

# Learning with Our Friends from Around the World

## Using Augmented Reality to Collaborate, Research, & Share

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*Please check out my blog post about how I used this lesson with my students*

[Mary Wever's Blog Post](#)

**Grade Level:** K-12 (used in K and 4<sup>th</sup>)

**Time:** 4- 60 minute class periods and 1- 30 minute class period to connect with buddies (optional). The time can be adjusted to suit your class's needs.

### **Objectives:**

Students will be able to:

- Use a variety of strategies to conduct research
- Collaborate with students from around the world who have similar interests
- Model the process of researching, presenting, and digital citizenship to an audience of a different age
- Use a loud, clear voice and meaningful visuals to engage an authentic audience
- Use technology to aid in researching, documenting, presenting, and sharing information
- Work with a completion deadline in mind

## Materials

- Classroom set or single iPad/tablet with access to the Internet and a camera
- [Aurasma](#) App
- Google Drive (or similar way to share photos)
- Paper, graphic organizers, and/or note taking apps on the iPad (students' and/or teacher's choice)
- Anchor charts like the ones in this lesson plan (suggested)
- Google Hangout/Skype/FaceTime (optional)

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### **Standards:**

[CCSS.ELA-LITERACY.RI.3.5](#)

Use text features and search tools (e.g., key words, sidebars, hyperlinks) to locate information relevant to a given topic efficiently.

[CCSS.ELA-LITERACY.RF.3.4.B](#)

Read grade-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings.

[CCSS.ELA-LITERACY.W.3.2](#)

Write informative/explanatory texts to examine a topic and convey ideas and information clearly.

[CCSS.ELA-LITERACY.W.3.4](#)

With guidance and support from adults, produce writing in which the development and organization are appropriate to task and purpose.

CCSS.ELA-LITERACY.W.3.5

With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing.

CCSS.ELA-LITERACY.W.3.6

With guidance and support from adults, use technology to produce and publish writing (using keyboarding skills) as well as to interact and collaborate with others.

CCSS.ELA-LITERACY.W.3.7

Conduct short research projects that build knowledge about a topic.

CCSS.ELA-LITERACY.W.3.8

Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories.

CCSS.ELA-LITERACY.SL.3.4

Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.

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**ISTE Standards:**

Creativity and innovation

- a. Apply existing knowledge to generate new ideas, products, or processes
- b. Create original works as a means of personal or group expression

Communication and collaboration

- a. Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media
- b. Communicate information and ideas effectively to multiple audiences using a variety of media and formats
- c. Develop cultural understanding and global awareness by engaging with learners of other cultures
- d. Contribute to project teams to produce original works or solve problems

Research and information fluency

- a. Plan strategies to guide inquiry
- b. Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media
- c. Evaluate and select information sources and digital tools based on the appropriateness to specific tasks
- d. Process data and report results

Critical thinking, problem solving, and decision making

- a. Identify and define authentic problems and significant questions for investigation
- c. Collect and analyze data to identify solutions and/or make informed decisions

Digital citizenship

- b. Exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity
- d. Exhibit leadership for digital citizenship

Technology operations and concepts

- a. Understand and use technology systems
- b. Select and use applications effectively and productively

**Background:** This was a culminating activity for my 4<sup>th</sup> graders to use their research, presenting, and sharing skills to communicate effectively to a younger audience. It is an authentic learning experience that mimics what people do in the real world to gather relevant information to present back to a pre-determined audience.

My students were already familiar with how to:

- Effectively research information using a variety of strategies and resources
- Create an aura using Aurasma
- Take video with the camera on our iPad
- Use screencasting tools like Educreations and ScreenChomp

### **Overview of how this lesson was used with Kindergarten and 4<sup>th</sup> grade students:**

[Rachelle Galang](#)'s Kindergarten class in Brandon buddied up with [Mary Wever](#)'s 4<sup>th</sup> grade class in East Lansing to do a joint research project during Genius Hour. Though the students were different ages and in different locations, they worked together to think deeply and construct knowledge using a variety of resources, tools, and strategies.

