

Subject: Physics

Grade Level: High School

DI Strategy: Compacting/Scaffolds

Physics - Electricity Compacting Lesson

As a day 1 lesson on electricity, in my physics class, I choose to use an online, web-based tool called ClassKick. It is a presentation tool that allows me to create any number of slide activities for my students to work through at their own pace. Some of those activities included typing/writing answers to questions, selecting the correct characteristics to describe a vocabulary term, completing practice problems, or learning new content. This particular lesson consisted of 14 slides for the students to complete at their own pace. The reason I chose to use this tool is it allowed me to use compacting as a way to differentiate my instruction. I knew coming into this lesson that I had students at various levels of prior content knowledge. A number of my students were a part of the engineering program at our school and therefore, had already had lessons on electricity. I knew that sitting through an introductory lesson on electricity would be boring for them, and I wanted to provide them a way to move past this lesson. By using ClassKick, I was able to allow my students with very little knowledge of electricity to move at a slower pace and complete all of the ClassKick slides to learn the content. At the same time, my engineering students were able to skip the content introduction slides and move right to the content review and practice problem slides.

By using ClassKick, students who had mastered a certain section of material could move forward to the next section. However, if any students felt that they needed additional review or had not quite grasped the topic, they could move back and review previous slides. On many of the slides, I also provided scaffolds for students who needed them. For example, on a slide that asked students to explain what electricity was, I provided a link to a video that could help them with that question. On another slide, I provided students with a link to a web page that explained the characteristics of electricity. While students were working, I was able to see the answers they were providing and offer them immediate feedback.

Anchor Activity: For my students who were able to work through the ClassKick activity quickly (due to their previous engineering background or because they could grasps the new content quickly), I provided them with an anchor activity. I asked any student who completed early to move onto the chapter on parallel and series circuits and begin outlining the chapter and then complete the practice problems. This allowed my engineering students to work on content that was new to them and meet them at their correct level of difficulty.

By structuring my lesson in this way and using the compacting strategy, I was able to start day 2 of the electricity unit with all my students at the same place in the content.