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An integrative approach to using student investment clubs and student investment funds in the finance curriculum

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Abstract

The educational advantages of student investment clubs and student investment funds have been well documented. This paper suggests ways to integrate them into the finance curriculum and examines the benefits of integrating both funds and clubs into an instructional framework that provides important out-of-class experience to potential finance students, allows for the practical application of finance theory, and gives alumni an opportunity to remain involved with their alma mater. A discussion of how research in student learning styles can help instructors maximize the benefits of club and fund activity is also included. © 1999 Elsevier Science Inc. All rights reserved.

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1. Introduction

Student investment clubs and funds are increasingly becoming an important part of the finance education process. Two articles in *Financial Practice and Education (FPE),* "Starting an Investment Club" (1996) by Don R. Cox and Delbert C. Goff and "Financial Innovation: The Case of Student Investment Funds at United States Universities" (1994) by

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Edward C. Lawrence, have dealt with the benefits of these activities for students of finance. However, no one has yet examined the benefits of integrating these two activities into a comprehensive and practical finance program nor suggested how to best include these activities within a typical finance curriculum.

Investment clubs can help provide a practical base for students who are interested in finance and investments while investment funds offer the opportunity for more advanced hands-on training. Before the benefits of integrating these activities into a finance program can be discussed, a separate examination of the nature of student investment clubs and student investment funds is warranted.

2. Student investment clubs

Investment clubs can, as an extracurricular activity, provide a practical base for a finance program. The only requirement for joining an investment club is a desire to learn about investing and perhaps the willingness to commit one's own funds to the process. Finance departments are often at a disadvantage when it comes to recruiting their own university's freshmen and sophomores. Since most finance courses are offered at the junior and senior level, students at the freshman or sophomore level are often not aware of the advantages of pursuing a degree in finance.

Investment clubs can help offset this problem by actively recruiting freshmen and sophomores as members. Good recruiting times include freshman orientation or during registration at the beginning of the term. It is important for the club to make its presence known on campus in order to successfully attract new members to the club. Dedicated faculty sponsors must take a leadership role in the recruitment process in order to bring in new members on a consistent basis.

Once students are made aware of the club and begin to participate in club activities, the very nature of the club is bound to generate an interest in finance among club members. Most investment clubs collect dues on a monthly or quarterly basis. These funds are then used to purchase securities for the club's portfolio. Special guests such as local stockbrokers or financial planners are often invited to club meetings in order to explain different investment strategies to the club. Clubs can also make of use educational materials from the National Association of Investors Corporation (NAIC) as well as other resources.

As the club begins to build a portfolio and as the portfolio changes in value with club decisions and market fluctuations, members often become quite enthusiastic. They become deeply involved in the pursuit of new investment possibilities. The lively discussions of past investment successes and failures that often occur spontaneously help students to develop a good knowledge base. Such interaction and enthusiasm creates a wonderful informal environment where students can learn a great deal about finance and have fun in the process.

Even if a student chooses not to major in finance, his or her involvement in an investment club may be the factor that leads that student into taking additional business/finance courses. Furthermore, since topics such as budgeting, and the use of credit are often brought up for discussion at club meetings, those students who participate in the club, regardless of their major, will have a better understanding of how to manage their own finances.

Participation in an investment club will also give the members who choose to study finance valuable practical experience before they begin formal course work. Club members will have already been exposed to a number of topics including stocks and bonds, financial markets, exchanges, efficient market theory, ratio analysis, asset allocation, and security selection. Students who discuss their investment club experiences in the classroom, often help produce markedly higher levels of class participation.

Investment clubs also give finance faculty the opportunity to interact with students outside the realm of the classroom. Faculty can get involved by sponsoring the club, providing investment funds for the club, or presenting investment information to the club. Such interaction can have positive effects in terms of recruitment and retention of students in the finance program. However, faculty should always keep in mind that these benefits are secondary to helping club members learn sound investment principles that can be used in their own investment activities.

3. Student investment funds

Cox and Goff (1997) define a student investment fund as "one where university students have full discretion over the management of a real dollar portfolio - typically a portion of the university's endowment or money donated for the purpose of creating a student managed investment fund." Lawrence (1994) defines a student investment fund as a fund "where university students have full discretion over the management of a *real dollar* portfolio." Recent articles on student investment funds include Block and French (1991), Bhattacharya and McClung (1994), and Johnson, Alexander and Allen (1996). Funds are generally obtained for these portfolios through individual giving, university endowments, or corporate donors.

