

Using a New Taxonomy for Significant Learning in the Theory Classroom

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In his 2003 publication *Creating Significant Learning Experiences*, L. Dee Fink defines a new taxonomy of significant learning. Through six instructional goals—foundational knowledge, application, integration, human dimension, caring, and learning how to learn—Fink calls for and prescribes a method to implement a more effective approach to teaching in higher education.¹ In this article, I will begin by explaining Fink’s taxonomy of significant learning, using the design and delivery of my graduate-level, “Analysis for Performers” course for specific examples; then, I will examine components of the core music theory curriculum through the lens of Fink’s taxonomy, including the positive ramifications that the new taxonomy can have for students, instructors, and the music program as a whole. Fink’s taxonomy signifies a shift from a content-centered paradigm of teaching to a learning-centered paradigm. In Fink’s taxonomy, instructors will find the tools to conceive of and integrate new types of learning into their courses—types which inspire significant learning for students.

Readers may be familiar with the taxonomy of educational objectives formulated in the 1950s by Benjamin Bloom and his associates.² Bloom’s taxonomy encompasses three domains: cognitive, affective, and psychomotor. The cognitive component is referred to most frequently with its hierarchical sequence of learning objectives: evaluation, synthesis, analysis, application, comprehension, and knowledge. Fink’s taxonomy answers the call for types of learning that are not easily facilitated through Bloom’s taxonomy (such as leadership and ethics). Indeed, Fink’s

¹L. Dee Fink, *Creating Significant Learning Experiences: An Integrated Approach to Designing College Courses* (San Francisco, CA: Jossey-Bass, 2003), 31-32.

² Benjamin Bloom, ed., *Taxonomy of Educational Objectives. The Classification of Educational Goals. Handbook I: Cognitive Domain*. (New York: McKay, 1956).

goal of “significant learning” is grounded in the foundation of learning necessitates a *change* in the student and significant learning necessitates *lasting* change. Further, Fink’s taxonomy is *not* hierarchical, but rather relational and interactive. This feature allows instructors to incorporate a variety of learning activities, with separate yet interrelated goals, into their courses at any time during the semester.

Fink’s methodology for course design begins at the end with instructors looking at long-term goals for students years beyond the course, moving then to learning objectives for each component of the taxonomy, followed by determining methods of assessment for each objective, and finally, learning activities to prepare students for each assessment.³ Once the long-term goals are established, instructors must determine skills related to each of the taxonomy’s objectives that are necessary to achieve the long-term goals. Instructors must ensure that each objective is measureable by a specified assessment type. Finally, instructors design learning activities, for both in and out of class, which will prepare students for the assessments. In the case of “Analysis for Performers,” the long term goals I set were for students to 1) use analytic score study to enhance artistic performance and 2) engage in scholarly, musical discourse.

With long term goals defined, instructors can begin to formulate specific course objective related to each learning type. Again, as the taxonomy is not hierarchical, instructors may conceive of these objectives in any order.

Learning Objective—Foundational Knowledge

Fink’s objective of foundational knowledge concerns the students’ abilities to define and recall basic ideas and concepts. Fink suggests that instructors focus on aspects of the subject

³ For more on back-end design, see Grant Wiggins. *Educative Assessment: Designing Assessments to Inform and Improve Student Performance*. (San Francisco: Jossey-Bass, 1998).

matter that students should understand, remember, or recall one to three years after the course.⁴ For my graduate course, foundational knowledge was more or less a prerequisite for the course. Because my students were coming from a variety of different institutions, with many international students included in the class population, I felt it important to ensure that the students did in fact meet this “prerequisite.” My objective relating to foundational knowledge became: *Students will refine and use scholarly terminology of musical form and texture.*

Application

Application learning is where foundational knowledge becomes useful.⁵ Fink offers the verbs “use, judge, critique, manage, solve, assess, analyze, create, calculate, and make decisions about” as suggestions for formulating the application objective. In the absence of hierarchy, instructors should look for ways that students may engage in application learning using knowledge students already have mastered coming into their course, not necessarily the information they are mastering in conjunction with the foundational knowledge objective. For my course, I had two application learning objectives: *Students will accurately analyze music with and without a score* and *Students will critique and critically evaluate published analyses.*⁶

Integration

The third component of the taxonomy, integration, involves students in making connections between two ideas, concepts, or paradigms. Fink offers instructors the flexibility of connecting course material to the students’ daily lives, to other realms of study, or to closely

⁴ Fink, 31 and 79.

