Teaching Remotely in Times of Need

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Teaching Remotely Survey!

I would like to continue designing open access materials and learning experiences for educators in regards to emergency remote teaching. If you have 8-10 minutes to spare, please consider filling out my new research study survey:


~Torrey Trust, Ph.D.
How to Use These Slides

These slides were designed to provide you with a collection of tools and strategies for teaching remotely/online.

**You know your students, your class, your content, and your community best.**

Please don’t feel like you need to completely revamp your teaching or redesign your lessons or use all of the tools in this slide deck. It’s meant to serve as inspiration for you to be creative given the challenges of remote/online teaching.

If your students do not have quality tech access (see slide 3), then consider how you might create low-tech or adapted versions of these activities (e.g., asking students to draw infographics and create 3D models with pen/paper rather than design digital infographics or models and submit a text response about their designs).
Step 1: Check in with your students

Before assigning activities/homework that requires the use of technology, check in with your students to see if they have the tools to complete the work:

- What **devices** do your students have access to?
- How **consistent and reliable** is their **Internet** connection?
- Feel free to use this **Google Form template to check in with your students** (click here to make a copy of the form).
Step 2: Design for variability

You may find that your students’ access to technology varies significantly. Or, you may find that your students’ level of comfort with technology varies.

Designing for variability means providing students with multiple options for engaging with, and learning, the content so they can succeed.

Multiple Means of Representation

Give your students multimodal ways of learning - through reading text, watching videos, examining images (e.g., infographics, posters, memes), and/or listening to audio.

*Check out the OER databases on Slide 18 to discover free open access multimodal resources to provide multiple means of representation of your content.*
Multiple Means of Representation

Ways of exploring information:

- Images (infographics, memes, graphics, photos, cartoons, comics)
- Audio (podcasts, audio recordings, sound bytes, Soundcite)
- Videos (live action, animation, documentary, etc…)
- Multimodal Tools (e.g., eBooks, interactive timelines - Knight Lab Storytelling Tools)
Multiple Means of Representation

Ways of exploring information:

- Virtual Tours ([900 Google Tour expeditions](#))
- Augmented Reality ([learn more](#))
- Digital 3D Models ([Smithsonian 3XD](#), [NIH 3D Models](#), [Thingiverse](#), and [more](#))
- Microsoft Immersive Reader (for reading text)
Multiple Means of Engagement

Design open-ended activities that encourage student choice based on interest (in the topic and/or technology)

**Activity Objective:** Your task this week is to design a digital media product that enhances student learning. Your design should draw from what you learned in Week 2 about how digital media can enhance student learning and you should use one of the tools you explored and evaluated from Week 1.

**Activity Instructions:** Choose a topic that your students have struggled with (e.g., why do leaves change color?) or that helps you achieve a learning goal (e.g., my students are not engaged in writing arguments to support claims). Make sure the topic is simple and easy to demonstrate through digital media. For example,
Opportunities for Choice

by Barbara Bray
@bbrey27
#rethink_learning

Adapted from original design and content by Bray and McClaskey

Graphics by Sylvia Duckworth
@sylviaduckworth

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**Designer**
- Makes some meaningful choices about learning
- Decides on topics based on interests or questions
- Chooses evidence of learning with teacher
- Selects seating based on activity

**Advocate**
- Identifies challenges or problems to tackle
- Selects strategies and people to brainstorm solutions
- Chooses evidence to support action plan
- Picks space for learning and collaborating

**Participant**
- Chooses from a menu of options
- Follows pacing guide
- Meets requirements to pass assignments
- Accepts seat assignment
- Determines how learns best with teacher

**Innovator**
- Develops passions to discover purpose for learning and life
- Chooses learning path based on purpose
- Selects evidence for portfolio and project
- Creates new ideas or ways of doing things
HyperDocs, Playlists, and Menus

HyperDocs, Playlists, and Menus are digital lessons/activities that support student engagement through choice.