Most student investment fund participants are required to enroll in some type of investments/portfolio management course (see Lawrence 1994). The benefit for students in this arrangement is that they are able to apply the theories learned in the classroom to the management of the fund portfolio. Student managers of investment funds who have also been members of an investment club will also be able to apply their club investing experience to the fund portfolio.

There are significant differences between the investment activities of a club and of a fund. First, the size of the fund portfolio is likely to be much larger than the club's portfolio. The median value of the funds surveyed by Lawrence (1994) was about $200,000. The typical student investment club portfolio is usually much smaller than this. Second, while clubs are free to set their own investment objectives, donors often have specific objectives in mind when they set up a student-managed fund. For instance, a retiring faculty member at a university in the Pacific Northwest and his wife recently donated a portfolio of stocks and mutual funds that is currently worth about $95,000 to the university. The objectives for this gift are 1) to provide a vehicle whereby students can learn the fundamentals of investing, and 2) to provide scholarships for students. The second objective will serve as a general guide for the students managing the fund. The goal is to grow the portfolio in order to provide scholarships. Investment decisions for this portfolio must always be made with this goal in mind.

If fund donors are still living, it is essential to invite them periodically to the class to discuss their goals and objectives for the portfolio with the student managers. This interaction will allow students to develop a better understanding of the risk tolerances of the donors, and the objectives of the portfolio. Fund donors are often very interested in students and are more than happy to meet with them from time to time. It is also useful to have the students make a formal portfolio performance review to the donors on a regularly scheduled basis.

A second set of restrictions may be placed on a student fund if it is part of an endowment (see Lawrence, 1994 p. 50). While such restrictions are sometimes looked upon negatively, they are valuable learning tools for those students who plan to make a career of managing the money of individuals or institutions. The goals, objectives, and risk tolerances of those individuals and institutions will not necessarily be the same as the goals and objectives of the fund manager. Successful fund managers are able to grow a portfolio within the restrictions set down by the owners of the portfolio.

It is clear that both clubs and funds are useful experiential learning activities. It is also clear that they differ substantively in the type of students that are involved as well as the complexity of the decision-making processes that takes place within each activity. Club members often make decisions in a relatively unconstrained environment risking only their own pooled funds. While this is not a trivial process it is also not significantly bound by a formal set of investment policies or objectives common to investment funds.

4. Pedagogic considerations

As we consider developing an integrative instructional framework using clubs and funds, it is useful first to consider how students learn and then to consider how to best impact the learning process. Students learn on different cognitive levels. These levels were first and perhaps most convincingly outlined by Bloom in his seminal work on cognitive domains and educational goals (see Bloom et al., 1956). Bloom defined six levels of learning that extend across a continuum of student awareness. Table 1 lists and briefly defines Bloom's domains.

Introductory courses typically focus on achieving student outcomes that demonstrate the first three of Bloom's levels (knowledge, comprehension, and simple application). More advanced courses, integrative cases, and complex simulations typically impact the student at

Table 1
Bloom's taxonomy of cognitive domains

Cognitive domain	Students demonstrate this domain when they can. . .
1. Knowledge	Define, identify, or list information.
2. Comprehension	Explain, distinguish, or summarize information.
3. Application	Use, solve, or manipulate information.
4. Analysis	Break down, differentiate, or discriminate information.
5. Synthesis	Combine, compose, or rearrange information.
6. Evaluation	Compare, contrast, or criticize information.

Table 2
Levels of affective domain

Affective domain	Students demonstrate this when they. . .
1. Receiving	Listen, attend carefully, or show sensitivity toward an issue.
2. Responding	Enjoy or show interest in an activity.
3. Valuing	Appreciate or feel that something has value.
4. Organization	Create (or organize) a value system or personal plan.
5. Characterization by a value or value complex	Act on a value system, make a commitment to following certain values or plans.

the higher four comprehension levels (application, analysis, synthesis, and evaluation). Students that struggle in senior level courses often do so because they were unable to master the lower levels of understanding. Graduate studies are often built entirely around the upper three domains.

In addition to this focus on intellectual cognitive abilities, most teachers feel that an important purpose for a student's education is to influence student behavior in positive ways. Just as students need direction and guidance in a purely intellectual context, they also need opportunities to develop and refine their own ethical decision-making framework.

In recent years, additional work on the principles of student cognition has produced another useful approach to internalizing student learning levels and values known as the "affective domain." Learning levels within the affective domain are based on the principle that learning "affects" behavior (see Krathwohl, 1964 or Linn and Gronlund, 1995). Setting specific learning objectives and then creating educational situations that meet these objectives demonstrate student comprehension at the specific affective domain level. Table 2 lists and briefly defines the affective domain.

