents instead of buying newer things. With online shopping becoming even more popular during the lockdown, particularly during the festive season, students showed their concern about the planet's health by reminding us all that overconsumption adds to pollution and increases our carbon footprint. By cherishing what we already have, we not only nurture our relationships but also become more conscious global citizens. Students used Flipgrid to record and share one another's sustainable practices, helping create awareness for the benefits of recycling and reusing.

## WHAT DID YOUR STUDENTS TAKE AWAY FROM THIS PROJECT?

The pandemic brought the entire world together. Our students witnessed firsthand how no issue is isolated to a region, country or race. They also experienced, some for the first time, clear skies and clean air in their usually polluted cities and realized that the damage we humans have done to the planet is not entirely irreversible. Students had the opportunity to learn how to build and create awareness on issues, how to collaborate amongst their comfort groups and with students across the globe and think critically to come up with viable solutions. They learned that the digital world, if used responsibly, is an effective medium to spread this awareness and forge associations with people working toward a common cause.

## WHAT LEARNING GOALS AND PROCESSES WERE ACCOMPLISHED BY LEVERAGING TECHNOLOGY? (ISTE STANDARD: INNOVATIVE DESIGNER)

Over a period of six weeks, students and teachers joined classrooms from across the globe to study the various factors causing this environmental crisis. Through a process of inquiry and innovation, students delineated local causes and concerns, connected them with global climate issues and came up with solutions to solve the problems. Using social media and tech tools, they collaborated with other students and experts to share their experiences, ideas and solutions.

Our students learned to become responsible and alert digital citizens, and showed international-mindedness. They also made sure that their actions on the digital platforms were principled and adhered to the protocols for each of the social media sites.

## HOW DID YOUR STUDENTS DEMONSTRATE RESPONSIBLE DIGITAL CITIZENSHIP? (ISTE STANDARD: DIGITAL CITIZEN)

Using Microsoft Teams helped students stay safe and secure online, as applications they used for learning are integrated into the platform. Through digital citizenship workshops, students were able to understand their roles and responsibilities when learning online. A virtual learning code of conduct

helped students understand expected online behaviors, such as being punctual, using the “hand raise” feature in Microsoft Teams to ask questions and using the chat to communicate and be respectful of presenters.

## HOW DID YOUR STUDENTS USE TECHNOLOGY TO BROADEN THEIR GLOBAL PERSPECTIVE? (ISTE STANDARD: GLOBAL COLLABORATOR)

Digital platforms made the process of engaging with school across the globe much easier because time and place were no longer deterrents. Interconnectedness among students of different nationalities and cultures was

facilitated by technology. Students could see and talk to one another, share common concerns about local climate issues and make connections with global ones. Students experienced the positive, constructive use of technology and how it can be used as a unifying force, broadening their perspective on how their actions don’t just impact their immediate environments, but also leave a footprint on a global scale.

## WHAT STRATEGIES DID YOUR STUDENTS USE TO HELP DEVELOP UNDERSTANDING AND PROBLEM-SOLVING SKILLS? (ISTE STANDARD: CREATIVE COMMUNICATOR)

Dependence on technology was a natural fallout of the pandemic, and social media saw a rise in subscribers. Although students used the virtual world for constructive learning, they were still vulnerable to the

issues it presents such as fake news, which was also addressed during our digital citizenship sessions. All this was helpful when the school community engaged in our projects. The process of inquiry, action and reflection was conducted with tools like applications like PowerPoint, Padlet and Trello. Collaboration and opinions were shared on these platforms with our students adhering to the “netiquette” involved.

## PROFILE 3

# Meet Krupali, Anni, Sonia & Pramod, global educators from India



## WHAT ISSUE DID YOUR STUDENTS FOCUS ON?

**Krupali:** I worked with three other educators and leaders from schools across India: Anni Kumar, Sonia Wadhwa and Pramod Thube. Our students, who are 12 to 15 years old, started #Ease4Peace. #EASE4Peace—Earn Values And Spread Empathy—is an initiative by students from Udgam School for Children in collaboration with students of Vikas Bharati Public School, The Sanskar Valley International School and MES Waghire High School. The students and their mentors worked together to bring in Empathy and spread Values in their surroundings via podcasting, Love for Humanity and various other campaigns, because each small change brings a big difference.

