Incorporating Fink's Significant Learning Experience Model in the Re-Designing of the Flagship Accounting Course

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Creating significant learning experiences requires a completely new focus on course design and student learning. This paper highlighted the insight gained from Fink's twelve steps to integrated course design. The result was an intermediate accounting course that was more active, relevant, and meaningful to students. The course objectives were drastically altered to reflect increasingly varied goals. A new teaching strategy was adopted along with a new set of learning activities to make the course a teamoriented learning process. Course evaluation systems became participative, continuous, and relevant.

INTRODUCTION

Any attempt to read the book *Creating Significant Learning Experiences* written by L. Dee Fink in one session proves to be futile. There is so much to learn from the book that it needs to be absorbed gradually and methodically, and needs substantial rereading. As one begins the book, he/she may be skeptical that it is only one of many books on how to become a better teacher. After further reading the overall objective of the book becomes clearer—its focus is not really about making better teachers, rather it is about creating better learning environments for students. Teaching is the delivery mechanism; learning is the desired end product. The former does not guarantee the latter; more is required.

Fink, an educational innovator, quickly points out that *significant learning* occurs only when students are engaged and the class has high energy. The result is a significant and lasting change in student learning as well as creating long-term implications for their lives. Significant learning creates change in the learner. Learners do not only just know more information, but also know more about what it means, how to use the information, and how it affects themselves and others. It is a holistic view of learning that involves six separate, but interrelated aspects: foundational knowledge, application, integration, human dimension, caring and learning how to learn (Fink, 2003, 2007; Robinson, 2009). A traditional content-centered approach of teaching focuses on the breadth of mastering foundational knowledge and perhaps limited application of it. A learning-centered view expands the learning process to include the deeper types of learning including integration, human aspects, and understanding more about making one a more effective and efficient life-long learner.

Much of the discussion among faculty in higher education revolves around, creating the ideal classroom. This is where students are engaged in the learning process, passionate about the subject matter, and are eager to learn more. In reality, this would not happen to most instructors during their careers

because that "dream course" is unattainable. Fink (2003) proposed that, by incorporating these deeper forms of learning into the classrooms, instructors will come closer than ever to teaching their dream course. This paper is an attempt to describe experiences in trying to apply Fink's design to an intermediate accounting course. Learning new pedagogical techniques often helps in improving course structure and assessment.

Integrated Course Design

One of the major contributors to unfulfilled course dreams is the way that many educators design their classes. For many of those in higher education, the traditional course design is one that is easy to apply and replicate semester after semester. It is generally some variation of listing the topics or chapters to be covered. Planning the lectures and scheduling the homework, quiz and exam dates. Extra projects or papers may be added for cosmetic reasons and variety, but with little thought as to how the projects or papers truly influence the learning process. More often than not, the extras are added only to break up the routine for the teacher; not to make the learning more meaningful for the students. This approach is primarily targeted at the lower level learning goals, summative assessment processes, and passive class activities.

Fink's integrated course design assures that all six significant learning objectives are included throughout the course. The design process is organized around three key phases with twelve individual steps: *Phase One: Building Strong Component Parts* - identify important situational factors, formulate significant learning goals, formulate feedback and assessment procedures, generate teaching and learning activities, evaluate integration of the component parts; *Phase Two: Assemble Components Into A Coherent Whole* - creating a course structure, selecting an effective teaching strategy, creating the overall scheme of learning activities; *Phase Three: Addressing Important Details* - assemble the grading system, identify what might go wrong, write the syllabus, plan the course and teaching evaluation system (Fink, 2003).

Identify Important Situational Factors

The first step in the integrated design system asks educators to identify the key situational factors affecting the environment. This includes the course content (e.g., divergent vs. convergent material), context (e.g., regular vs. online course; day or night class), expectations of external groups (e.g., AICPA, IMA), specific and unusual characteristics of both the students and the teacher (e.g., demographics, experiences, learning styles), and any pedagogical challenge of the subject matter (e.g., accounting is the transitional course). A good analysis at this point will help the instructor anticipate and avoid later problems or inconsistencies

Formulate Significant Learning Goals

Some professors may think that their course objectives are already "significant" and do not need much improvement. After all, they have spent many semesters perfecting and rewriting them so the objectives must certainly be good by now. When teaching a course for the first time faculty members often use the syllabus and objectives of an experienced instructor and add a few personal touches as the semesters unfold. Many professors know about writing course objectives. They make sure that the goals are measurable; they have some connection to the topics in the textbook and are related to broader institutional goals (Fink makes no distinction between goals and objectives is difficult, Fink (2003) suggested that an instructor write no more than seven or eight significant learning goals and try to have at least one in each of six dimensions of significant learning. Moreover, one should approach the goals by asking questions about what positive student outcomes are desirable a year or more after the course has been taken. This is not limited by just what one wants them to know, but also wants them to understand, appreciate, and value.