Understanding the affective domain and designing educational opportunities to maximize student exposure to values-oriented decisions produces students who are logically more inclined to act responsibly outside the confines of the academic institution.

Good learning environments do not simply make use of a series of cognitive and affective levels. They must also consider the different ways that individual students learn. Research in this area has produced many different types and definitions of learning styles. Most college level instructors are aware that some students tend to be "concrete" learners while others are more "abstract." Probably the most widely known and usable framework in learning styles has come from Dr. Howard Gardner (1983) of Harvard University. By examining the different areas of life where people excel, Gardner was able to identify seven kinds of intelligence.

While people have abilities in nearly all of these areas, each of us tends to excel in only one or two of them. Because of this, we seem to learn well when these specific abilities are tapped. Table 3 lists Gardner's seven intelligences, describes the kinds of skills that students with that type of intelligence typically possess and suggests teaching techniques that may be best used to tap into those skills.

Traditionally the classroom tends to emphasize only the first two of these seven intelligences: verbal/linguistic and logical/mathematical. In the typical college course the student is required to:

Table 3
Gardner's seven intelligences

Type of intelligence	Skills	Teaching techniques
Verbal/linguistic	Speaking, reading, writing	Textbooks, papers, class discussion, oral presentations
Logical/mathematical	Calculating, questioning, experimenting	Experiments, puzzles, word problems, calculations
Spatial	Drawing, visualizing	Videos, pictures, graphic organizers
Interpersonal	Relating to others	Cooperative learning projects
Intrapersonal	Reflecting on one's actions, knowing oneself	Journals, self-paced learning projects
Bodily/kinesthetic	Building, moving, using one's hands	Using manipulatives, role playing
Musical	Listening/creating sounds and rhythms	Creating or performing musical compositions

- attend lectures
- read the text
- write notes
- respond to questions or participate in class discussion
- do well on written tests or papers.

All of these activities tap into verbal/linguistic and logical/mathematical skills. Students whose strengths lie in these areas tend to benefit most from this approach. However, many students excel in other learning styles. For example, some concepts are not fully understood by some students until they can see the idea in a graph or chart (visual/spatial learners). Others learn best by interacting with other students and discussing the issues (interpersonal learners), while others need to see the connection between the material and their own lives (intrapersonal learners). There is clearly a need for other types of educational experiences to help tap into these different aptitudes and predilections.

As every instructor of finance knows, teaching the concepts, theory, mathematics, and applications of the field is a challenging undertaking. Understanding Bloom's work on cognition helps teachers of finance set reasonable objectives and outcomes for each type of course taught. Incorporating the work on affective domains helps our students develop a sense of enjoyment and an appropriate set of values for their future work in the profession. Being aware of and responsive to the different ways our students learn increases the amount of learning that can occur. While a more in-depth discussion of each of these pedagogic topics is well warranted, this section was meant to simply provide a reasonable foundation for the following discussion on how to best include club and fund activities within the structure of our courses.

5. Integrating learning theory and cognition into the club and funds

Armed with this basic understanding of the ways students learn and the different dimensions to the learning process, it is useful to consider some of the ways that club and fund activities fit within the work on cognition and learning. The investment club offers an early educational opportunity for novice financiers to learn by working with other students to uncover appropriate investment selections. As they strive to meet this primary objective they must quickly achieve the first three of Bloom's domains. Faculty advisors, experienced club members, and outside experts all help immerse the novices in the basic principles of finance.

More senior club members act as mentors and discussion leaders improving their own understanding as they interact with the less experienced club members. Interpersonal learners make the best mentors and although they may struggle more with the mathematics and textual material, the payoff is the satisfaction they gain by interacting with (teaching) the novices in the club. Faculty who understand the importance of different learning styles must take care to step back and allow this mentoring to take place.

While each club member must pull their own weight and work hard individually, they must also learn to turn to one another for direction. Verbal/linguistic and interpersonal learners find great benefit in this experience. All club members regardless of learning disposition must work together to first analyze and then convince the other club members that their recommendations are sound.

The incentive structure for an investment club is entirely different from the classroom. Within the club, members focus on meeting a shared set of investment goals. There is simply no opportunity for cheating and all club members share in the success or failures. Students are not competing against one another, are not jealous or fearful about grades, and are equally motivated for the team to do well. When decisions produce negative consequences, club members must learn to deal with criticism, disappointment, and the very real loss of their own scarce investment capital. This is precisely the type of learning activity that allows students to come to understand the need for values and goals, and further helps them get a feel for whether they will enjoy working in the field of finance. This is also a good example of how a student activity can utilize the concepts of the affective domain.