- How HyperDocs Can Transform Your Teaching
- HyperDoc Templates
- Interactive Learning Menus (Choice Boards) with G Suite
- Using Playlists to Differentiate Instruction
- Playlists vs. Menus
- Personalizing and Differentiating Teaching with Playlists
Sample HyperDoc

Finding Open Educational Resources (OERs)

Engage
Many of my students are struggling. They are working adults trying to make ends meet. I used to use a $350 textbook from a publisher and I switched to an open textbook. My students love it because it costs nothing. They are now asking if my next course will use the free textbook too.

Open Washington: Open Educational Resources Network
https://www.openwa.org/module/30/

Watch the video below to learn more about finding OERs:
https://www.youtube.com/watch?v=nArNapkz3EU

Explore
Now that you’ve watched the video, explore some of the links mentioned in the video:

- UMass Amherst Libraries OERs
  https://www.library.umass.edu/oor/
- Mason OER Metafinder
  https://ordeep.mason.sas.upenn.edu/oer/desktop/en/search.html
- OER Commons
  https://www.oercommons.org/oer
- OASIS
  https://oasis.geneva.edu/index.php

Explain
OERs can help you in your courses in a variety of ways. Let’s explore what’s available for the courses you are teaching.

More HyperDocs:
- Geometry (by Jackie Gerstein)
- English/Language Arts Padlet Collection
- TeachersGiveTeachers Database
- Extensive HyperDocs List
Multiple Means of Action & Expression

Give students multiple options for showcasing their understanding

Option 1: Written Reflection
- Write a short paragraph (150-200 words) describing why the benefit you identified might be relevant or advantageous to your own professional growth.
- Post your paragraph on the online course community and comment on at least two other posts.

Option 2: Multimedia Reflection
- Create a short podcast or video (90-120 seconds long) describing why the benefit you identified might be relevant or advantageous to your own professional growth. Here are some resources for creating a podcast or video.
- Post your podcast or video recording on the online course community and comment on at least one other person’s post.
Choice Board

Give students a Digital Media Choice Board and let them select the tool(s) they can use to show their knowledge.

Get your own copy of this Digital Media Choice Board
Step 3: Use Open Educational Resources
Step 3: Use Open Educational Resources

There are thousands of free open educational resources (OERS), including eBooks, digital tutorials, videos, audio files, primary sources, presentation slides, and more available online that you can use to create multimodal learning experiences for your students without having to start from scratch:

- Mason OER Metafinder
- OER Commons
- OASIS
- Smithsonian Open Access
Step 3: Use Open Educational Resources
Step 4: Design for Accessibility

- Do the videos you assign have closed captions? If not, find alternatives or create your own videos and add closed captions in YouTube.
- Do the audio files you assign (e.g., Podcasts, interviews, sound bytes) have transcripts? If not, ask students to make transcripts for extra credit.
- Make sure your materials (e.g., documents, presentation slides, texts) are accessible (review: Make Your Google Docs More Accessible & Make your document or presentation more accessible & Creating an accessible word doc)
- Interested in learning more? Review the University of Michigan’s Access to Remote Instruction for Students and Faculty with Disabilities & Online Teaching and Accessibility Twitter Thread
Step 4: Design for Accessibility
Step 5: Think Creatively

Low-tech access doesn’t have to mean no technology activities! Students might be able to borrow their family members’ phones to snap photos of math in their community or film a science experiment or create a stop motion animation or record their screen as they watch and narrate a YouTube educational video...so many options!