Foundational Knowledge

Since students are not likely to remember all, or even fifty percent of the details of a specific course, one must decide which of the content areas are the most vital, overall concepts and details that students need to learn long-term. What overreaching knowledge should the students remember, understand and explain and/or identify after the course is over? It was with some difficulty that these two foundational knowledge goals were condensed into the intermediate accounting course. After taking this course, students will be expected to: understand the ending of key terms related to assets, liabilities, owner's equity, revenues, expenses, and cash flows. Understand the evolving nature of U.S. GAAP, including international influences (see Table 1, Appendix).

Application

In moving up to the next higher level of learning, instructors should ask themselves what students need to be able to do successfully in later courses and their careers. What items should they be able to use, manage, solve, assess, calculate, analyze, and/or make decisions about? These were the most challenging goals to write since it had been common to think in terms of individual calculations rather than overall concepts and relationships. After much thought, the application goals for the intermediate accounting course were condensed into four ideally, the students are expected to:

- •Use the accounting cycle to capture and summarize financial information.
- •Analyze the contents and interrelationships of the four main financial statements.
- •Demonstrate Competence in oral and written communication.
- •Demonstrate Competence in the use of electronic spreadsheets and word processing software.

It is difficult to leave out some of the core content goals, such as computing depreciation and inventory costs. However, from a larger perspective, the above four are tremendously more important, and students can quickly review how to compute depreciation when the need arises, and they cannot as quickly review the interrelationships among the financial statements. The communication and technology skills are just as vital in today's competitive recruiting world.

Integration

At the next higher level of learning, one must decide what will be the most important connections that students need to be able to make from the course. The connections can be between this course and other major or business core courses or issues with their personal lives. Fink casts his integration net very widely and incorporates some areas that most instructors may have not considered before. Instructors have different goals and visions as to what they want to accomplish with their students. This is the time to incorporate those aspirations into their course. It was eventually concluded that the intermediate accounting course was success if students were able:

•Compare and contrast the differences between cash and accrual measurement system. This is a broad concept, but it reaches to the heart of financial reporting. Although its importance was long professed, this was the first time using it a specific course goal for intermediate accounting. Applying Fink's design method allowed for explicitly incorporating this key concept into the course that had been only implicitly addressed in the past.

Human Dimension

This was a difficult dimension to incorporate into the course, since it seemed unnatural viewing intermediate accounting from this perspective. Fink (2003) challenged teachers to think about how their courses might change, how students view themselves and others, how students interact with others, and how course theories and content affect their lives. After much analysis, it was discovered that one of the situational factors affecting intermediate accounting creates a perfect opportunity for students to grow in this regard. Thus, the following goal was added: students will be more confident about mastering difficult material after taking this course.

Caring

Implicitly at least, most instructors want their students to have a better appreciation after taking an upper level course. However, many instructors like this one, have never thought to include it as a specific course objective. Based on the adage that "you get what your measure", including this in the stated course goals assures that it will be explicitly evaluated. What do you want your students to get excited about, value or be more interested in after having taken your course? The following goal was included: students will better understand career opportunities in the accounting profession.

Learning How to Learn

The term *metacognition* describes the concept of thinking about how to think. Part of an education should involve students becoming more effective and more efficient learners as they progress through a program of study. Lifelong learning will occur only if students understand the need for and the way to accomplish it. This means instructors should help learners become better students by helping them learn how to learn and become more self-directed. An instructor may implicitly do these things, but never include it as a separate learning goal. At a practical level, a key goal for the intermediate accounting students was to be able to identify sources of information for future research in intermediate accounting.

Formulate Feedback and Assessment Procedures

Over the years, the authors have learned the culture of what Fink calls "backward-looking" assessment. This involves testing whether students have learned the material covered during the last few class sessions. Homework, quizzes and exams are very good ways of looking back for the foundational knowledge goals, backward looking assessment is appropriate. Without the requisite understanding of basic terms and concepts, student experiences in the application and integration levels of learning will likely have little benefit. However, this is not a good way to evaluate the higher-order learning goals. For higher-order goals, the focus should be forward rather than backward. Forward looking assessment is realistic, requires judgment and innovation, and stimulates real-life context. In short, try to place the student in a professional situation that they might face in their future careers. In intermediate accounting this might include capital lease or operating lease recommendation on a company's equipment. Some ideas on assessment techniques that incorporate these features include: (1) Students help develop the evaluation criteria for an assignment, (2) Students do peer evaluations of assignments such as papers or homework problems, (3) Students assign themselves a preliminary grade that is later verified by the instructor, (4) Members of student teams compare answers and resolve any differences, (5) Giving quizzes with both individual and group grade components.