Student managed funds also produce a team atmosphere that places students in a decision-rich environment. But this environment differs from the simpler club framework. Within the fund, students must make decisions in a more constrained setting. Further, these decisions must be analyzed, synthesized, and evaluated. Each decision must be adequately justified before the group, the course instructor/faculty advisor, and often to at least one other student fund manager who has been specifically designated to study the decision independently.

Students must learn to work in an environment where each decision must be validated, where decisions have real consequences, and where the group's decision may often differ from any individual student participant. Bloom's upper three domains are exercised regularly in this process. As students realize the consequences of their actions and as responsible faculty or investment professionals work with the students, the need for professional values and an ethical framework are also very likely to develop. This is a clear application of the principles of the affective domain.

Since clubs and funds differ in how they impact students, incorporating both of these activities into the curriculum provides important learning synergies. The goal is to produce a set of experiential activities that enhance student learning beyond what the typical curriculum would produce.

Figure: Flow Chart of Student Participation in Clubs and Funds

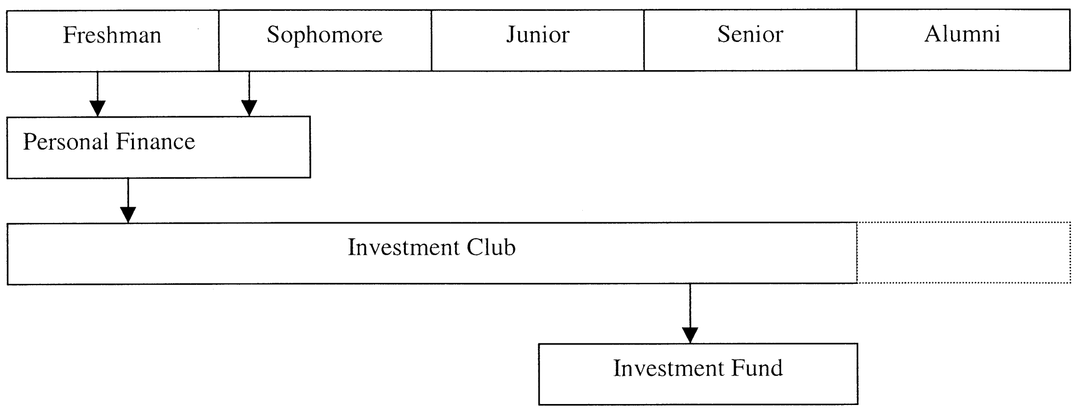

Fig. 1. Flow chart of student participation in clubs and funds

6. Integrating club and fund activities within the finance curriculum

Student investment clubs and student-managed funds can be used together to provide a powerful learning experience for finance majors. Fig. 1 provides a basic framework for this process.

Finance students often complain that the courses they take are so specialized and compartmentalized that they have difficulty tying everything together into a comprehensive whole. Part of the problem is that most traditional students have no pertinent experience from which to draw. This can be remedied to a large extent by offering students the opportunity to join an investment club prior to their formal finance training. The students who have been introduced to the problems common to the investing process in the clubs are better prepared to understand the importance of key financial topics.

Few new finance students can properly connect financial practices and theories to the specific problems that the theory or practice was developed to help address. Experience gleaned in club decisions translates directly within the first finance courses to a fuller understanding of the foundations of financial thought.

Another way to help remedy this problem is to offer a course in personal finance. Vihtelic (1996) argues that a personal finance course should serve as the introductory finance course since “It better matches students’ interests, personal experiences, and cognitive structures.” This is true whether personal finance is offered as the introductory finance course or as a lower level elective. It is also true of investment clubs.

The personal finance course is also a great place to recruit for investment clubs. Students who are enrolled in a personal finance course probably already have a great deal of interest in finance. The combination of a structured course in personal finance along with the practical experience of the investment club will provide those students who go on to study finance as a major with a solid foundation. Further most personal finance courses spend very little time on investing. The course often ends just as the students are beginning to realize how interesting, fun, and profitable wise investing can be for them.

When club members begin their upper level course work in finance, they should be well prepared to participate in a student-managed fund. Student-managed funds are usually paired with a specific course such as portfolio management. Practical application of the concepts learned in this more traditional classroom setting can be made, with the help of the professor, as the students are engaged in managing the fund. The fund acts as an ideal springboard for the topics of portfolio management. Additionally, the course and fund give students the opportunity to gain experience in dealing with individuals who might not share their investment philosophies, time horizons or investment goals.