⁵ Ibid.

⁶ Admittedly, these are lofty goals for a single semester course for non-theory majors. My intention was perhaps more to expose students to their potential to learn to complete these tasks. Their assignments focused on the analyses and readings in Matthew Santa (2009) *Hearing Form* and Deborah Stein (2005) *Engaging Music: Essays in Music Analysis*.

related subjects of study.⁷ My integration objective was: *Students will examine the interaction between musical analysis and performance.*

Human Dimension and Caring

The remaining three components of Fink's taxonomy—human dimension, caring, and learning how to learn—are likely qualities that instructors have wished for in their students...*if I could just get them to care about theory.* In actuality, with careful planning of course objectives and learning activities, instructors can TEACH this quality, though we may be required to step out of the comforts of our traditional curriculum to do so.⁸ As music theory instructors, these objectives require that we think outside the topics of harmony and form; to consider the long-term significance of music theory for our diverse student populations; thinking beyond degree requirements—to practical career applications of our subject.

The human dimension and caring require learning of “self,” learning the personal and social ramifications of the subject matter, and developing a new understanding of self-image or self-ideal as it relates to the subject matter. Additionally, students may develop a new understanding of how to interact with others regarding the subject matter.⁹

For many performers, the concepts of music theory seem to be in contrast or detriment to their artistry. I found the human dimension and caring objectives to be crucial for the success of my course. The human dimension objective was: *Students will become analytically-informed performers without sacrifice to creativity/artistry.* Indeed, I wanted students to redefine “self” as music scholar as a positive supplement to “self” as performer. For this to occur, the caring

⁷ Fink, 31 and 80.

⁸ For more on teaching caring see Wilbert McKeachie, et als. “Teaching Values: Should We? Can

We? In *Teaching Tips: Strategies, Research, and Theory for College and University Teachers*, 10th ed., (Boston: Houghton-Mifflin, 1999.)

⁹ Fink. 32.

component is equally critical. By empowering students with the skills to formulate and defend their own interpretations, instructors can take advantage of their ownership of interpretive preferences to motivate their students' sense of caring. Here, the objective I created was:

Students will value the ability to challenge a performance or interpretation that conflicts with their own interpretations.

Learning How to Learn

The final component of Fink's taxonomy, learning how to learn, gives students a means of furthering their educational growth after the course has ended.¹⁰ Fink suggests three distinct areas of focus: becoming a better student, learning how to inquire about the subject matter, and becoming a self-directed learner. Instructors may incorporate more than one area of focus if appropriate for their course. For my course, I focused on students improving and establishing their academic voice: *Students will develop their own scholarly voice by emulating writings they study.* I wanted my students, who have established credibility as musical performers, to project equal credibility when speaking or writing about music.

Pairing Learning Objectives with Assessment and Learning Activities

Once instructors have determined the course learning objectives ("where we were going"), the next step is to decide how to "get there." Here, each objective is paired with a form of assessment and criteria for evaluating that assessment. The pairings I chose for "Analysis for Performers" is summarized in Table 1. While each assessment is directly connected to an objective, most assessments draw on secondary skills from other objectives as well, reflecting the relational nature of Fink's taxonomy. Most importantly, assessments do not necessarily have

¹⁰ For more on lifelong, self-directed learning see Phillip C. Candy. *Self-Direction for Lifelong Learning: A Comprehensive Guide to Theory and Practice.* (San Francisco: Jossey-Bass, 1991).

to impact a student's final grade, nor do all parts of an assessment need to be equally weighted when considered as part of a grade.¹¹ What is important is that the assessments are valid and the criteria for grading are clearly defined.