As the lead author reviewed his intermediate accounting course, he realized that assessment was the weakest part of the class. Fink's assessment discussion is primarily based on Wiggins *educative assessment model* (Wiggins, 1998). Assessment is not educative unless it provides useful information about what the student did. It is not advice or evaluation (e.g., grades) but descriptive feedback on a complicated task in relation to preset standards. It is a value-neutral guidance on what happened and why and what students should modify as a result. Fink adds that high-quality feedback is frequent, immediate, discriminating, and delivered supportively. For many classes, a realistic assessment technique would be experimental learning where students operate in the professional realm. Some business classes have students act as consultants and make suggestions for small businesses; co-ops and internships can accomplish the same objective. For the examined intermediate accounting class, the logistics of experimental learning for a class of 15 students precluded that option. Instead, an attempt was made to design projects that required teamwork, multiple skills, knowledge sets, and some professional research.

Teaching and Learning Activities

The effectiveness of the learning environment improves significantly when students are actively involved. Active learning is "anything that involves students in doing things and thinking about things they are doing" (Bonwell & Eison, 1991). Instead of passively receiving information, students are actually applying, practicing, or integrating the material and reflecting on how they are learning. Fink

describes active learning as having two main components: experiencing (doing and observing) and reflecting (what is being learned and how). Both of these processes can be done alone or collectively. There are active learning activities that run the spectrum of teaching and learning activities. Normally passive learning can be made active by, for example, pausing every few minutes and asking students to summarize key topics. Presentation of material can be made active through the Socratic method of teaching. Classroom assessment techniques are types of active learning. Collaborative learning techniques are naturally active since they require interaction, debates, role playing, simulations case studies, and learning portfolios all make students actively participate in the learning process. These are only some of the available active learning techniques that are available to us. The challenge is finding those techniques that most appropriately fit us, our students and the learning task. Most active learning proponents recommend trying only one or two new techniques each semester until one gets comfortable with the process. Also, most of these techniques can be individually designed to fit the instructor, students and classroom environment.

Integrate the Primary Components

As the final check of the interrelatedness of the first four components, Fink recommends that the instructor prepare a summary schedule of steps one though four. Table 1 (see Appendix) shows the schedule for the intermediate accounting course. For each significant learning goal, the assessment techniques are listed (steps two and three) and the relevant teaching and learning activities are listed. This assures that the course assesses each learning goal and shows the student exactly what they have to do to master each area of learning. Indirectly, the instructor is also reviewing to see if there are conflicts or disconnects with the situational factors.

Course Structure

In laying out the sequence of topics for the course, there should be an ordered, thematic approach. First, identify the main themes of the course and then arrange them in their most logical order (Fern, 2008). Many course schedules are dictated by the order of topics in the textbook. For example, in the covered first intermediate accounting, the chapters are arranged as follows: Financial accounting environment, accounting cycle, income statement, balance sheet, statement of cash flows, earnings management, cash and accounts receivable, revenue recognition, inventory and intangibles (Kieso, Weygandt, & Warfield, 2012).

Putting these into broader themes in chapter sequence, one might identify these topics financial reporting environment, accounting cycle, current assets, earnings management, revenue recognition and intangible assets. Here then, one way to structure this course thematically:

Week 1	Financial Reporting Environment
Weeks 2-3	Accounting Cycle
Weeks 4-7	Financial Statement Preparation
Weeks 9-12	Current Assets
Week 13	Earnings Management
Week 14	Revenue Recognition
Week 15	Intangible Assets

Teaching Strategy

At this point in the backward design process, Fink recommended that instructors formulate a teaching strategy. A common strategy was to cover the material, assign and grade homework, conduct somewhat interesting class sessions, and give exams. What other strategy could there be? Fink defined a teaching strategy as a particular combination of learning activities in a particular sequence. In other words, combine and sequence the learning activities in a synergistic way to promote increased learning. Fink suggested three teaching strategies: team-based learning problem-based learning, and accelerated learning

(Fink, 2003). After exploring the team-based learning concept, a decision was made to adopt this teaching strategy for the intermediate accounting course (see Table 2, Appendix).

Team learning is an important educational concept that surpasses routine group activities. For each learning unit in the course, the team initially takes individual and team quizzes on the basic material. To allow more time for learning how to use the course material, the initial quizzes encourage students to spend more out of class time learning the basic concepts. The quizzes are scored in class (immediate feedback), grade appeals are heard and resolved, and instruction is then focused on the weakest areas (as revealed by the quizzes). The remaining class time is spent on learning activities focused on using the material. These activities should ideally be of increasing complexity. At the end of the learning unit, individual and or team exams are given within the overall strategy of team-based learning (or any other type of teaching strategy) the instructor can use a variety of teaching and learning techniques as deemed appropriate (Michaelsen, Knight, & Fink, 2004).