### Interdisciplinary STEAM Activities at Home

<table>
<thead>
<tr>
<th>Science</th>
<th>Technology</th>
<th>Engineering</th>
<th>Arts</th>
<th>Math</th>
</tr>
</thead>
<tbody>
<tr>
<td>Take a haiku hike or write a haiku (science haiku)</td>
<td>Create an animated story with Blop Motion Studio or Stikbot</td>
<td>Invent something (kids as inventors) and write a proposal about why this invention should be funded</td>
<td>Design a Graphic Novel or Picture Book</td>
<td>Write a math comic</td>
</tr>
<tr>
<td>World Languages</td>
<td>Research and design a video about how climate change impacts a country/region where the language is spoken</td>
<td>Explore a virtual tour of a city where the language is predominantly spoken</td>
<td>Design an artifact to represent the culture of the language (see 3D printed Nahuatl and more examples)</td>
<td>Create a multimedia book about a topic of interest written in a foreign language</td>
</tr>
<tr>
<td>Math</td>
<td>Explore climate change over time through graphs</td>
<td>Design an infographic that features statistics</td>
<td>Create a 3D digital model on Tinkercad</td>
<td>Create a funny math meme</td>
</tr>
<tr>
<td>Science</td>
<td>Participate in a Citizen Science project</td>
<td>Juxtapose two images that show environmental change over time</td>
<td>Design multiple paper airplane prototypes and test which features influence the flight path and length (home lesson)</td>
<td>Make a video featuring one of the periodic table of elements characters</td>
</tr>
<tr>
<td>Social Studies/History</td>
<td>Examine human impact on the environment over time through Google Earth Timelapse</td>
<td>Create a virtual tour of a UNESCO World Heritage Site</td>
<td>Create a historical timeline of African American Inventors</td>
<td>Design an editorial cartoon</td>
</tr>
</tbody>
</table>
Step 6: Stay Connected with Your Students

Sean Michael Morris
@slamteacher

Online doesn’t mean you need to change how you teach. You are still just as human, and so are the students on the other side of your screen. Email, text messages, phone calls—these are all ways to sustain a human connection.
Step 6: Stay Connected with Your Students

Here’s a fun follow-up/check-in form, featuring baby yoda, that you can use.

[Go to this link to make a copy.]
Step 6: Stay Connected with Your Students

- Read: Teaching Effectively in Times of Disruption & Tips and Tools for Teaching Remotely

- Setup virtual classes and/or virtual office hours (if your students have access to devices/Internet to connect in real time): Zoom, Skype, Google Hangouts (see new Google Hangout advanced features)

- If students lack a strong Internet connection, connect with them via text (e.g., YoTeach!, GroupMe) or asynchronously (not in real-time) via Flipgrid or Voxer
Step 6: Stay Connected with Your Students

- Additional Reading:
  - Navigating Uncertain Times: How Schools Can Cope With Coronavirus
  - Coronavirus Has Led to a Rush of Online Teaching. Here’s Some Advice for Newly Remote Instructors
  - So You Want to Temporarily Teach Online
  - Asynchronous, Remote, & Flipped Classroom eBook
  - Planning for Elementary School Closures
  - Crowdsourcing: Teaching Online with Care
  - Free Access to Tools & Apps for School Closures Due to COVID19
  - School Closure Planning Document
Step 7: Provide Extra Support to Students

Many students are not familiar with online/remote learning...

- You may need to send them **extra reminders** (e.g., send a daily email with a list of tasks to complete for the day or show them how to use [Google Keep](https://keep.google.com) to organize tasks/deadlines).

- Be **flexible with deadlines**. Students may need additional time for a variety of reasons (e.g., technical issues, lack of support/motivation, anxiety related to the COVID19 spread).

- **Build community** - students may struggle with isolation. Use some of the collaborative tools listed in this slide deck to help students feel connected to one another.
ISTE Strategies for Online Learning

**PREPARE AND PRACTICE**
- Ensure digital equity
- Practice before the shutdown
- Communicate to staff and parents
- Plan, plan, plan
- Pack

**IMPLEMENTATION**
- Establish daily schedules
- Provide robust learning
- Design independent learning
- Address the emotional toll
- Choose the tools—and stick with them

From: [10 strategies for online learning during a coronavirus outbreak](https://iste.org)
Step 8: Connect with other Educators

Now is the time to tap into the wisdom of your professional learning network!