As educators in a diverse learning environment, it's our responsibility to underpin moral and ethical values in our students, so that they become well-balanced and good individuals as they grow. Through #Ease4Peace, student ambassadors took up the challenge to resolve global issues by promoting values and spreading empathy, a key factor that revolves around themes like education, social vulnerability, equity and human rights, environmental sustainability, and health and well-being. They took on several different initiatives as part of #Ease4Peace.

## HOW DID YOUR STUDENTS UTILIZE TECHNOLOGY IN DEVELOPING A PLAN TO ADDRESS THE ISSUE?

Students leveraged many different tech tools throughout their project, such as collecting and analyzing data with Forms and Excel, using Publisher to create artwork that promoted empathy on social media, and using Flipgrid to help empower one another's voices. They also used technology to connect with students in 15 other countries around the world and spread awareness of their campaign on social media.

## WHAT LEARNING GOALS AND PROCESSES WERE ACCOMPLISHED BY LEVERAGING TECHNOLOGY? (ISTE STANDARD: INNOVATIVE DESIGNER)

Students used innovative design for many parts of their project, such as when they developed a Minecraft world that focused on empathy toward humans, animals and the environment. Another example is when they made e-cards using Buncee as part of a love for humanity campaign.

## HOW DID STUDENTS DEMONSTRATE RESPONSIBLE DIGITAL CITIZENSHIP? (ISTE STANDARD: DIGITAL CITIZEN)

As responsible digital citizens, students took on many different initiatives as part of #Ease4Peace. For example, they raised their voices against cyberbullying by running a campaign called "Say no to bullying." They also prepared an e-safety guide to help students understand cybersafety, and conducted training programs to help students navigate cyberspace. Using Nearpod, students delivered live lessons to classes in four schools for more than 1,000 students.

## HOW DID YOUR STUDENTS USE TECHNOLOGY TO BROADEN THEIR GLOBAL PERSPECTIVE? (ISTE STANDARD: GLOBAL COLLABORATOR)

Students connected with peers in more than 15 countries, helping them learn the importance of empathy and sharing their campaigns. Through these interactions, students came to realize that they are more alike than different from others.

## WHAT STRATEGIES DID YOUR STUDENTS USE TO HELP DEVELOP

## UNDERSTANDING AND PROBLEM-SOLVING SKILLS? (ISTE STANDARD: CREATIVE COMMUNICATOR)

During the pandemic, the entire world faced multiple problems and empathy from every individual was required to get through. We encouraged students to reflect and act by taking humanitarian action toward empathy for living beings and the environment.

One of the campaigns students created was an "AI for Good" competition, which motivated and inspired participants to think out of the box to develop original ideas to solve a real-world problem of society.

*"As educators in a diverse learning environment, it's our responsibility to underpin moral and ethical values in our students, so that they become well-balanced and good individuals as they grow."*

– KRUPALI SANGHVI

## PROFILE 4

# Meet Mariam, Mirna & Nehmat, global educators from Lebanon



*“Our project taught students how to achieve better environmental and health sustainability, addressing the global challenges we faced with the COVID-19 pandemic.”*

– MARIAM RABAA

### WHAT ISSUE DID YOUR STUDENTS FOCUS ON?

**Mariam:** For this initiative, I worked with two other educators in Lebanon, Mirna Fares and Nehmat Khalil. Our students are aged 12 and 13. We created a project that would teach students how to achieve better environmental and health sustainability, addressing the global challenges we faced with the COVID-19 pandemic. The goal was to investigate the effect of using disposable surgical masks on our health and environment and try to find a solution regarding this issue.

### HOW DID YOUR STUDENTS UTILIZE TECHNOLOGY IN DEVELOPING A PLAN TO ADDRESS THE ISSUE?

At the beginning of their project during the action-planning phase, students created a digital survey using Microsoft Forms to find the number of surgical masks used by people per week. Using the statistical report from Forms, they analyzed the data to estimate the number of surgical masks used by the country's population, and the impact of using these masks on the community's health and on the environment.

Next, students came up with an action plan. They used Bing to find the hazardous effect of disposable masks on the environment, and searched for features of sustainable, reusable and safe masks we could use instead. They also researched the best fabric to use out of recyclable materials.



