

# CREATING A LEARNING COMMUNITY IN FINANCIAL MANAGEMENT: THE APPLICATION OF THE METHOD SUMMARY IN TEAM BASED DECISION PROCESSES

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## *Abstract*

*A learning community is a relationship between learners and faculty that fosters an acute motivation for a particular discipline. Undergraduate financial management curriculum provides a unique opportunity to facilitate the development of a student-initiated learner community. Undergraduate financial management is a foundation finance course for all business majors. The course emphasizes traditional financial statement analysis, cash flow estimation and analysis, time-value of money analysis, capital formation and cost of capital, optimizing capital structure, corporate dividend policy, working capital management technique, and introductory international financial management. During an introductory session of the course, students are introduced to the learning community model for financial management. The introduction includes a description of the learning process, the faculty member's expectation for student involvement, and the scope of the students' role in the learning community. During the semester, as students develop their individual exam companions, the learning community emerges. Periodic breakout sessions and evening mentoring groups give students the opportunity to develop their understanding of financial management. Breakout sessions offer students an opportunity to share their understanding with their peers in small group settings as they attempt short, lecture-focused quizzes. Quizzes are rigorous and require immediate involvement by all participants. Students quickly discover that preparation is the key to successful participation. Evening mentoring groups give students an opportunity to share their learning experiences with one another. Students use this time to compare and evaluate their progress as they prepare for midterm and final exams; working together in small groups and in larger alliances, students discuss conceptual models, solve problems, and prepare their exam companion for the midterm and for the comprehensive final.*

## INTRODUCTION

In order to stimulate interest and motivation to the subject of finance, while providing a culmination of the skills and knowledge, which one gathers during the semester, we teach our Principles of Financial Management course in a manner that develops the students in more ways than just the understanding of rudimentary and even sophisticated ratio analysis. The course finds its completion by applying the semester learning in an

introduction to the decision processes of a merger and acquisition strategy. The purpose of this paper is to examine the Learning Community Model and discuss techniques used to increase the retention of understanding by every student who is introduced to managerial finance through the Principles of Financial Management course at Oral Roberts University and how this method better prepares the students for a full range of financial decision-making.

The 2001 study by McWilliams and Pantalone evaluated Finance Curriculum and made observations from surveys given to financial executives and business school deans. One dichotomy McWilliams and Pantalone confirmed is that employers want broadly educated graduates who immediately provide value. Employers want specific skills, such as accounting and finance. Within their survey they also found that employers, on average, feel the purpose of the finance major curriculum is to focus more on subjective decision-making, rather than to provide a strong base of analytic tools. If the students are not given opportunity to apply the tools to business situations, then after graduation, students will lack the ability to apply their book knowledge into the real life situations in corporate environments. This results in frustration in both the employer and employee. If the graduating student is to be marketable, as a complete product, that are offered employers nationally and internationally, it is our conclusion that a differentiation strategy is necessary in order to develop a competitive offering to both students and future employers.

## **CLASSROOM EXPERIENCE**

The name of our new classroom learning experience is the Learning Community Model (LCM). The LCM is an effort to include important social and team based learning experiences in the financial management classroom. The use of teams on specific assignments that foster collective learning and team development accomplishes this goal. In *The Fifth Discipline*, Peter Senge states that “team learning is vital because teams, not individuals, are the fundamental learning unit in modern organizations” (1990). Senge later adds, “When teams are truly learning, not only are they producing extraordinary results, but the individual members are growing more rapidly than could have occurred otherwise.” Amy L. Wilson-Delfosse and Daniel. R. Wolpaw (n.d.) identify important evaluators to the use of teams in curriculum. In their opinion, the introduction of team-based learning should “promote self-directed learning, improve retention and ability to apply concepts learned, and increase student satisfaction with regard to the learning experience.” An Arnold Bateman study in 1990 lists similar goals.