The final step in Fink's planning process is for instructors to determine appropriate learning activities to prepare students to succeed at each objective/assessment pair. This step is crucial as Fink explains, "Simply defining one's teaching goals in terms of the taxonomy of significant learning does not, by itself, improve the quality of student learning. To do that, we must find ways of designing and creating a special kind of learning experience for our courses."¹²

Looking again at Table 1, I considered the foundational knowledge objective to be remediation; therefore, all of the learning activities for this objective occurred outside of class in the form of readings and exercises from the textbook. This left class time open for activities including, discussions, debates, analysis, comparative listening, and writing practice.¹³ It is within these activities that students are able to demonstrate their competence of each learning objective. I was able to assess their use of terminology (*foundational knowledge*), review their analyses and critiques (*application*), understand how they connect and compare ideas and

¹¹ I assessed my students' progress on various objectives through my observations of students' participation in class discussions and group projects. While their participation influenced their grade, the quality of their scholarship, in these free-flowing conversations, did not. Rather, I used this information to gauge if various learning activities were effective towards our course goals and to make changes to planned activities to further engage students towards active and significant learning. My graded assessment of their scholarship was focused on their formal presentation and research paper.

¹² Fink, 59. See also pp. 102-154 for a detailed discussion of various types of activities that promote active and significant learning, including discussions of learning portfolios, in-depth writing, and online/distant learning.

¹³ For more on balancing in and out of class activities see Barbara Walvoord and Virginia Anderson. *Effective Grading: A Tool for Learning and Assessment*. (San Francisco: Jossey-Bass, 1998), pp. 53-55.

concepts (*integration*), observe them interacting and understanding each other's interpretations (*human dimension*), feel their excitement and interest in our activities (*caring*), and respond to them as they frame useful questions (*learning how to learn*) without engaging in a grade-generating formal assessment.

Reflections on Teaching with Fink's Taxonomy

From an instructor's standpoint, implementing Fink's taxonomy in the "Analysis for Performers" course created a positive, process-oriented learning environment. While not an intentional outcome, my attempts to keep students engaged in the learning process resulted in me acting as a facilitator of learning rather than a lecturer, allowing the students to take an active role in each class period. The previous year's course also included student-lead discussions, but without the focus brought by a cohesive set of instructional goals, students were less engaged than in the revised course. Further, in my first attempt teaching the course, I believe I created tension with my fear that my own credibility would be questioned as I am not an active performer. In my second attempt, I changed my orientation, focusing instead on demonstrating my respect for them as performers, with the added desire of helping them transcend to an even greater level of analytically-informed performance—or in Fink's language, a greater level of "self." I believe this sensitivity was a byproduct of considering the human dimension and caring objectives of Fink's taxonomy.

I anticipated the time constraints of my course would be an insurmountable obstacle;¹⁴ however, I approached each class period void of anxiety and excited to observe the learning process. Instead of leading students through my own analysis as I did in 2009, students worked together creating their own analyses and were able to compare and contrast their analytic

¹⁴ The course met for 50 minutes, every day for 7-weeks to accommodate my maternity leave at the beginning of the semester.

decisions with other groups in the class—and when necessary, the students asked me to “lecture” about topics or analyses that needed further clarification. Additionally, some students adapted assignments and activities to be more relevant to their area of study—most notably to conduct, rather than perform, their analytic interpretations.¹⁵

Fink’s Taxonomy in the Core Curriculum

What does Fink’s taxonomy mean for the core music theory curriculum? Going back to foundational knowledge—the students’ need to define and recall basic ideas and concepts—in music theory, this includes much of the “fundamentals,” clef reading, intervals, key signatures, scales, etc. While this component is absolutely crucial for success, it is a detriment to students if fundamentals are the focus of an entire course. Students have difficulty finding need, purpose, and motivation for music theory when the beginning semester(s) isolate foundational knowledge as the only objective of the semester. The human dimension and caring components of Fink’s taxonomy can serve as a catalyst for student engagement in fundamentals-level courses.