There are numerous educators who are freely sharing resources, lessons, strategies, tips, and tools. Save yourself time from reinventing the wheel or starting from scratch as you move online and connect with others.
Designed by Fred Zinn
Step 8: Connect with other Educators

Twitter Hashtags to Explore:

- #CovidCampus
- #remoteteaching
- #remotelearning
- #k12

*If you don’t have a Twitter account, you can still explore these hashtags via tchat.io*
Step 8: Connect with other Educators

Facebook Groups to Join:

- HyperDocs Group
- Amazing Educational Resources
- K-12 Learning Possibilities in Pandemic Times
- Educator Temporary School Closure for Online Learning
- Teacher Memes (for a good laugh)

Adapted from Mason P.’s Meme
Step 8: Connect with other Educators

Welcome to the global educator support group directory! We're so glad you're here!

First, join the Temporary School Closure Support Group if you haven't already done so. Tap group name below to open the group. Look for the Join button. Answer ALL questions to expedite your membership approval!

Next, join each subgroup of interest to you. Tap group name below to open the group. Look for the Join button. Answer all questions to expedite your membership approval!

<table>
<thead>
<tr>
<th>Global Learning Community Subject Area Support Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd Grade/Year 4 UK</td>
</tr>
<tr>
<td>After School Activities and Clubs</td>
</tr>
<tr>
<td>Art</td>
</tr>
<tr>
<td>Australia Educator Support</td>
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<td>Canada Educator Support</td>
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<tr>
<td>Canvas LMS</td>
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<tr>
<td>Career and Technical Education (practical skills courses)</td>
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<tr>
<td>Deaf/Hard of Hearing</td>
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<tr>
<td>Early Years</td>
</tr>
<tr>
<td>ELL/EAL</td>
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</tbody>
</table>

| English (Secondary - MS, HS, Senior Upper School)    |
| Exam Classes: IBDP, AP, A LEVELS (last 2 years of school) |
| Gifted and Talented                                  |
| IB PYP/MYP Community                                 |
| ICT Coaches/Tech Directors                          |
| Instructional Coaches                                |
| International Schools with High Tech Access          |
| Librarians                                           |
| Lower Primary/Elementary (5-8 yo)                    |
| Math                                                 |
| Modern Languages                                     |
| Music                                                |
| New Zealand Educator Support                         |
| Physical Education and Health (PE)                   |
| Reading/Literacy Specialists (K-5)                   |
| School Admin and Leadership                          |
| Sciences (MS/HS/Secondary/Senior Upper School)       |
| SEL: Counsellors, PYP                                |
| Social Studies/Social Sciences                       |
| Special Education/SEN/Student Support                |
Step 8: Connect with other Educators

There are also subject-specific groups/pages like:

- [Science Sites for Educators](#)
- [Teaching with a Sociological Lens](#)

Use the search engine on Facebook to do a quick search to see if you can find groups/pages related to your subject.
Step 8: Connect with other Educators

There are a lot of incredible educator blogs to learn about new tech tools, teaching strategies, tips, and more:

- [FreeTech4Teachers](https://www.freetech4teachers.com) & [Practical Ed Tech](https://www.practical-edtech.com)
- [Cult of Pedagogy](https://www.cultofpedagogy.com)
- [User Generated Education](https://www.usergeneratededucation.com)
- [Top 75 Educational Technology Blogs](https://www.top75educationaltechnologyblogs.com)
- [Top 100 Education Blogs in 2020](https://www.top100educationblogs.com)
Don’t Forget Self-Care

Emergency remote teaching in times of need is intense. It will be a lot of extra work and learning new technologies, trying, failing, being okay with failing, and doing your best.

Breathe. Set boundaries for when work starts/ends. Forgive yourself for not being a perfect teacher in a challenging situation.

Join the Self-Care for Educators Facebook Group for more tips.
Enrich Your Teaching with Technology
How it feels to discover new technologies for teaching and learning
Learn how to find, evaluate, and teach with digital tools and apps with this free open access eBook!