The team based model stretches the students beyond what we, as instructors, feel they can do as individuals and finds additional value in the dynamics of a cross-disciplined team. The team consists of individuals from a multitude of disciplines, ranging from accounting, management, and marketing to international business. The cross-disciplined team creates some level of discomfort, which Senge calls “creative tension” (1990). G.T. Hammond offers that “it is the mismatch, the lack of fit, the incongruity that is the spur to creativity. It is our recognition of it and ability to contend with it and make something of the opportunity that determines our success or failure, our prosperity, the quantity and

quality of life itself” (2001). The team experience is better for the student because each student sees how another student processes information, works through complex problems, and develops tools to aid in the completion of the assignments. The cross-disciplined teams also assist students in understanding how to work with individuals whose skills, talents, and abilities differ from their own. This “real world” approach simulates the common business environment in which teams are a critical component of organizational success. The team involves all individuals in the total outcome of the assignment, and the students must find a way to pool their strength while overcoming their weaknesses in order to be successful. It is also the goal of this team model to build the students understanding of the full process and most importantly the application of the correct answer in a real corporate or organizational business decision.

The cross-disciplined team concept is partially derived from team-based learning, which describes the four levels of team experience as pseudo-community, chaos, emptiness, and community (Wallace, 2001). The first level of team building is pseudo-community. Pseudo-community is when the group fakes pleasantries and avoids conflict at the cost of production. Conflict avoidance stifles creativity since individuals who have specific knowledge speed ahead and do what they know to do. For example, in the classroom, this will most likely be the student with two previous years of accounting courses or other courses that are highly quantitative. These students have the tendency to leave lesser quantitative students behind in calculations, by feeding answers to them instead of allowing the weaker quantitative students the benefit of working the problem. The team seems to be productive, but the benefits of the cross-discipline are not utilized and this leads to problems in the group and the next level.

The second level of team building is chaos. Chaos is when differences of opinion and discipline come out in the open. Instead of hiding conflict, the attempt is made to obliterate it. There is an attack on aggressive leadership, if the leader handles the situation well, and if group members deliver criticism constructively, this can lead directly to the third level.

The third level of team building is emptiness. Emptiness typically follows when there is relinquish and release of tendencies to control. It is very important to reach this point since it is precisely this release that leads to the realization that no one person can complete the task alone and that they will have to work as a single entity to reach a solution that everyone understands. From here it is a short transition to the final step of team building.

Community is the final level of team building. Community occurs when the team is finally ready to work together. It is now safe to have differing opinions, and there is an embrace of creative approaches. At this point, the team reaches peak effectiveness and creativity and soon solves the problem. The team utilizes cross disciplines for their strengths so that the analysis leading from the solution benefits everyone.

“Unfortunately, the community phase may be fleeting. Ongoing teams may move from community all the way back to chaos or pseudo-community, and then have to work their

way back through emptiness and into community, again and again over the life of the team. There seems to be no way to permanently freeze the team in community; the team-building process must continue throughout the life of the group” (Wallace 2001). We believe this accurately reflects the business world at large and helps prepare students for it.

It is evident that the four levels which include pseudo-community, chaos, emptiness, and community are present as the groups develop. The instructor may witness groups moving through the stages, and back again. In break-out sessions, the team building levels are most obvious.

## **GROUP BREAK-OUT SESSIONS**

A large part of the model consists of team focus that is introduced through team exam companions, a group-generated tool for successful test taking, which facilitates group learning outside the class in addition to lecture style or reading only the “Method Summary”. Students create the tool, “Method Summary”, during periodic break-out sessions. The collaborative effort by the team to create the model encourages communication across skill levels while enabling individuals from multiple disciplines to have input into a final product. Periodic break-out sessions take place during class time, while others are evening or outside of class activities. Often the periodic break-out sessions require focus and are solution driven. The students use this time to work on assignments that are commonly too difficult to complete without the collective efforts of the team. The evening “mentoring groups” are more interactive, giving each student the opportunity to share their experience without the time pressure of the class setting. Additionally they are comparing and evaluating progress of the other students within their team to look for ways to improve the total team performance.

As a result of the team’s development of the exam companion, group oriented quiz assignments allow the students to use the method summary to successfully navigate the assignment which we design to be more difficult than are found in a common quiz. The team approach justifies the difficulty of the assignment, where students accomplish more work as a group rather than alone.