Students created Padlet collaborative board to share ideas and information collected. They held virtual meetings via Microsoft Teams to collaborate, communicate and plan. To share ideas and finalize their plan, students used Nearpod, where they discussed and presented their work. Then, they wrote a final action plan using Planner. In addition, students designed a logo for their product and designed a reusable face mask using Sketchbook. They created the mask they had designed, using recyclable materials, and prepared a brochure using Microsoft Publisher to market their new design and show its features.

Students also created a poster using 3D paint in order to advertise their new product. To wrap the mask in an eco-friendly way, students decided they would use reusable bags with a QR code sticker that would provide consumers with information about the mask and how to wear it properly.

#### **HOW DID STUDENTS DEMONSTRATE RESPONSIBLE DIGITAL CITIZENSHIP? (ISTE STANDARD: DIGITAL CITIZEN)**

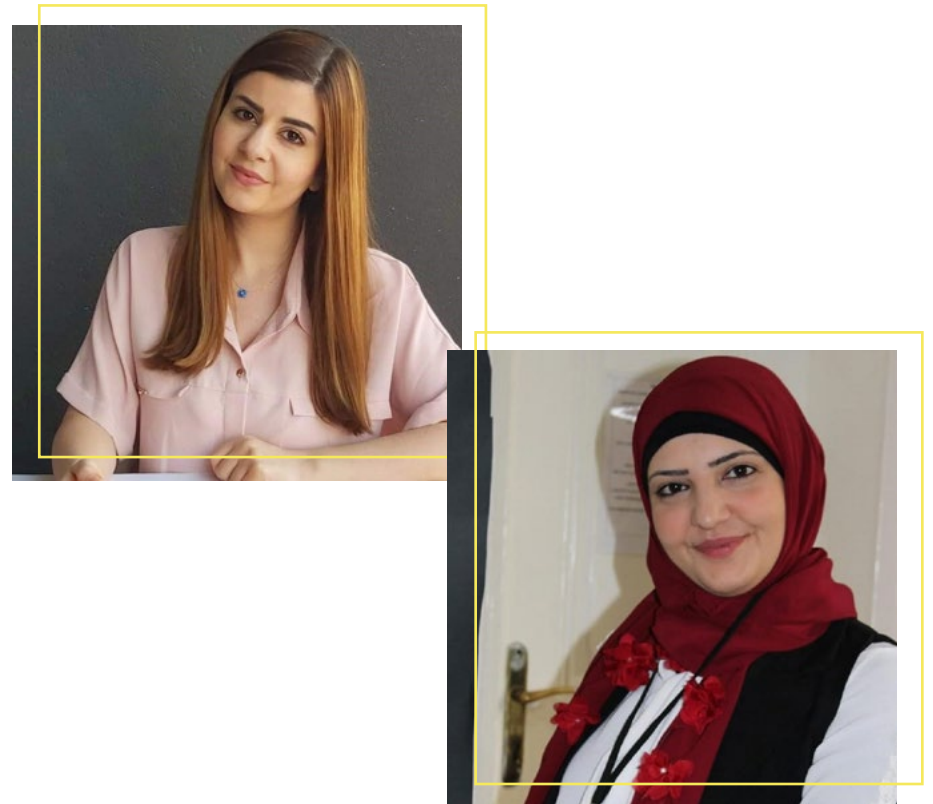
Students learned about how their digital identity impacts their reputation both offline and online. They also learned about “fake news” and how users consume false information. Moreover, while planning and taking actions, students ensured that they maintained digital privacy by using secure websites, and made sure to get permission from the school administration to post their poster on the school Facebook group.

#### **HOW DID YOUR STUDENTS USE TECHNOLOGY TO BROADEN THEIR GLOBAL PERSPECTIVE? (ISTE STANDARD: GLOBAL COLLABORATOR)**

Students conducted an interview via Microsoft Teams with Dr. Asfari, a specialist in healthcare from Sweden, to get more information about the features of the best protective mask and its proper usage. In addition, students presented their product to Dr. Asfari and took their remarks to edit their product’s design to fit the best quality for a protective mask.

#### **WHAT STRATEGIES DID YOUR STUDENTS USE TO HELP DEVELOP UNDERSTANDING AND PROBLEM-SOLVING SKILLS? (ISTE STANDARD: CREATIVE COMMUNICATOR)**

Throughout the project, our students communicated with us through Teams, commented on their plan posted on Planner to support the development of their idea, and met with us regularly to discuss their progress. Students created digital presentations and presented them on Nearpod to show their learning and outcomes. We regularly reflected on the students’ learning and discussed their time-management skills. To market their product and raise awareness in the community about the advantages of wearing an eco-friendly mask, students created posters and a brochure using Sketchbook and Publisher respectively.





