Learning, Understanding, and Conceptual Change Essay

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CEP 810

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I found the Bransford, Brown, and Cocking (2000) reading assigned this week very interesting. Specifically, the idea that preconceived notions and experiences affect learners. For two and a half years I taught students who had a much different background than students I taught prior, as well as a different background than I have. The reason they seemed to have so much difficulty with the concepts I presented them with, is because seemingly most of their education up until that point had been based on learning and memorizing facts. As Bransford et al. (2000) states, “If children were blank slates, telling them that the earth is round or that one-fourth is greater than one-eighth would be adequate. But since they already have ideas about the earth and about numbers, those ideas must be directly addressed in order to transform or expand them (Bransford et al., 2000, p. 15). Further, as the reading suggests, I believed it was my job to learn about the student’s background and preconceptions of concepts to promote learning and understanding (Bransford et al., 2000). In this essay I will address two personal experiences with the ideas of learning, understanding, and conceptual change.

While reading Bransford et al. (2000), one experience I had came to mind. Earlier this year I was teaching the ideas of main idea and theme to my sixth grade students. I anticipated that they would have some difficulty because the concept of theme is abstract, and from my experience teaching these concepts can be difficult for students to understand. First, we discussed the definitions of main idea and theme and how they were different. I presented the ideas with a PowerPoint, and after having read Bransford et al. (2000), I do not think this mode was very effective because it did not allow the students to have an experience with theme or main idea, it only gave them the definition. We spent about three days introducing it and then going over examples together. Toward the end of the week I checked out six children’s books from our library to have the students practice in groups. They were to read the books and discuss as a group the main idea and theme. In our class we defined the main idea as being literally what the story was about and that the theme was something you learned from the story that isn’t explicitly written down. As it states in the Bransford et al. (2000) reading, “A student can learn to fill in a map by memorizing states, cities, countries, etc., and can complete the task with a high level of accuracy. But if the boundaries are removed, the problem becomes much more difficult. There are no concepts supporting the student’s information” (Bransfrord et al., 2000, p. 17). Once the teacher scaffolding is removed, and the students only understand the definition and not the concept, the information becomes less meaningful. In hindsight, and after beginning this course, I realized I could have selected a much more effective technology to introduce these ideas. Most groups would state the main idea correctly, but then just paraphrase it and call it the theme. To combat this, I needed to address their misconceptions. I decided to spend more time incorporating theme into other material. By the end of the unit most of my students were able to identify theme in many contexts. As Bransford et al. (2000) explains, “Deep understanding of subject matter transforms factual information into usable knowledge” (Bransford et al., 2000, p. 16).

Finally, during my time in college I had a linguistics professor who taught me an idea that resonates with me much more after having this teaching experience. During a lecture, one of my peers theoretically asked why we needed to learn an idea we were being introduced to, and my professor had a profound answer. He said that as students, we expect our teacher to know much more about a subject than just the material for that particular class. He continued by explaining that if we don’t have a conceptual understanding about something, we will not be able to translate that to our students, and ultimately they will not truly understand what we have taught them. This mirrors what Bransford et al. (2000) states, “Teachers must come to teaching with the experience of in-depth study of the subject area themselves. Before a teacher can develop powerful pedagogical tools, he or she must be familiar with the progress of inquiry and the terms of discourse in the discipline, as well as understand the relationship between information and the concepts that help organize that information in the discipline” (Bransford et al., 2000, p. 20). As teachers, we must be able to transfer our factual knowledge into conceptual understanding so we can teach our students to do the same.

References

Bransford, J., Brown, A.L. & Cocking, R. R. (2000). How people learn: Brain, mind, experience and school. Washington, D.C.: National Academy Press. Retrieved from

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