Teaching with Digital Tools and Apps

Torrey Trust

Introduction
Finding Digital Tools and Apps
Evaluating the User Experience
Evaluating the Learning Experience
Evaluating Cost, Privacy, and Data
Evaluating Accessibility
Teaching With Digital Tools & Apps
Create Screen Recordings with [Loom](https://loom.com), [Screencastify](https://screencastify.com), or [Quicktime](https://support.apple.com/en-us/HT204050). These are great tools for student presentations or recording lectures (use the [Made to Stick principles](https://www.madetostick.com/) to keep your lectures captivating).
Build Community with Flipgrid or Slack

For more information, visit Online Tools for Teaching & Learning: Flipgrid & Slack
Facilitate social annotation with Hypothes.is (free) or Perusall.
Encourage Collaborative Brainstorming with Webjets.io, Google Drawings, Twiddla, or Netboard.me
Redesign Video Watching with Ted-Ed, Ed Puzzle, or Playposit

For more information, visit Online Tools for Teaching & Learning: Ted-Ed, Video Not.es, Ed Puzzle or Playposit
Make Reading and Writing More Accessible with Microsoft Immersive Reader
Encourage Collaborative Video Watching with Vynchronize
Annotate Video Transcripts with VidReader
Curate Multimodal Content with Wakelet, Book Creator, Buncee, or Adobe Spark

This Adobe Spark page was created by the students in the 2019 "America in the Post-9/11 World" class at the Ransom Everglades School. The students were assisted by their teacher, Mr. Gregory Cooper.
Turn text into a video with Lumen5
Create Interactive Images on Google Drawings or Genial.ly
Organize and Connect Information and Ideas with Mindmup or Popplet
Create Branching Surveys or Interactive Stories with Google Forms

For examples of interactive storytelling through Google Forms, check out the What Would You Do Examples for Study Abroad
Encourage Data Analysis with Google Trends or DataBasic.io

For more information, visit Online Tools for Teaching & Learning: Google Trends & DataBasic.io
Design a Class Podcast with Synth or Anchor
Create Comics with Pixton or MakeBeliefs Comix

Designed by Tyler Volpe-Knock
Create Interactive Timelines with Timeline JS or Tiki Toki

For more information, visit Online Tools for Teaching & Learning: Tiki Toki
Create Digital Stories & Analyze Visual Information with Knight Lab Projects
Curate Articles, Blogs, and Websites in a Class Social Bookmarking Group on Diigo
Bring in 
Humor with
Meme
Generators
(Google Drawing Template)
Organize Class Projects with Trello or Basecamp (free account for education)
Motivate Discussions with Piazza or Packback (free license for spring 2020)
Design Visual Tours with Google Tour Creator/Builder
Create Whiteboard Animations with Educreations, Flipgrid, or Showme
Build Digital 3D Models with TinkerCad

For more 3D modeling tools and activities, visit this 3D Printing & Modeling spreadsheet
Connect with Explorers, Scientists, and Researchers via Exploring By the Seat of Your Pants (Google Hangouts)
Role Model
Legal Use of Media by using YouTube Audio Library, Unsplash, or Photos4Class

For more Creative Commons and Royalty Free media, visit this Online Tools Document
More tools!

- Online Tools for Teaching & Learning Database
- More than 200 Digital Tools for Reading & Writing
- Free Access to Tools & Apps for School Closures Due to COVID19
- Home Learning Slides for Teachers
Level Up
Your Teaching
Learning Through Design

Take one of your written or test-based assignments and revise it to a design project. Students can create and share:

- Open educational textbook chapters
- Videos, podcasts, interactive infographics, memes, graphics
- Educational apps or games (board games, Scratch games, etc...)
- Lesson plans or learning activities
- Pinterest Boards
- 3D digital models or virtual tours
- Interactive Google Form stories
- Need even more ideas? Check out this Twitter thread about non-paper assignments
Learning Through Design

Preliminary data analysis suggests that students gain a number of employability (21st century) skills from design projects in addition to content knowledge.