## PROFILE 5

# Meet Ayesha, a global educator from Pakistan



### WHAT ISSUE DID YOUR STUDENTS FOCUS ON?

My students at The City School in Quetta, Pakistan who are 9 and 10 years old, did a project called "World's Largest Lesson" to learn more about the Sustainable Development Goals and how they relate to issues in rural Pakistan, such as poverty, the environment and education.

For this project, my class went through the 17 goals, then divided into groups to discuss the goals and come up with ideas to solve them. I believe that by teaching kids about the Sustainable Development Goals, we can show them that a better world is possible. "World's Largest Lesson" was a fantastic entry point to enable my students to become interested and active in creating change in the world around them.

*"I believe that by teaching kids about the Sustainable Development Goals, we can show them that a better world is possible. This was a fantastic entry point to enable my students to become interested and active in creating change in the world around them."*

– AYESHA ALI

### **HOW DID YOUR STUDENTS UTILIZE TECHNOLOGY IN DEVELOPING A PLAN TO ADDRESS THE ISSUE?**

My students did a survey using Microsoft Forms to find the main problems in rural areas of Pakistan, before making plans on how to solve them. During their project, they used Teams meetings and breakout rooms to discuss their project, OneNote to keep track of written work, and PowerPoint and Buncee to present their ideas.

### **WHAT LEARNING GOALS AND PROCESSES WERE ACCOMPLISHED BY LEVERAGING TECHNOLOGY? (ISTE STANDARD: INNOVATIVE DESIGNER)**

Using Buncee, students digitally annotated the solutions they came up with, and explained the process of finding those solutions using videos, audio, texting, drawing and stickers. They then shared their digital annotations in OneNote for myself and their peers to assess their work.

### **HOW DID YOUR STUDENTS DEMONSTRATE RESPONSIBLE DIGITAL CITIZENSHIP? (ISTE STANDARD: DIGITAL CITIZEN)**

My students learned the SMART rules for being online: Safe (keeping personal information safe and not sharing it), Meet (Ensuring everyone they met online was safe and reliable), Accepting (Thinking carefully before opening anything online), Reliable (Knowing whether the information they found was true or false), and Tell (Telling a trusted adult about anything they are concerned about online). Students learned a lot throughout this process, which made them into digital citizens. We had to collaborate with a school in a rural area of Pakistan, and students were very responsible in communication with the other students.

### **HOW DID YOUR STUDENTS USE TECHNOLOGY TO BROADEN THEIR GLOBAL PERSPECTIVE? (ISTE STANDARD: GLOBAL COLLABORATOR)**

Students attended workshops on saving water, saving trees, basic education and poverty. These workshops, along with research and collaborating on Teams with students at the school in rural Pakistan made their horizons bigger and wider.

### **WHAT STRATEGIES DID YOUR STUDENTS USE TO HELP DEVELOP UNDERSTANDING AND PROBLEM-SOLVING SKILLS? (ISTE STANDARD: CREATIVE COMMUNICATOR)**

They came up with wonderful ideas, such as if we all reduce one font level and use narrow margins, we can save a lot of trees. Students shared their learnings with the other school on using technology like Word to save paper. Students also used the internet to learn about ways to save water when brushing their teeth and boiling water for drinking.



## PROFILE 6

# Meet Ashra, a global educator from Sri Lanka



### WHAT ISSUE DID YOUR STUDENTS FOCUS ON?

My students are 14 and 15 years old. As a result of the global pandemic, physical interaction between teachers and students was cut to a minimum, and students' education regarding their culture and heritage was put to a halt. Another result of COVID-19 lockdowns was the degradation of students' mental health, as a lack of physical interaction led to isolation and distress. Therefore, we decided to hold a digital art exhibition on Flipgrid.

Students were asked to draw an image addressing the topic "Beauty of Mother Lanka" and upload a video conveying the intention and meaning of their drawings. The topic could have been interpreted in many different ways, from natural beauty, to culture, to the unity of people present in this country. The project was also successful in tackling the degradation of mental health, as it encouraged participants to be interactive through art, and through their video submissions.