The Kindergarten students came up with questions, or wonderings, they had about the world during their Genius Hour. With their teacher's help, the Kindergarteners augmented individual videos of themselves asking their questions over separate, self-selected pictures. Miss Galang shared those pictures in a folder with Mrs. Wever using Google Drive. Mrs. Wever printed out the pictures and had her students choose their buddy based on their personal interests. Each 4<sup>th</sup> grader watched his/her buddy's video and came up with a plan to research and report back an answer. All the while, they had to keep in mind the age of their audience so they could effectively communicate their findings in a way their buddy could understand. In the end, the 4<sup>th</sup> graders augmented the videos they created with their answers over a different picture that was sent back to their Kindergarten buddies. Essentially, the students were partners working on the same project in a different location. To wrap things up, we did a Google Hangout with both classes so we could meet our buddies and celebrate our successes.

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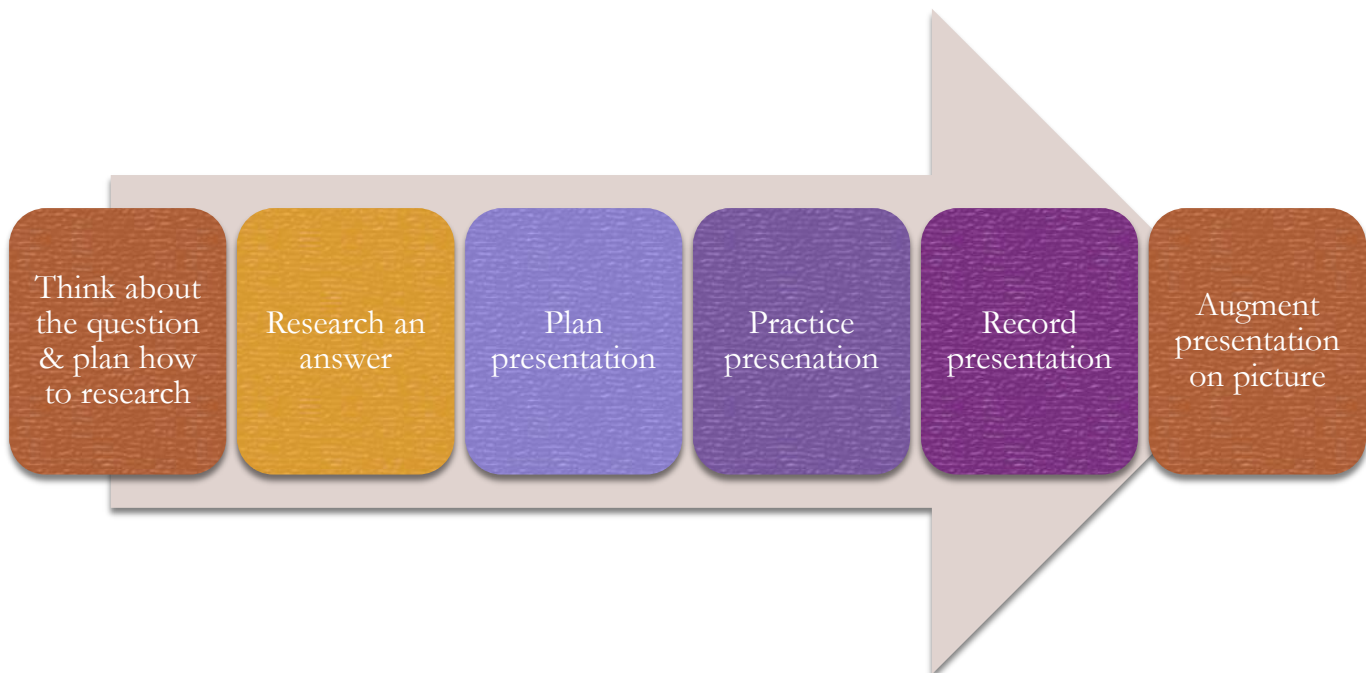
## **Lesson plan for the class doing the research and reporting**

### **Hook**

Show the students the printed pictures. Ask them to choose a picture they are interested in, but do not tell them why. Have students turn and tell a neighbor something they already know or may wonder about their picture. Then explain that their picture isn't just a picture. It is a question from another student in a different part of the world. Their job is to listen to the question, research an answer, and present the answer or their findings back to the person who asked the question by making a video.