Overall Set of Learning Activities

Finally, the instructor is ready to schedule the daily activities for the course. In scheduling the learning activities for each block of material, it is important to remember three concepts: (1) Use of a variety of learning activities, (2) Make the activities increasingly more complex as students move through each topic and as they move through the course, and (3) integrate the topics throughout the course for each learning unit. By adopting the team-based learning strategy, the overall structure of the course had already been determined (quizzes, in-class team activities, out-of-class activities). Specific class activities now needed to be identified (see Table 3, Appendix).

SUMMARY

Once the course re-design was established the result was an intermediate accounting course that was more active, relevant, and meaningful to students. The course objectives were drastically altered to reflect increasingly varied goals. A new teaching strategy was adopted along with a new set of learning activities to make the course a team-oriented learning process. Course evaluation systems became participative, continuous, and relevant. Students were challenged more than ever to work outside the classroom, be better prepared, and contribute to their team's success. Finally, assessment turned out to be more forward-looking and less backward-looking.

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APPENDIX

TABLE 1 INTERMEDIATE ACCOUNTING WORKSHEET FOR INTEGRATING THE COMPONENT PARTS OF SIGNIFICANT LEARNING

Learning Goal	Assessment	Learning Activity
<i>Foundational Knowledge</i> 1. Understand the meaning of key terms related to assets, liabilities, owner's equity, revenues, expenses, and cash flow.	Chapter quizzes	Lecture, out of class study, and group interaction
2. Understand the evolving nature of GAAP including international influences.	Class Presentation	Lecture, outside of class study, and group interaction
 Application and Integration 3. Use of accounting cycle to capture and summarize financial information. 4. Analyze the contents and interrelationships of the four main financial statements. 5. Compare and contrast the differences between cash and accrual measurement systems. 6. Demonstrate competence in written and oral communication. 7. Demonstrate competence in the use of electronic spread sheets and word processors. 	Homework problems, Practice set Financial analysis project Integrated financial statement Writing assignments, class presentation	Lecture, homework, outside of class study, groups & interaction
<i>Human Dimension</i> 8. Be more confident about mastering difficult material.	Questionnaire (Pre & Post Test)	Quizzes, exams, projects
<i>Caring Dimension</i> 9. Better understand career opportunities in the accounting professions.	Class discussion, student papers, and presentations	Attend career fairs and professional presentations
<i>Lifelong Learning</i> 10. Identify sources of information for future research.	Writing assignments, class presentations	Internships and career development

TABLE 2 INTERMEDIATE ACCOUNTING LEARNING GOALS, ASSESSMENT TECHNIQUES, AND EVALUATION CRITERIA

Learning Goal	Assessment Technique	Criteria	Total Point Value	Point Evaluation
1	Chapter quizzes	10 MC covering key concepts	10 points	Record actual score
2, 6	Class presentations comparing US/ASB standards	Oral presentation peer evaluation	40 points	Record actual score
3, 7	Accounting cycle practice set done in groups of students; accounting system prepared in Excel	Proper Jes-5, correct GL- 5, proper Adj. Jes-5, correct Adj. TB-5, proper US-5, proper ST of SE-5, proper BS-5, proper SCF-5	40 points	Record actual score
4, 6, 7, 10	Financial analysis project; ratio analysis of a firm compared to the industry norms; interest research on the firm	Well organized-10, full & clear descriptions- 10, complete & concise- 10, proper use of excel- 10	40 points	Record actual score
5, 6, 7	Integrated financial statement project done in teams of 3	Analysis worksheet; description of transactions	60 points	Record actual score
8	Question asked at beginning of course & midterm	Confident about doing well in this class: 1 = Strongly Agree 2 = Agree 3= No Answer 4 = Disagree 5 = Strongly Disagree	50 points	Record actual score
6, 9	Class discussion: students do a presentation & handout	Student groups do a presentation or prepare a handout for the class	50 points	Record actual score

TABLE 3INTERMEDIATE ACCOUNTING WORKSHEET FOR SEQUENCING OF LEARNING
ACTIVITIES (WEEKS 1-4)

Week	Class Session I	Between Classes	Class Session II	Between Classes
1	Form teams,	Chapter 1,	Chapter 1 quiz;	Chapters 1-2
	assign grade	Case 1-28	Case 1-28, team	
	weights, get		response to	
	acquainted		questions	
2	Chapter 2 quiz	Exercises 2-19, 20,	Exercises; practice	Exercises 2-24 &
		22	test; intro. To CPA	28
			problem	
3	Chapter 2 exercise	Practice set	Practice set due,	Chapter 3
	problem – work on		review	
	practice set		transactions and	
			financial	
			statements	
4	Chapter 3 quiz	Exercises 3-26, 27,	Exercise page 3-	Prepare
		28, 35, 39	42, 43	