*"The use of technology to innovate unique and original solutions empowered students in their journey to foster peace and prosperity. By expressing their ideas with technology, students met their goal of reconnecting with their culture and heritage."*

– ASHRA SHIBLY

## HOW DID YOUR STUDENTS UTILIZE TECHNOLOGY IN DEVELOPING A PLAN TO ADDRESS THE ISSUE?

Platforms like Flipgrid and Teams played a key role in eliminating communication barriers. Students were able to publish their perspectives of certain issues found in society today in the form of videos explaining the ideas behind their digital art.

For example, one student drew an image of a farmer for her digital art project. In her video, she narrated a beautiful concept that explained the ideas acquainted with it, a great example of how students were able to bring contextual thoughts into a work of art and then share those ideas with others through use of technology. This will also build students' ability to foster strong relations among friends and family who may have to be communicated to virtually.

By using Flipgrid, we were able to share ideas and perspectives among different age groups. Students could all share their take on the topic and observe and learn how others interpreted it. It also allowed for discussion among students, which was a key objective of the project. Flipgrid also provided accessible and simple tools students could use to be creative and edit their video submissions.

Many students did not have access to tools that would enhance their ability to do digital art, for example a stylus. However, we observed the adaptability of students in these situations, who learned how to use a metal pen lid as a stylus. For students who lacked access to digital devices, they were able to use devices from the school as substitutes.

## WHAT LEARNING GOALS AND PROCESSES WERE ACCOMPLISHED BY LEVERAGING TECHNOLOGY? (ISTE STANDARD: INNOVATIVE DESIGNER)

We encouraged students to use a wide range of digital art software for their projects and to edit their videos, which meant that students from all age groups and of any means could participate in the competition. This made the competition as accessible as possible and allowed participants to compete on an even playing field. Students were encouraged to gain hands-on experi-

ence using technology tools they had not regularly used before.

The use of technology to innovate unique and original solutions empowered students in their journey to foster peace and prosperity. By expressing their ideas with technology, students met their goal of reconnecting with their culture and heritage. Students also learned about adaptability: many produced outstanding pieces of art, even without access to the best tools suited to the task.

## WHAT STRATEGIES DID YOUR STUDENTS USE TO HELP DEVELOP UNDERSTANDING AND PROBLEM-SOLVING SKILLS? (ISTE STANDARD: CREATIVE COMMUNICATOR)

Information about the project was communicated through Teams, where educators also held meetings to ensure participants were consistent with their work throughout the competition. Educators were able to instantly respond via Teams chat to any questions students had. Teams also allowed us to post important announcements, tag specific people and upload informational links. Using Teams as a method of communication meant that the flow of information between participants and organizers was frictionless.

By expressing ideas digitally, students were able to exercise the "trial and error" method when developing their work—because unlike paper, paint can be erased on digital platforms. This allowed students to expand their thoughts and try out a range of methods as they portrayed their ideas. With students' videos, this "trial and error" method sharpened their problem-solving skills as they had a lot of time to structure their explanations and thoroughly think them through.

Another strategy adapted by students was peer learning. Online communication platforms like Teams facilitated the transfer of information among students through chats, which allowed students to review one another's work and provide constructive feedback.

## PROFILE 7

# Meet Ranjana, Suman, Kusum & Gladys, global educators from India and Brunei



RANJANA VARMA



SUMAN CHAWLA



KUSUM TARUN



GLADYS VALDEZ CONCEPCION

*“Technology was an enabler in connecting, communicating, collaborating and completing project ECHO, as we used technology for good to empower students not to be mere bystanders, but to be upstanders.”*

– RANJANA VARMA

### WHAT ISSUE DID YOUR STUDENTS FOCUS ON?

**Ranjana:** This project was led by myself along with Suman Chawla, Kusum Tarun, and Gladys Valdez Concepcion. Our students took action on cyberbullying.

Our project was called Edifying Cyberspace Harassment Outreach (ECHO). Students met on Microsoft Teams to brainstorm on issues faced by themselves and the community, before voting on the topic they would work on. They chose cyberbullying after deciding that online safety is as important as offline safety. Students found that bullying is a serious concern for millions of children all over the world and is compromising their right to education, aligned to Sustainable Development Goal 4. With the growing importance of social media in children's lives, cyberbullying is becoming an increasing source of concern.