## **CROSS-DISCIPLINE TEAMS**

Corporate environments do not always allow people to select their team, which is why we assist the students in putting together a cross-discipline team. The careful selection of a cross-discipline team requires those with natural leadership abilities as well as a desire for academic success to step to the front and provide direction for their team. A sense of community develops when a team is put in a pressure situation that requires each member to attain a level of success. This forces the team to help each individual succeed. This requirement of assisting each member of the team develops the team as a unit as well as developing the skills of the individuals within the unit. Part of the accomplishment of this development is through the teaching of the material from the more advanced students in a group to the other individuals. It helps all parties to consider the material in a

conceptual framework that assists them in solidifying their knowledge. When a student is required to break the content into components, to teach those components to their team members, and to be accountable that each member has a full understanding of the process, then learning occurs. Ultimately, we find that through this process many students discover a deeper understanding of the material. This is an attempt to move beyond memorization and regurgitation scenarios, which we find in many academic instruction methodologies.

## **METHOD SUMMARY**

The initial goal of the team is to develop their method summary into a usable tool to work through complex data elements, identify the information that is required to make a decision, calculate and solve for the value, and then make a decision. By teaching students to make a decision, it reinforces the fact that the numeric value is not just right or wrong, but rather a point of reference upon which to make or base a decision. In follow up questions, students receive reinforcement when the professor changes one variable, and then asks what resulting action correlates to the new value.

Not only is the development of this tool for use along side exams, but the long term goal is to have a decision making tool to use in more advanced courses, such as strategic management or other capstone courses. The method summary is also valuable as reference in future financial decisions found outside the classroom.

Many traditional financial management classroom formats allow the students to list out the individual calculations and formulas; the method summary includes specific problems and the use of the formulas in a step by step manner. This development exercise reveals the interaction between some formulas and enables a student to solve a more complex application. From here the student can move beyond a mere listing of calculations and functions, into real world decision making points. For this reason, exam problems can be more complex than previous in-class problems. After determining the accurate calculation of a value, the student must make a decision, or form analysis statements to demonstrate the meaning of the derived numeric value.

One example of its uses is ratio analysis. The calculation of the ratios in the DuPont formula for Return on Equity is only one part of the desired learning outcome. It is just as important for the student to see someone work out the calculation step by step in problem format, which truly gives the student a reference as to the interaction of the components of the formula and analyzing how they may be interacting comparatively to other firms or other ratios within the company. The typical style of allowing a student to develop a 3x5 note card or sheet of paper with formulas and calculations written on it as a guide to take the exam now develops beyond a list of formulas into a true method summary.

## **QUIZZES**

The format of quizzes is in a team and companion based model. The quizzes are extremely difficult; however one can characterize them as a short burst of intense concept

reinforcement. The design of the quiz is to be too much for one person; however the team can solve this quiz much quicker and thus move the quiz beyond simple true false statements or definitions into true problem solving. These are done in class so that the instructor can watch and evaluate the process of students moving through the problem and identify strengths and or weaknesses of the group and the problem solving technique that the students use. During the process the instructor critiques, develops, and assists the communication of each team during this process so that it can develop further on its own in break-out sessions. The instructor can see immediately when the decision process gets off track and can adjust accordingly since they are dealing with a few groups as opposed to a large number of individual students. The quiz material will relate back to the method summary and help in the development of that tool and its use in a short burst situation gives the team an opportunity to test their summary before using it an exam or outside the classroom. In this fashion the clarity of the summary is critically developing by the team while instruction is present and in an environment where students ask questions and the professor answer, which benefits everyone in the classroom setting rather than just that team.

## **EXAMS**

Examinations are on an individual basis as in the traditional model. They are of a more modest difficulty than the problems in the method summary, yet more difficult than could have been accomplished in the traditional model. This is due in part to the time limitations of a single class period allotted for exam time. A problem in the method summary may take an hour or more to solve or to work, but the problem on the exam needs to be done in a relatively short period of time so that there is time for testing of a wide range of concepts.

