

Increasing Student Engagement with Nearpod

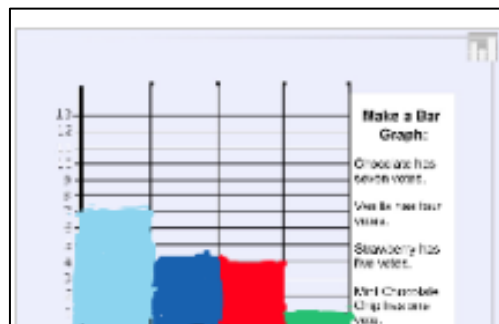
Integrating technology into lessons is a common discussion in among educators. Making these lessons student-centered is a challenge for many teachers. Nearpod (<https://nearpod.com/>) is a website that offers interactive lessons, some of which cost a small fee to purchase, but many others are FREE. The lessons work on all platforms, and the site collects data from the student's device as the lesson is completed. From my experience, all of the lessons are interactive and engaging. The Nearpod site allows the lesson to be controlled by the teacher, and the lesson can be paced to meet the needs of the class. Lessons can also be adapted for individual students to work at their own pace to complete the lesson.

Using this resource with a second-grade class, my class and I worked on the lesson together. (See the resource list for a link to all the lesson plans I used.) I used a free lesson by Dan Gallagher titled Graphing: Create Graph & Interpret Data. The lessons took three days in the classroom to complete. Every student had an iPad to complete his or her work, and I used the SmartBoard to show the lesson. I also logged into the lesson with an iPad as a student so that I could view the lesson as the students saw it. We focused on the following essential questions:

1. How can we use a picture, bar graph, chart, or table to organize data and answer questions?
2. How do you use a bar graph to gain information?
3. Why do I need to ask questions and collect data?
4. What type of graph should I use to display data?
5. How can I use data to help me understand the answers to the questions I asked?

The lesson began with presenting the learning targets to the students and reviewing data and types of graphs. The class took a poll and gathered information to create graphs. The students were so excited to get to use the iPads to create their graphs, take polls, gather data as a class, and even to answer questions about the data presented in graphs. Students need opportunities to gather data

and create graphs before being asked to interpret data on a graph. This lesson gives them the opportunity to do both. After the students chose their favorite flavor of ice cream, the data collected was immediately displayed on the board for the students to use the information to create a graph on their iPads. When the students submitted their work, it was displayed on the board for everyone to see. The class could immediately discuss the graphs and address any of their misconceptions about the results. Here is an example of my students' work within Nearpod.



This information could be used immediately to help me make decisions about my instruction. After working with bar graphs, we collected more information and created pictographs.



Some of my students were more creative and learned how to change the color of their “text” while others used innovative ways to squeeze the data into the space provided when they ran out of room for their triangles. This gave us the opportunity to discuss the importance of keeping our work neat and organized. Another poll or survey taken during the lesson was their favorite season.

Which is your favorite season?

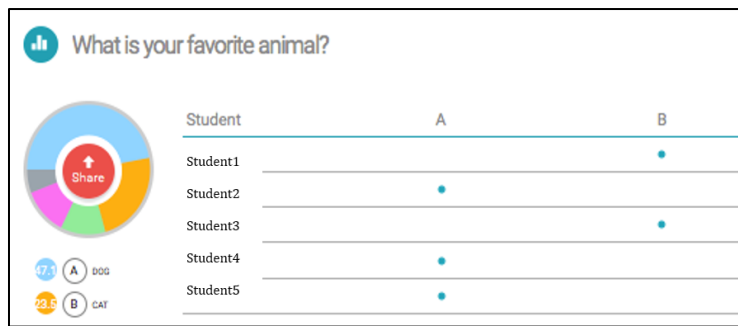
Winter

Spring

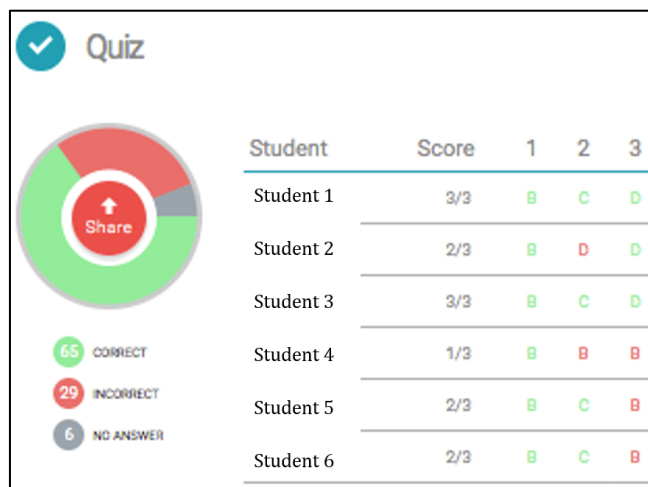
Summer

Fall

The student data from the survey was immediately recorded and displayed on the SmartBoard as they submitted their responses. I could see which students had or had not submitted their answers in real time.



The lesson also contained pre-created quizzes for the students to take and for me to gather information about what they had learned or what they understood. With this information, I could immediately see which students still needed work and which ones were already successful.



Additional resources, such as links to an outside websites that had an interactive lesson on graphing, were also provided in the lesson. For example, one link took the class to the “Jellybean Tree” activity where students had to move the jellybeans from the tree to the correct color on the chart.



A bar graph was immediately created with the data. The students loved this activity. This site also had questions about the data that they had just collected, and the students answered these questions by using the graphs they had just created. Nearpod turned out to be a very useful resource for my second graders. Through this lesson, my students collected data and used graphs to organize the data and to answer questions.

As with all lessons, there are things that I would change. For example, I would download the Nearpod app onto the iPads instead of asking second graders to type in the web address. The app is more user-friendly in that all the students have to do is use the pin number and log into the site. The pin number takes them directly to the lesson that I want them to complete. Additionally, I would teach some basic iPad skills to my students before beginning the lesson. I found that students would inadvertently open a new webpage by tapping on the tab at the top of the page. However, all of these are easy fixes to relatively small problems with implementing the lesson.

Overall, I enjoyed the lesson and would recommend it to other teachers. The students remained engaged for way longer than they normally would, and they were enthralled with every

new change or slide. The data the students collected related to real scenarios to which they could relate and they recognized how it was applicable to them. The students impressed me with their ability to use technology. They gathered data, created graphs (bar graphs and pictographs), and answered questions about the data. For me, it was easy to collect student work or evidence of learning. I was able to assess their knowledge immediately and address misunderstandings or move forward with the lesson as needed.

With such easy data collection and samples of student work right there on my computer, it was easy to differentiate the current lesson and the next day's lesson for struggling or accelerated students. With this program, the teacher can turn off the student names and display the class data collection and work samples immediately. I love the fact that I could even stop and talk about individual work samples, mistakes, good ideas, and even challenges within the work seamlessly as students needed the differentiation. The lesson is a definite repeat!

Resources for this article:

Nearpod: <https://nearpod.com/>

My lesson plans:

<https://dl.dropboxusercontent.com/u/43603543/2nd%20Grade%20Data%20Lessons.pdf>