### HOW DID YOUR STUDENTS UTILIZE TECHNOLOGY IN DEVELOPING A PLAN TO ADDRESS THE ISSUE?

Technology was used every step of the way, from communicating the idea to our final presentation. Microsoft Teams was used for conducting and recording meetings among students and educators. Microsoft Forms was used for voting on an issue and conducting a survey to find out about the prevalence of and impact of cyberbullying, and what awareness and resources around cyberbullying currently existed in schools.



Students used PowerPoint to share ideas, information and learnings. They also collaborated with OneNote and Word, presented their work with Sway, and used SharePoint and OneDrive as learning platforms. Flipgrid provided an accessible video discussion experience, Wakelet brought in the power of curation, organization and collaboration, and Padlet was a virtual canvas of thoughts on anti-cyberbullying practices. Minecraft provided a method of exploring, communicating and developing problem-solving skills by visualizing and designing a world free of cyberbullying.

### **HOW DID YOUR STUDENTS DEMONSTRATE RESPONSIBLE DIGITAL CITIZENSHIP? (ISTE STANDARD: DIGITAL CITIZEN)**

Digital citizenship is the core of ECHO. With schools shifting to online, educators modelled desired behavior online. In the first meeting, students were told about being safe online and measures to be taken, and had a discussion that let us know that students were aware of safe online practices and contact us or their parents in case of any doubt or problems.

Students exhibited exemplary citizenship by not only following the netiquette expected of them, but also went further to make others aware of expected behavior and enhancing the digital skills of their peers through cooperative learning. The students' use of varied tools for different purposes highlighted their proficiency in using technology for creativity, communication, critical thinking, and collaboration. They are 21st century learners, equipping themselves to be problem-solvers and innovators.

### **HOW DID YOUR STUDENTS USE TECHNOLOGY TO BROADEN THEIR GLOBAL PERSPECTIVE? (ISTE STANDARD: GLOBAL COLLABORATOR)**

Using Microsoft Teams, students presented and discussed their learnings, so that every group member could learn from one another. The educators also designed a plan to help our students from India and Brunei connect to one another and work as a group. Students from all three schools met virtually, got to know one another, and shared information they had gathered to analyze the problem of cyberbullying. Inter-school groups were formed to work on different parts of the project.

### **WHAT STRATEGIES DID YOUR STUDENTS USE TO HELP DEVELOP UNDERSTANDING AND PROBLEM-SOLVING SKILLS? (ISTE STANDARD: CREATIVE COMMUNICATOR)**

Students used a range of strategies and tools for communication with a wide audience. As I mentioned, there was a lot of collaboration to create content, plan the process and have project outcomes using the different tech tools. All this collaboration would not have been possible without appropriate communication, using tools like email and Teams.

To deepen their understanding of cyberbullying, students interviewed their Students used a range of strategies and tools for communication with a wide audience. There was a lot of collaboration to create content, plan the process and have project outcomes using the different tech tools.

Students interviewed their peers and educators to get their perspective on the issue of cyberbullying. Students also composed poems, song and monologues and designed posters. Many used Flipgrid to express their views through video. The topic was "Be a true buddy and not a bully." 35 responses were recorded by all three schools involved, and we had more than 2,000 views and 70 hours of engagement, with students taking part in the U.S. and the Philippines. We also reached many people through a website and social media platforms.

### **IS THERE ANYTHING ELSE YOU WANT TO SHARE ABOUT THE PROJECT?**

Technology was an enabler in connecting, communicating, collaborating and completing project ECHO, as we used technology for good to empower students not to be mere bystanders, but to be upstanders.



## PROFILE 8

# Meet Kamariah, a global educator from Malaysia



*“Students exhibited a tolerance for ambiguity, perseverance, and the capacity to work with open-ended problems.”*

– KAMARIAH BINTI AWANG

### WHAT ISSUE DID YOUR STUDENTS FOCUS ON?

Our initiative is called Project P.E.N.Y.U:

P: Protect and restore ecosystems

E: Eliminate the destruction of nature

N: Now, it is the time to do it together

Y: You are the one we are looking for

U: Ultimate goal to conserve ecosystems

Teaching and learning history subjects requires knowledge exploration as well as teaching aids that use the latest information and communications technology. There are various innovative features that can be adapted using the latest applications, as well as nature exploration for history learning. However, history textbooks still use traditional methods to teach students, who are not fully able to appreciate and understand what is written in the textbook.