Three exams are scheduled dividing the semester into three sections so that each exam covers about one-third of the material. The exams are spread out in this manner so that the student can see what a test is like early and evaluate their own progress soon enough so that they can make adjustments to their own habits and involvement before effecting not only their own overall performance. This allows them to see the value of the LCM process that is being developed early in the semester, leading to greater buy-in, and possibly more diligence, to obtain greater levels of future success. There are typically ten problems covering multiple concepts from the most recent material. Students are allowed to bring their method summary, a development from the group setting and calculators necessary to do the computations. Exams are designed to test not only their calculations but problem solving skills as well.

## **CASE STUDY APPLICATION**

The value of the case study application is found in moving the students from an understanding of the tools to a more thorough understanding of the application of those tools. The opportunity the student has to apply the decision tools that they learn during the course of the semester is a valued experience. Each team evaluates a case study in mergers and acquisitions strategy. Next, they work calculations that were previously

introduced to them from the theoretical perspective, but now the students view the problems from a more practical approach. Each team makes recommendations to the professor as to the value of an acquisition over the next five years. It is this combination of calculations and decision strategy that provides the capstone experience within the financial management curriculum.

The teams assess the current financial situation of the selected target company. Next, they determine the goals of their organization which will be used to govern the decisions as to how much they would be willing to pay for an acquisition. Using the tools in the method summary, they analyze the data and make a written report as to their findings and recommendations. Finally, each team makes an oral presentation of their findings and recommendations as if they were on an M&A team communicating their findings to an in house board of directors. This real world experience is similar to real life experiences that they may have if their career track provides opportunity for involvement in M&A strategy. It is also an exciting exercise for many traditional students who see M&A as a career track that requires them to use most of their education in traditional business, finance, and communication.

In order to have a successful experience in the classroom, the students must have a rudimentary education on M&A strategy. It is the feeling of the instructor that the accuracy of the decision is not as important as the analysis that the team must do in order to get to a recommendation. A true life M&A scenario requires a great deal more analysis than can be accomplished through this assignment. However, this assignment is an introduction to the proper application of the concepts that are taught in the course. Students generally find the scenario and the presentation to be a fulfilling experience that stretches them and creates a curiosity about other ways to use the tools and teaching of financial management. "In addition to being intellectually exciting, learning is more likely to be remembered if it is tied together" (Vihtelic 2001).

## **SUMMARY**

This paper examines a process of combining students from cross disciplines in the course of Financial Management into one team for the purposes of learning both financial management principles, and the dynamics of teamwork and cooperation. The process is worthy of study because of the dynamics that we find when the assignment given to a team is far more difficult than the assignment given to one individual. Encouragement is given to the team to build a tool that will assist them in their decision process. The capstone of the course is when the students apply their new experience, which is the tool 'a method summary'. This accomplishment is from the team-based approach and then the student applies the method to decisions in a merger and acquisition scenario. The addition of the merger and acquisition scenario demonstrates the practicality of the lessons, the work-sheets, and the team-based approach to problem solving and decision analysis.

An additional bonus is found in this methodology when we consider the importance of building excellence in communication among students in the business field. Requiring students to participate, succeed and or fail as a group adds a dimension of interpersonal communication that one rarely finds in traditional finance pedagogy. In order to truly assess the value of a course the faculty must not only manage the dissemination of information but also monitor the successful assimilation and application from their student population. Although each experience will have varying results, this methodology for teaching financial management at the undergraduate level stretches beyond traditional didactic lecture and examination formats, assisting the student in building an understanding of the application and opportunities that are found in this curriculum.

## **CONCLUSION**

We find this pedagogy to be successful in the development of our students in four distinct areas. First, the use of teams requires each student to use leadership and group communication to successfully accomplish short-term, problem-oriented goals. The development of the method summary teaches the student to order and create tools to assist them in making decisions of a complicated and detailed nature. The case study application offers the student an opportunity to apply problem solving skills and decision strategies, which are formed in the development of their method summary. Finally, there is a requirement of teams to use cross disciplinary training to create written and oral reporting similar to real business situations. It is their ability to work as a team, accomplish goals, analyze data, and report their findings that make this methodology a successful and life changing classroom experience.



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