## Day 1: Introduction and beginning research

1. Hand out the student-selected pictures to each student and have them use an iPad to watch the question posed by their Kindergarten buddy.
2. Explain that they have several options to answer their buddy's question. They can conduct a survey, research online (see *Safe Search Sites*), interview experts, or use books from the classroom, home, or library. They will have 4 class periods to research, plan, and present back to their buddy, so they need manage their time wisely. Display Anchor Chart 1 (below) or something similar so students know the process of the project.
3. Give the students a few minutes to write down their buddy's question, jot down their initial ideas, and make a plan for researching.
4. Allow time for researching. Students take notes in a way that makes sense to them. To differentiate based on preference and need, students could use graphic organizers, blank paper, or an iPad.
5. Walk around the classroom to assist individual students and lead students to find answers in different ways than they had originally planned. Push them to extend their thinking.
6. Wrap up by telling students you are proud of their work ethic and how they watched the time while also doing some great research. They will have 3 more days to work on their research, plan how they will present their information back to their Kindergarten buddy, record their video and augment it on another picture. Hopefully they will ask if they can extend their learning at home so you can tell them they are more than welcome to ask their parents and/or friends for help with their answers.



**Anchor Chart 1:** Display a chart similar to this in your classroom so students can self-monitor where they are in the process. You can list ideas students have under each heading. For example, under “Plan presentation”, you could list ideas like “selfie video with iPad camera and printed pictures”, “screencast with pictures found online”, “iMovie to edit together videos, pictures, audio”.

## Day 2: Researching and planning a presentation

7. **Minilesson** Explain that students need to be thinking ahead to their presentation while they are still researching. People in the real world not only think about **what** they are presenting, they also think about **how** they will present it and **to whom**. The **what** is sometimes the easy part that can usually be found by researching an answer to a question. We have a lot of experience with this. However, we have to think about **who** we are presenting the information to so we can effectively communicate our ideas. In our case, we are presenting to Kindergarteners. Do you think Kindergarteners have the same experience and background knowledge as a 4<sup>th</sup> grader? No, of course not. They have not been around the world and seen as much as we have, so their vocabulary and ideas are not as developed as ours. Since we have learned so much about research, presenting, and what we should and shouldn't say in a digital environment; we will be acting as mentors for our buddies. They will look up to us when we report back our findings. We need to keep this in mind as we plan our presentations so our audience, our Kindergarten buddies, can understand our answers.
8. Allow time for research (repeat steps 4 and 5 from Day 1). Encourage students to focus on their Kindergarten buddy as their audience when they plan their presentations.
9. Students will complete the work at different times. Encourage them to move through the process, but they should be ready to finish their research today.
10. Wrap up by complimenting the students on being ready to move on to planning their presentations tomorrow. Thank them for thinking about their Kindergarteners as their audience as they researched so they will have an easier time with their presentation planning tomorrow.

## Day 3: Planning and practicing presentations

11. **Minilesson:** You all did such a great job researching your buddies' questions. You kept in mind that your audience is a Kindergartener, so you may have to define words, use visuals, and explain concepts more than you would to someone with more background knowledge. Great job! Today, you are going to start planning your presentations. We have learned about a variety of great presentation tools, but you have to remember that it is your job to keep your eyes on the clock too. We only have today and tomorrow to plan, practice, record, and augment your presentations so your Kindergarteners can have answers to their questions before their next Genius Hour. So, you need to decide if you want to simply answer your buddy's question with a video of you speaking directly to the iPad camera while showing a picture to support your answer, or if you want to use screencasting to show the picture or a diagram with your voice narrating over the top. Maybe you have another idea. There are many ways to present back

### Guidelines for Presentations

- Say hello to your buddy and introduce yourself.
- Restate their question.
- Explain your answer (remembering to define any words a Kindergartener may not know).
- Close by thanking them, telling them how to research further, or ask another question they may not have thought about.
- Remember to present in a natural speaking voice and use good transition words.