The objective of this project was to provide a theoretical understanding and practical exploration of knowledge. We used an interactive, exploratory approach to learn and understand the original concept of caring for shelter and the environment of the sea and the coast, connected to Sustainable Development goals 14 and 15. A total of 35 students in year 4 (age 10) were involved in the project.

## HOW DID YOUR STUDENTS UTILIZE TECHNOLOGY IN DEVELOPING A PLAN TO ADDRESS THE ISSUE?

Students demonstrated advanced understanding of a social issues in their community and were able to articulate the importance of the cause, using PowerPoint and Sway and connecting with others around the world using Flipgrid and Skype.

What learning goals and processes were accomplished by leveraging technology? (ISTE Standard: Innovative Designer)

Students selected and used digital tools to plan and manage a design process that considered design constraints and calculated risks. Students exhibited a tolerance for ambiguity, perseverance, and the capacity to work with open-ended problems. They successfully and managed to create a prototype model called "Earth Rescue Umbrella" that serves as both an umbrella and a clamp to collect garbage. The project was presented at a state-level competition for a green project innovation competition.

## HOW DID YOUR STUDENTS DEMONSTRATE RESPONSIBLE DIGITAL CITIZENSHIP? (ISTE STANDARD: DIGITAL CITIZEN)

Students cultivated and managed their digital identity and reputation and are aware of the permanence of their actions in the digital world. This project succeeded in achieving a high level of awareness in the students. They also successfully used technology to connect with the outside community.

How did your students use technology to broaden their global perspective? (ISTE Standard: Global Collaborator)

Students were able to collaborate with a turtle conservation centre, the state fishery department, council office and the state education department. They also collaborated with students around the world via Teams and Flipgrid during the Microsoft Global Learning Connection program.

## WHAT STRATEGIES DID YOUR STUDENTS USE TO HELP DEVELOP UNDERSTANDING AND PROBLEM-SOLVING SKILLS? (ISTE STANDARD: CREATIVE COMMUNICATOR)

Students developed problem-solving skills that helped them be successful in creating a presentation of their Earth Rescue Umbrella for judges at the state-level competition, without any teacher guidance. From that, I know my students have the capability to find a solution to any problem they are facing and can communicate with others very well.

# Additional resources

*Find even more helpful books, posters and videos to enrich your experience and help your students grow and learn!*

## ADDITIONAL RESOURCES

# Children's books to teach ISTE Standards

### CHILDREN'S BOOKS

#### *Nerdy Bird Tweets*

Written by Aaron Reynolds (Roaring Book Press, 2017) ISBN: 9781626721289

#### *The Technology Tail*

Written by Julia Cook (Boys Town Press, 2017) ISBN: 9781944882136

#### *But I Read it on the Internet*

Written by Toni Buzzeeo (Upstart Books, 2013) ISBN: 9781602130623

#### *What Does it Mean to Be Global*

Written by Rana DiOrio (Sourcebooks Inc., 2009) ISBN: 9780984080649

#### *Hello Ruby: Adventures in Coding*

Written by Linda Liukas (Macmillan, 2015) ISBN: 9781250065001

## ADDITIONAL RESOURCES

# General books & articles

### BOOKS

*ISTE Standards for Students: A Practical Guide for Learning with Technology*

Written by Susan Brooks-Young. (ISTE, 2016) ISBN: 978-1564843982

*EdTech for the K-12 Classroom: ISTE Readings on How, When and Why to use Technology in the K-12 Classroom*

(ISTE, 2018) ISBN: 9781564846938

*Digital Citizenship in Action Empowering Students to Engage in Online Communities*

Written by Kristen Mattson. (ISTE, 2017) ISBN: 9781564843937

### ARTICLES

["Esports and the ISTE Standards for Students"](#)

["The Empowered Learner and Esports"](#)

## ADDITIONAL RESOURCES

# Posters & videos

### POSTERS

[Digital Citizenship in the Elementary Classroom Poster](#)

[Digital Citizenship Classroom Pledge Poster](#)

["I Am A Digital Age Learner" Poster](#)

### VIDEOS

["Introducing the ISTE Standards for Students"](#)

[ISTE Playlists for each standard](#)