Of course, students may also continue to participate in an investment club while they are taking upper division courses. This gives them yet another opportunity to apply the concepts they are learning in the classroom and to share this growing knowledge with the younger club members.

Students who have participated in a club or fund or both often enjoy the experience so much that they want to continue it in some way. One way to accommodate this desire is to form a college sponsored investment club where both students and alumni can participate. This gives students a great chance to network with alumni who have established their careers, and it gives local alumni a way to remain active with their alma mater. Students are often able to parlay their club and fund experience into jobs in the investment industry upon graduation. First job turnover should also be lower as students arrive at their first job with a clearer understanding of what an investment professional does for a living.

7. Reflections

It has taken a number of years to set up the overall program described in this paper. While it is fairly easy to start an investment club, student-managed investment funds can take years to establish. It took two years of negotiating with the donor, the university endowment association, the dean of the college of business, and a department chair to set up a fund at one of the author's institutions. However, the time and effort is beginning to pay off, as students are now able to make practical application of the ideas and theories they are learning in the classroom. The enthusiasm and participation levels in the portfolio management class, which manages the fund, have been extraordinary. In fact some former students of the class missed the interaction and learning environment of the class so much that they were eager to form an investment club for alumni, upperclassmen, and retired faculty. This club, with only two or three meetings under its belt at the time of this writing, completes the integrative framework described above. Some fine-tuning and assessment procedures need to be implemented, but the basic program is now in place and ready to be utilized to the fullest.

A valuable side effect of faculty, students, and alumni working together are the long lasting ties created between all the participants. The act of investing together forges a bond that can last far beyond any quarter or semester. The continuing popularity of investment clubs outside of higher education is evidence of the strong ties that can form. Since most academic institutions devote significant resources to the cause of maintaining relationships with graduates, the fact that investment clubs and funds create such persistent connections between faculty and alumni should not be overlooked. Investing activities often contribute to personal networks that can serve the student for their entire career.

A student who was struggling in an introductory finance class recently acknowledged that part of her problem was that she had very little exposure to the world of finance prior to the course. Thus nearly everything that was discussed in the class was very new to her, and she had difficulty relating to the subject matter. Had she been involved in an investment club before taking the class, this student could have learned important information in an informal setting that would have made the course less threatening and less of a struggle for her.

The great challenge is to direct students during their freshman and sophomore years into the investment club environment. For many students this is a time of great uncertainty about their future. The new experience of college is often overwhelming and frightening, and while they may have an interest in investing, other priorities often take precedence. Furthermore many cash strapped students just can't see how they can afford to invest in their present circumstances. An important goal of any student investment club is to educate the students on their campus and help them to realize that they really can't afford not to invest!

Naturally, the real measure of success for any innovation in teaching or learning can only be gauged after the student has graduated. "Real world" experiences such as club and fund activities are consistently identified by past students as the part of their education that they have found most valuable in their professional lives. Alumni and business advisory groups constantly urge our institutions to immerse our students in more integrative learning experiences. Many past students have contacted the authors explicitly to express their gratitude for the extra time and effort spent in the investing activities. Some even call to let us know about hot stock tips!

8. Conclusion

A holistic approach to the finance curriculum should make full use of both investment clubs and investment funds. Clubs offer an informal setting where freshmen and sophomores can begin to build a knowledge base. Those who do not go on to major in finance will have learned valuable skills for investing and managing their own money. Those who go on to major in finance will have built a solid foundation for upper division finance courses especially if their investment club activities are coupled with a course in personal finance.

Student-managed investment funds provide students with a more formal "financial laboratory" where the lessons of finance theory can be applied. It also gives students the opportunity to interact with fund donors and the school's endowment association. Fund management requires students to learn to make informed and responsible decisions in a way that simply cannot be taught in a traditional classroom setting.

Investment clubs are also an excellent vehicle for keeping alumni in touch with their alma mater. Alumni benefit because they can continue to engage in an activity that interests them, students benefit because they are able to network with alumni, and schools benefit because of the increased interaction with alumni.

Both club and fund activities offer alternative ways to increase student comprehension by placing students in situations that impact a broader spectrum of cognitive domains. Additionally, individual student learning is enhanced as students work together to meet group goals and objectives. Students are able to work together in an enhanced learning environment that allows each member to take full advantage of their own skills and abilities. Faculty participation, of course, is key to the success of both types of activities. Clubs and funds offer an ideal nontraditional teaching and learning experience that can span a student's entire college experience.

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