Using Fink's Taxonomy in Course Design

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Lifespan Development is an introductory psychology course at my university. I love teaching this course. However, in the past I found myself bogged down by the volume of content and the rush to cover each of the myriad developmental theories over the course of single semester. I want my students to acquire necessary skills, not simply endure a crash course in developmental content. In 2004, I had the good fortune to attend a conference workshop led by L. Dee Fink entitled Creating Significant Learning. Fink presented his taxonomy for a systematic approach to course design that went beyond the usual focus on content (Fink, 2004). Fink's taxonomy provided a model for course design that aligned learning goals with a method for assessing student learning (Fallahi, Levine, Nicoll-Senft, Tessier, Watson, & Wood, 2009; Fink, 2003). After attending Fink's workshop, I decided that it was time to redesign my Lifespan Development course. I was not alone — five other faculty members from different departments within my university also wanted to redesign their classes.

Taxonomies and Course Design

Fink begins his book *Creating Significant Learning Experiences: An Integrated Approach to Designing Colleges Courses* by asking instructors to think about what they want their students to remember at the end of the semester. In other words, what are the long-term goals for the course? Fink encourages instructors to create learning goals based on his taxonomy of significant learning rather than relying on a content-driven method of course design (Fallahi et al., 2009; Fink, 2003). During his 2004 workshop, Fink joked about the "two-textbook" method of course design, in which the professor assigns one book while incorporating the second book into the lectures. It is likely not a coincidence that many textbooks contain 15 chapters to facilitate covering one chapter per week in a typical 15-week semester. Fink's approach switches the emphasis away from content toward the goals and skills the instructor wants his or her students to retain after the course is completed.

Other taxonomies are available for educators. For example, Bloom's widely used taxonomy incorporates the notion that students need to move beyond course content and develop high-order learning skills (Bloom, Engelhart, Furst, Hill, & Krathwohl, 1956; Shulman, 2004). Many instructors use Bloom's taxonomy in course design because it facilitates achievement of specific goals and provides direction for lessons to achieve those goals (Fallahi & LaMonaca, 2009).

Fink's Taxonomy: A How-To Guide

Fink's model for course design (2003, 2004) can be used to develop new courses or redesign existing courses. As I was considering how to redesign my Lifespan Development class, I came up with four specific goals (Fallahi, 2008). The choice of goals was both personal and based on research in the scholarship of teaching and learning. Based on my experiences in the classroom, I wanted to get away from all lecture-based learning, but having a large lecture class made some of the activities that I typically use more difficult to implement. Further, as a clinician, I have a wealth of case studies to draw

upon. My students seem to respond well to real-life examples, and as a result, I made a decision to utilize more case studies. In addition, I really liked the idea of building the skill base of my students in the hopes that they would take those skills with them beyond the classroom. The teaching-and-learning literature strongly emphasized the enjoyment and benefits of active learning (Benjamin, 2008; Goss Lucas, 2008; Knight, 2008). Finally, it is always important to align course goals with departmental goals. The aforementioned research literature and my personal observations led to the following goals.

Goal #1. Decrease the emphasis on course content and foundational knowledge. Instead of trying to cover every possible topic, I started incorporating basic concepts that I felt every student should understand. I stopped worrying about covering all possible topics. While there are many universities that want introductory courses to cover every single topic, I am fortunate that in my department, the instructors teaching Lifespan Development often take different approaches to teaching the course. Some provide a chronological approach, some a topical approach, but all emphasize different aspects of lifespan development based upon their own areas of expertise. For example, I am a clinician and I have a tendency to emphasize how development can negatively impact a child's emotional health.

Goal #2. Increase the emphasis on active learning. No longer lecture driven, my redesigned course was now based on active-learning assignments. I had to be creative and consider teaching methods beyond the typical lecture-based instructional approach.

Goal #3. Apply course content to real-life problems. I chose problem-based case studies that illustrated a number of important concepts. These case-study assignments required students to use theoretical and practical strategies to figure out the best approach to solving the problem and summarize their findings in a formal written format. For example, one case described a student who was acting out in class and exhibiting aggression, depressive symptoms, and academic underachievement. He was a bullied and rejected child with attachment issues. The goal of the assignment was to link the subject's history with his current problems by applying theories of development, attachment, parenting styles, and social rejection. Once they finished the written assignment, students researched possible interventions for the case subject. Students worked in small groups of five or six and came up with an action plan that could be used by a counselor, teacher, or parent.

