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Utilizing Service-Learning in Accounting Programs

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ABSTRACT: This paper discusses the use of service-learning in accounting curriculums as a tool for enhancing learning and student performance in the classroom by addressing the call for accounting education to move beyond “number crunching” to critical analysis and problem solving. First, the paper reviews the educational research supporting the enhanced learning that takes place with service-learning. Next, the link between service-learning outcomes and accounting education objectives is discussed. Additionally, specific examples of service-learning projects successfully implemented in auditing (with evidence of improved performance) and governmental/nonprofit accounting courses are presented. The projects themselves, as well as the administrative tasks required to implement them, are discussed in detail. The concepts presented can be applied to other accounting and/or business classes.

Keywords: service-learning; accounting education.

INTRODUCTION

Accounting education has been under attack in recent years. Advancing technology has reduced the need for “number crunchers” and increased the expectation of analytical and problem-solving skills in business school graduates. Accounting is no longer about compiling information requested by management, but rather about being a manager determining the information to be compiled (American Accounting Association 1998). For years, the accounting major has had the prestige in the business school as being the “rigorous” major (Albrecht and Sack 2000). To an individual majoring in accounting, “all doors were open” to not only traditional accounting careers, but also to other business opportunities. Accounting education is under fire to maintain this prestige while improving accounting graduates’ ability to succeed in a time of new expectations.

This paper proposes using service-learning as a method to prepare students for the changing role of accountants in today’s society. We have utilized service-learning in the accounting curriculum at our institution and have been rewarded by an observation of increased engagement of our students in their course work. Additionally, employers increasingly comment on the ability of our students to perform with confidence and immediately add value to their organizations. Service-learning is a vehicle through which we can move our accounting students beyond “number crunching” and “rule memorizing” to analysis and problem solving. This directly attacks the charge that accounting education is too focused on debits and credits and rule memorization. First, the paper reviews the educational research supporting the enhanced learning that takes place with service-learning. The spectrum of experiential learning from traditional volunteer work to professional internships is

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presented to allow the reader to discern when “service” is “service-learning.” Next, the link between service-learning outcomes and accounting education objectives is discussed.

Additionally, specific examples of service-learning projects successfully implemented in auditing and governmental/nonprofit accounting courses are presented. The projects themselves, as well as the administrative tasks required to implement them, are discussed in detail. Issues of accountability and evaluation are discussed with potential problems and solutions offered. Presented results demonstrate improved student performance across the auditing classes with the inclusion of service-learning.

IDENTIFYING TRUE SERVICE-LEARNING

Waterman (1997) summarizes the definition of service-learning as follows:

Service-learning is a method:

- a) under which students learn and develop through active participation in thoughtfully organized service experiences that meet actual community needs and that are coordinated in collaboration with the school and community;
- b) that is integrated into the students’ academic curriculum or provides structured time for the student to think, talk, or write about what the student did and saw during the actual service activity;
- c) that provides students with opportunities to use newly acquired skills and knowledge in real-life situations in their own communities; and
- d) that enhances what is taught in school by extending student learning beyond the classroom and into the community and helps to foster the development of a sense of caring for others.

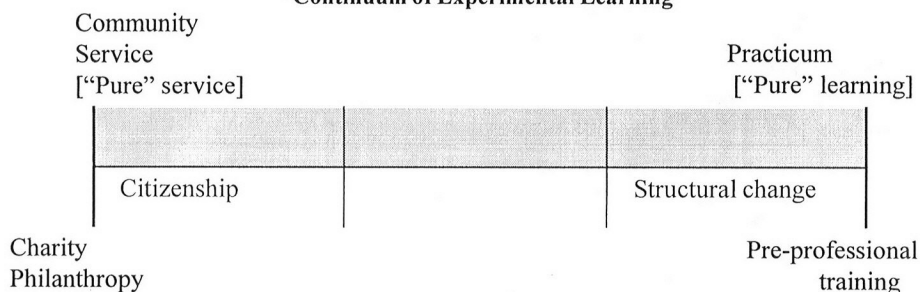
There is an altruistic component of service-learning that helped to make it a staple of the general education curriculum at colleges and universities across the nation. Instilling a sense of citizenship and engaging students in their communities are frequent messages in university mission statements. However, Zlotkowski (1996) urges the educator to look at the continuum of experiential learning and determine that the service component of a particular course is appropriate (see Figure 1).

Zlotkowski (1996) refines the definition of service-learning beyond Waterman (1997). He maintains the characteristics of service-learning activities include:

- 1) Direct experience working with communities and/or organizations that promote the public good
- 2) Reflection on the service experience (usually a weak component of the process)
- 3) Planned reciprocity of learning and benefits

Zlotkowski (1996) cautions that true service-learning is not “do-gooding.” The agencies engaged in the process with the students are not “desperate” and “thrilled” to be rescued by college students. In fact, the benefits need to be evenly balanced. The learning that takes place should more

FIGURE 1
Continuum of Experimental Learning



than offset the services provided the organization. The staff at the organization is not just the beneficiary of free services, but in fact has been instrumental in enhancing the students' learning and has felt the burden of the responsibility to the students associated with any given project.