### Anchor Chart 2

to your Kindergartener, but you have to think about what is best to communicate your idea. If you are answering a question about shooting hoops in basketball, you may want to have someone else record you in the gym shooting hoops. Or you may want to have a diagram of a basketball arching through the air. Whatever you decide to do, you need to remember that we have a timeline and our buddies are relying on us for information. So, your job today is to finish up any last minute researching and plan your presentation by choosing not only **what** you are going to say, but also **how** you are going to communicate your idea using your words and visuals. You don't have to be too formal, but you should have a good plan of what you are going to say.

12. Model a sample presentation to a Kindergartener. Use the iPad to record yourself to show the kids how simple, yet informative and content rich, a recording can be. You can put your own stipulations on their recordings, but mine are highlighted in Anchor Chart 2.
13. Allow time for students to plan their presentations. Ask these leading questions as you circulate the room:
  - **What are you going to say?** Do you have a script or bulleted list to lead your thoughts? What words are you going to define?
  - **How are you going to say it?** Should you use your normal speaking voice, or is it a good idea to slow down a little bit so your buddy can understand you?
  - **What tool will you use?** iPad camera (will you record yourself or will a friend help?), Educreations, Whiteboard, iMovie, another idea?
14. Check for thoroughness from those who complete the planning early. Then encourage them to go to the next step on Anchor Chart 1.
15. Close with a compliment and tell them you are excited to get to the final presentations tomorrow!

## Day 4: Recording and augmenting presentations

16. **Minilesson:** I was able to walk around to see everyone's hard work yesterday, and I am very excited to see your presentations. I bet your Kindergarten buddies will be too! I want to give you a lot of time today to record your presentations and augment them over the image you choose. Your buddies are waiting for answers to their questions so they can continue with their work during Genius Hour. So, let's use every minute of class today to complete our presentations. These are things you need to have completed today:
  - **Practice your recording.** I suggest everyone does this one more time to be sure you include everything you need to effectively communicate your ideas. Also remember you need to use a loud, clear, and conversational speaking voice so your buddy can understand you. You may want to speak slower than you would normally speak and put emphasis on important words. You may even want to record yourself while you're practicing so you can see how you need to revise your words, voice level, speed, or when you show your visuals so your buddy can completely understand your ideas.
  - **Record your answer.**
  - **Watch your recording to make sure it is what you want to send.**
  - **Augment your video over your image.**

17. This is a great time to show the class an example of a finished product. In my class, a few students finished their recordings on Day 3. With one student's permission, I showed her video to reinforce to the class that they are on the right track and to show them they are almost finished.
18. Walk around to help students and encourage them to listen to each other practice. Encourage students to record their presentations and get them augmented in the timeframe allotted so their Kindergarten buddies have their answers for their Genius Hour. Students who finish early can assist classmates by serving as a videographer for others or by assisting students who need help finishing in the time given.
19. Celebrate the class's hard work, tenacity, and creative ideas by telling them their buddies are going to be thrilled to meet them "in person" during a Google Hangout.

## Finishing Up (Teacher Responsibilities)

20. The images that were used to augment the students' videos need to be sent to the buddy class. This can be accomplished by placing all images in a Google Doc uploading the images to a shared folder in Google Drive.



## Day 5 (optional): Connect with your buddies online in real time

21. Use Google Hangouts, Skype, or FaceTime to meet your buddy class and introduce yourselves. This activity can be set up in a variety of ways.

## Closing Survey

22. Ask students the following questions:
  - What did you like about this project? What would you have changed? Did you like working to meet a deadline? What did you learn from working with a Kindergarten buddy? If you could do anything differently, what would it be?