Instructors can engage students in learning activities that 1) allow them to discover how specific course components will empower them in their future career paths and 2) expose them to the types of discourse that mastery of fundamental concepts will allow. Students could be asked to begin a dialogue with professionals from their chosen field, attend research presentations, or lecture recitals as learning activities and provide a written journal-response for assessment. Instructors might choose to provide questions for reflection if students are new to this type of

¹⁵ I had hoped student evaluations of the course would highlight some of the positive changes I felt from revision of the course; however, the second year’s evaluations resulted in only two comments from students and only one relevant to course design (7-weeks not being enough time for the course). Perhaps, without the contrast of the prior year’s course, the revised course created an appropriate or expected course that did not necessitate further comment from students. Additionally, the lack of comment could have been a byproduct of the change in student evaluation tool between Fall 2009 and Fall 2010.

activity. These activities can be connected to human dimension and caring learning objectives. By providing (or requiring) experiences that build an understanding of the usefulness of the subject matter, students may easily *choose* to care about the fundamentals. When they do care, the quality of their efforts towards learning, retaining, and recalling these concepts will likely create more effective results in a shorter amount of time.

In the theory classroom, application frequently occurs in the form of composition. Students' foundational knowledge is engaged in creating music. However, much of this type of assignment is, in fact, model composition where students are requested to create music that specifically represents a style of composition. Model composition actually falls under Fink's concept of integration. (Remember, for integration learning to occur, students must make connections between ideas, concepts, paradigms and the like.) Indeed, students must connect the act of placing notes on a staff with the understanding of a prescribed methodology used by canonical composers to then create music.

Awareness of the first three types of learning, not only by the instructor but also by the students, can help develop solid skills at each level and diagnose gaps in learning when they occur. As an instructor, it is easy to overlook the complexity of the task assigned. For example, a step-by-step, guided demonstration of how to properly resolve the dominant to the tonic chord in SATB style may seem easy to follow, but it is of utmost importance for an instructor to realize that *three* different types of learning must occur (or have already occurred) for this task to be completed. First students must have mastered, among other tasks, note-reading, clef-reading, appropriate vocal ranges, and the meaning of "dominant" and "tonic" (*foundational knowledge*), then create a four-voice structure of both the dominant and tonic chords (*application*), and finally connect the individual components of each chord to one another, identifying the connections

between the individual notes and how they function within each chord as well as the key (*integration*).

Through the lens of Fink's taxonomy, the complexity of a seemingly simple task (resolution of the dominant) is quickly brought to light. Most musical tasks require an immediate mental processing of foundational knowledge, application, and integration learning. In fact, students must develop proficiency with basic application and integration tasks such that these tasks become encompassed by the concept of foundational knowledge. Students must create and analyze chords (*application*) with the speed and accuracy of facts (*foundational knowledge*). Relating chords to a key or key area, identifying the similarities and differences between chords, cadences, and keys (*integration*), too, must become second nature. Instructors may see this circular effect as a breakdown in Fink's taxonomy, or perhaps it provides a new plateau at which application and integration may begin again.

Fink's taxonomy can help provide cohesion and understanding amongst colleagues with a varying pedagogical experience. The thoroughness of the objectives can provide a strong outline of any course and an immediate sense of expectation for new instructors. While Fink's methodology prescribes what goals the students will achieve, individual instructors are still free to conduct their classes as they see fit. Music theorists have long been inspired by the repertoire-based discussions of "what" to teach our students. With the addition of Fink's taxonomy guiding course design, we can feel empowered with an outcome-based rationalization for "how" to teach our students—that results in truly significant learning.