~Trust & Maloy (2020)
Learning Through Design FAQs

● How do I grade student design projects?
  ○ Rubrics that focus on content knowledge gained (rather than the design of the project) are valuable grading tools
  ○ It can be beneficial to co-design rubrics with your students

● How do I assign design projects if I’m not familiar with many digital design tools?
  ○ Give students a list of design tools they can use (see the choice board on slide 16) and let them figure it out themselves. Setup an online forum or Flipgrid for them to ask questions and support one another in using the tools. Learn alongside your students.
Example OER Design Project (tap on the screenshot learn more)

EDUC 612: Educational Web Design
Web Design Basics for Educators Project

For this project, you will work in teams to design a multimodal eBook chapter and interactive teaching demo for your select topic (see page 3).

Goal: Create an interactive OER eBook that helps educators (teachers, higher education professionals, instructional coaches, administrators) design websites that facilitate and enrich learning.

Learning Objective: Explain the basic principles, techniques, and concepts of web design.

Chapter Requirements
- **Write a 10-15 page (double-spaced) chapter** about your topic that includes:
  - A table of contents
  - A 2-3 minute video overview of the topic
  - Text with hyperlinks to relevant resources
  - Headings for each section (Heading 1, Heading 2, Heading 3...in order)
  - Multiple visuals (e.g., screenshots; infographics; copyright-free images that complement the text)
Design Tools

- Adobe Spark – video, poster, and website design
- Audacity – audio production and editing
- Book Creator – design multimodal eBooks
- CoSpacesEDU – create mixed reality content
- Educreations – interactive whiteboard screen recorder
- Google Sites – website design
- Google Tour Builder/Creator – virtual reality design
- LucidPress – graphic design (brochures, newsletters, magazines)
- Pencil Code – creative programming
- Powtoon – animated video design
- Sutori – collaborative multimodal timeline design
- Sway (Microsoft) – presentation, newsletter, and document design
- TinkerCad – Basic 3D modeling software
More Tools

Online Tools for Teaching & Learning
Torrey Trust, Ph.D.
torrey@umass.edu

Table of Contents
- Lists/Databases of Tech Tools
- Curation Tools
- Multimedia Production Tools & Resources
- Creative Commons & Royalty Free Media
- Assessment Tools
- Synchronous Collaboration Tools
- Asynchronous Communication Tools

Lists/Databases of Tech Tools
- 321 Free Tools for Teachers
- Online Tools for Teaching & Learning
- 2015 Top 100 Tools for Learning
- Web Tools for Teaching Database (tools by subject, grade level, and topic/standard)
- Apps That Rise to the Top: Tested and Approved By Teachers
Learning Through Social Media

Encourage your students to expand their knowledge and build a professional learning network through social media.
Learning Through Social Media

More ways students can engage with social media for learning:

- Analyze the content of a hashtag related to a class topic (e.g., #climatechange; #medialiteracy; #art)
- Participate in a Twitter Chat
- Ask authors, scientists, scholars, professionals, etc… a question
- Curate images related to a class topic on a class Instagram or Pinterest account
- Record 10-second tutorial videos with Snapchat
- Share relevant resources, articles, and links on a class social media page
Put Your Students in Charge

Give up some control in your class and let students become the teacher!

Students can:

● Crowdsource and curate content (e.g., articles, videos, online tools)
● Design an assessment or homework activity for classmates
● Run a discussion forum or Flipgrid debate for the class
● Create mini-lecture videos or podcasts to teach class topics
● Lead a collaborative article annotation activity using Hypothes.is
● Host a Twitter Chat related to a class topic
Incorporate Design Thinking

Design thinking is a systematic problem solving approach that supports creative and analytical thinking. Redesign an assignment or your entire class to solve real world problems using the Design Thinking model.

Learn more: Design Thinking for Educators
Focus on Connected Learning

The Connected Learning model is about interest-powered, production-centered, peer supported educational experiences that are openly-networked, academically-oriented, and have a shared purpose. Redesign your class based on these principles to re(engage) students in online learning.

Learn more: Connected Learning: An Agenda for Research and Design
Questions?
Connect with me!

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torrey@umass.edu