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## Reflection

### My purposes for this lesson:

- Collaborate with another class
- Teach my students how to consider their audience and their needs when they present information
- Provide a safe place for students to do presentations with high-engagement, productivity, and ownership but low-anxiety
- Learn to work with a deadline in mind

## Assessment and Management

Due to my purposes, I did not include a rubric or formal grading procedure. Instead, we had a timeframe with a deadline and certain processes that had to be followed to accomplish the task and meet the deadline. I wanted my students to have choices in their learning, feel a sense of ownership over their work, choose topics that interested them, and have a low-pressure form of presenting with an authentic audience. Due to this, I did not include rubrics or grading procedures. Instead, I wanted my class to focus on the process, their audience, and the product rather than the grade they would receive. With this, their work was detailed, creative, thorough, engaging, and catered to their audience. The anxiety level was low, but the production quality was high. My students felt ownership over their work and were excited to make connections to other students. Since I served as a facilitator during this lesson, I was able to interact with each student individually, formatively assess where my students were with their learning, and make suggestions or cheer them on to accomplish their goals. Students were highly engaged because they felt accountability to another person, they had a specific task to accomplish, they could use tools and strategies that were familiar to them, and they had a deadline to meet. Teachers with different purposes could easily create a rubric and grading criteria for this project.

## Differentiation

These lessons can be modified or adapted to fit a variety of students, standards, and needs. Depending on how you implement this project, this activity can be as simple or as complex as you want. It can be modified based on your students' needs, background knowledge, your access to technology tools, and/or your ability to connect to a different classroom. The same process can be followed (see *Anchor Chart 1*), but the level of complexity can be adjusted to suit different grade levels or individual student's needs. The timeframe can be modified to adhere to the amount of time a teacher can spend in class and/or how many standards need to be covered. English Language Learners, special needs students, gifted students, and general education students all thrived in this lesson in the 4<sup>th</sup> grade and Kindergarten classrooms.

## Collaboration

Not only are the students collaborating with their buddies from a different school and grade level, they are also encouraged to collaborate with each other, their parents, and anyone else who can help them answer their question or give them good ideas for an effective presentation. Students are encouraged to elicit help from their families at home. Though my students each received a question to answer, you could have students work individually, in teams, or in small groups to complete this lesson. Additionally, this would be a great way to involve parents, volunteers, and/or experts in a classroom activity. If you want to partner with another classroom in a different part of the world, I would suggest putting out a request on Twitter. There are many teachers/classrooms that are thrilled to collaborate!



## Student Choice

Students have choice from the beginning of the lesson. They choose their Kindergarten buddy based on personal interests. This is to promote engagement and autonomy. Students choose how to research their answers (surveys, Internet research, books, personal experience, or any other method that lends itself to answering their question). The choice of presentation is also offered. With students in the driver's seat, the hope is they will take ownership over their learning and have pride in their work.

## Technology

If a classroom set of iPads is not available, you can use one single iPad or tablet instead. That is how I originally did this lesson with my students (with the exception of the research part when we went to the computer lab). It took more time to have students record their presentations with one iPad than a class set, but I was able to see each presentation as my students recorded their videos. With this, I was able to offer suggestions about content and delivery and help with the technological part of the process. Augmenting the videos was fun and it excited the kids. However, you could do this lesson by sending the videos in a different way too.

## Safe Search Sites

[Useful Websites](#) on Mrs. Wever's classroom website (look under Search Engines)

[Safe Search Kids](#) (Google Kids Search Engine)

[Ask Kids](#)

[MEL Kids](#) (Michigan Electronic Library has many [databases](#) and safe search sites for kids)

[Kids InfoBlts](#)

[InfoTrac Junior Edition](#)

## Additional Resources

- Mary Wever's [blog post](#) about how she used this lesson with her class
- Mary Wever's [Useful Websites](#) (look under Search Engines)
- Erin Klein's guide [How to Make an Aurasma Augmented Reality Video](#)