A Two-Step Approach to Integrating Technology

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Just a few posts ago I provided a list of some of my favorite education books. One of them was *Applying Standards-Based Constructivism: A Two-Step Guide for Motivating Elementary Students*. In this post I want to revisit the book to explain how this two-step approach works well when integrating technology into the classroom.

The Two-Step Model

The authors break down the learning process into two steps, the Exploratory Phase and the Discovery Phase. During the Exploratory Phase, students are given a chance to explore the content or tool. They are assessed for understanding, but are not formally graded. It is this phase that prepares them for applying what they have learned in the Discovery Phase. Once students have completed the Exploratory Phase, they are given a task that requires them to show what they know about the content to apply their knowledge.

Standards-Based Constructivism

This model allows for constructivist teaching and learning student centered learning while also addressing content standards. Since we should be designing our learning experiences with the end goal (often a standard) in mind, this model helps our students 'get there.' We give our students a chance to explore standards-based questions, concepts or tools that will guide them toward the ultimate goal of being able to apply their new knowledge, showing their understanding of the standard/goal. The Exploratory Phase can be as short as 10 minutes or as long as a few days, depending on the goal in mind or the concept being taught.

The Two-Step Model and Tech Integration

So what does this model bring to tech integration? Plenty. As an example, when I was teaching my 5th graders iMovie for the first time, I dedicated an entire 45 minute period each to just learning how to add photos, text, transitions and music. During the class period I walked around, asking each student to show me that he or she knew how to add and delete photos from their project. This was a chance for my students to explore iMovie and its basic functions before being given a chance to show that they know how to apply these skills to building an organized story with photos, transitions, music and text.

On a smaller scale, when I wanted to introduce my 3rd grade students to creating stories in Storybird, I had to first make sure they knew basic word processing skills. We spent an entire 45 minute period practicing making the right number of spaces between our words, using the Shift key and placing periods and capitals in the right places. I walked around while students typed whatever they wanted and checked that each student knew how to format their text. The next class period, my students were ready to apply what they had learned to their Storybird stories. Were they older students, I may have spent only 10-15 minutes in the Exploratory Phase.

Why Use the Two Step Model?

We cannot expect our students to jump in and create a meaningful piece of work that shows their applied understanding of a concept using a tech tool if we do not give them time to really explore not only the content, but the tool itself. While it does tack on some time to completing a project, it is worth it in the end to know that your students have had a chance to investigate questions they may have, for you to address any misconceptions and for a student to have a good grasp on content and/or a tool before they are asked to apply what they know. By taking the time at the beginning, you will save yourself time while students are creating. They will be able to focus more on the content and less on the tool.

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