Goal #4. Incorporate course lessons into life lessons. Some of the goals for my newly redesigned class included learning what might enhance and hinder a child's development. Here we considered a number of topics throughout the semester that were introduced through lectures, assigned readings, discussion-based debates, and reflection papers. Some of these topics included: *How might we provide a stimulating environment for our children? Should we use spanking as a form of discipline? What types of parenting styles promote an independent and empathic adolescent? What are some of the reasons behind adolescent aggression?*

Once I identified the general goals for the class, I needed to determine how to assess those goals. Again I turned to Fink's (2003) taxonomy, which provides the structure for assessing both course content and higher-order thinking in six taxa (Fink, 2003):

1. Foundational Knowledge. Foundational Knowledge includes all of the content, ideas, and information that you want your students to know at the end of the semester.

2. Application. The Application taxon encompasses critical, creative, and practical thinking, as well as additional skill sets that may be beneficial to students.

3. Integration. Integration includes connecting different ideas that might appear in different disciplines or across the lifespan.

4. Human Dimension. The Human Dimension taxon helps assess if students learn more about themselves and others. It stresses the human factor and gives human significance to learning.

5. Caring. Caring is the taxon that provides the motivation and energy for learning by developing new interests, feelings, and values associated with the course material.

6. Learning How to Learn. The Learning How to Learn taxon provides the ability for long-term learning by teaching students to become self-directed learners.

Now instead of assessing my goals through content-based examinations, I re-designed my class to incorporate assessments of the six taxa. For example, Foundational Knowledge was assessed by multiple-choice items. I assessed students throughout the semester on important course content. Application and Integration were assessed through several case studies, as mentioned previously. Students were presented with real-life problems and asked to show their understanding of the problems by citing developmental theories. In addition, students were required to develop innovative methods for solving these problems by using material that was presented in class as well as by identifying other interventions through independent research. The Human Dimension was assessed through reflective writings that incorporated new ideas and insights into contemporary lifespan development problems. Finally, Caring was assessed with a Likert rating scale on which students responded to statements about how much they cared about the course, its content, and humanity in general.

Operationally designing the six taxa proved to be the most difficult part of this process. It was fairly easy to come up with goals associated with the some taxa, but specific assignments that clearly measured each taxon were difficult and time consuming. Some taxa were easier to operationalize than others. I had no difficulty coming up with multiple-choice items that reflected the content I hoped my students would learn, but other taxa, for instance Caring, proved to be more difficult. The idea behind Caring is that you want your students to care about the material or increase their interest and passion for the material. How do you measure that? I developed questions that assessed their interest in and caring about developmental psychology topics. This was one taxon that did not show improvement following the course. In reflecting on the results of several studies evaluating this taxon, the problem may be with the assessment tool I developed.

As I stated earlier, there were five professors other than myself who worked during this time period to redesign their respective classes. This was incredibly helpful for the assessment piece because everyone reviewed each other’s goals and assessments and provided feedback. We also were all interested in validating this approach and examining the benefits of redesigning our classes both individually and collectively.

Did We Build a Better Mousetrap?

Systematically redesigning a course is all well and good, but how did I know if I succeeded? I needed to assess the validity of Fink's taxonomy and evaluate the success of my goals for the class. As a result, several research projects were born. Starting simply, one of the first studies that I authored with a colleague examined within-course changes that were assessed with Fink's taxonomy (Fallahi & LaMonaca, 2009a). We examined within-group changes on Fink's six taxa for 151 undergraduates in the Lifespan Development course. We administered identical pre- and post-tests to quantify the changes that occurred during the semester on the six taxa. We found significant changes in Foundational Knowledge, Application, Integration, Human Dimension, and Caring taxa.

In the next study, I compared a traditional Lifespan Development class with a redesigned class in order to evaluate a between-groups design (Fallahi, 2008). Students in the redesigned class improved significantly in comparison with the traditional course in Foundational Knowledge, Application, Integration, and Human Dimension. Finally, Levine, Fallahi, Nicoll-Senft, Tessier, Watson, & Wood (2008) conducted a meta-analysis to examine significant changes both within and between classes taught by six different instructors who each redesigned their classes from different fields of study. We found that all six courses showed significant improvement in learning on four of the six taxa — Foundational Knowledge, Application, Human Dimension, and Learning How to Learn. We wondered about the nonsignificant taxa and suspected that the problems we observed were associated with the outcome measures used to operationally define each taxon.

Issues in Redesigning Your Own Class

When I first used Fink's approach to redesign my Lifespan course, I had a tendency to focus more on new and exciting techniques in the classroom instead of changes to pedagogy or a systematic approach based on our course goals. What is important in this approach to redesign is to use Fink's taxonomy to decide what goals are important for long-term student learning. In other words, what long-term learning, knowledge, attitudes, and skills do we want our students to take away from our class? Fink's taxonomy and approach to course design helps provide a structure that clarifies our goals for student learning, makes student learning more personal, and directs the organization of the course and the methods we use to ensure that learning and skill-building endure.