EVIDENCE OF ENHANCED LEARNING

Service-learning outcomes research can be divided into two categories: (1) student outcomes related to intellectual skills, and (2) student personal outcomes (Rama et al. 2000). Intellectual skills research has examined grades and observed problem-solving abilities and self-reporting. The research has shown mixed results regarding course performance. A review of the available studies that addressed actual gains in learning that could be attributed to service-learning as a part of the course, indicate most studies are not relevant to the kinds of service-learning utilized in accounting courses. Some of the large-scale studies with large numbers of students and institutions, such as Berson and Younkin (1998), and Astin et al. (2000), do not show the service-learning component relationship to the actual course material. Those studies also are not definitive in the methods to score the class credit for service-learning or how service-learning became part of the students' overall grades. Two fairly recent studies, though, seem to address the effects of service-learning on performance. Gray et al. (2000) conducted a large study of schools that participated in Learn and Serve America, Higher Education grants. The study included 1,322 students in 28 institutions with paired courses, one using service-learning, one not incorporating service-learning. In the aggregate, they did not find increased course performance in the service-learning sections. However, when they separated out the sections where the service-learning projects required utilization of skills being learned in the course, they did find evidence of improved learning of the material. This is important in accounting education as our service-learning projects are tied to material learned in the course. This could also be evidence that the term service-learning is being misused to include activities that are actually community service (see Zlotkowski's [1996] continuum in the previous section), which could also explain why past studies have had mixed results in finding evidence of improved learning when including service-learning in the coursework.

Philpot and Wright (2002) divided multiple sections of a sophomore-level business administration class into a control group and a group using service-learning to learn time-value-of-money concepts. All students took a pre-test. Students in the control group were subjected to a 40-minute presentation on future-value and present-value concepts. The students in the service-learning sections were given a 20-minute presentation on the concepts and then 15 minutes of instruction on how to teach elementary school students about the time-value-of-money. When the students were post-tested, both groups had significant gains in mastery of the concepts, but the students in the service-learning sections had greater gains, even when controlling for ability with ACT scores. More interestingly, students with lower ACT scores in the service-learning sections had greater gains in their mastery of the material than students with higher ACT scores. This points to service-learning as a means to mitigate differences in outcomes between students of various aptitudes.

A difference in course performance across auditing sections was tested in this paper, resulting in service-learning being a significant positive factor in predicting course performance. The methodology and results are discussed later in this paper following the presentation of the auditing course service-learning project.

As mentioned earlier, service-learning outcomes research not only addresses student outcomes relating to intellectual skills, but also student personal outcomes. Studies conducted using course evaluations show positive results toward service-learning. On average, students report that their learning was enhanced by and they benefited from the service-learning component. Features identified by students as contributing to their learning include: trying out the work themselves, having real responsibility, listening and talking with people at the site, etc. (Owens and Owen 1979; McCluskey-Fawcett and Green 1992).

SERVICE-LEARNING AND ACCOUNTING EDUCATION OBJECTIVES

A motivation for considering service-learning in accounting education is the fit between expected outcomes of service-learning projects and the competencies desired in accounting graduates by the profession. The AECC's (1990) Position Statement Number One states:

Students must be active participants in the learning process, not passive recipients of information. They should identify and solve unstructured problems that require the use of multiple information sources. Learning by doing should be emphasized. Working in groups should be encouraged.

The inclusion of service-learning in accounting coursework has the ability to meet the criteria suggested in the above statement. Rama (1998) connects lifelong learning, reinforcement of technical knowledge, communication and interpersonal skills, ethical and moral development, and social responsibility and community involvement to the utilization of service-learning in accounting curriculum. Citing other studies emphasizing lifelong, or independent, learning, as desired qualities in professional accountants, it is noted that students are cultivating this ability when they have to research and collect information to solve problems for their clients in service-learning project settings. The necessity of students to apply technical knowledge to problems presented in the real world can improve their understanding and retention of technical material. Communication and interpersonal skills can be more challenging in service-learning than anywhere else in a student's experience. In our own service-learning activities, much time is spent preparing students to monitor their own behavior in a way that will allow them to help solve their clients' problems, do their tax return, review their financial statements, etc., without showing their dismay at how the client has previously handled these accounting needs. We spend much time in debriefing, allowing the students to vent their frustrations about errors they found and the difficulties in maintaining composure during interactions with the client. We also reinforce the need for the students to be helpful without being judgmental. These are important life skills that graduates can take into their career with them.

Ethics components to accounting curriculum, while emphasized previously, are sharply refocused in the aftermath of Enron and other management fraud/audit failure cases. Rama (1998) cited Boss (1994) in which students in a college ethics course showed greater gains in moral reasoning when they engaged in community service. In our experience, students' reflections on their service-learning projects have demonstrated that they felt a strong ethical obligation to perform at a high level for the client. Students showed a heightened sensitivity to the level of ethics employed by the clients and in some instances were very concerned when they thought controls were too loose or violations had occurred.

Rama (1998) notes in her discussion of the social responsibility and community involvement aspect of service-learning that notions of community involvement and civic responsibility are not the primary justification for making service-learning a part of accounting curriculum. Rather, the primary justification for service-learning in accounting education is to develop skills considered important by the accounting profession. Accounts do tend to play important roles in community organizations. Professional accountants are routinely sought out to be treasurers of nonprofit organizations. Awareness of this role in their professional life is probably accelerated through service-learning as we have seen of graduates of our program taking positions with or serving on the board of directors of organizations they were introduced to through service-learning projects.

The AICPA *Core Competency Framework for Entry into the Accounting Profession* (AICPA 1999) calls for accounting graduates to exhibit highly complex and integrated skills, such as decision modeling (a "functional" competency). "Interaction" is one of the "personal" competencies cited. Again, service-learning appears to have a natural fit with accounting education objectives and the teaching methodology is well suited for professional programs such as accounting.

EXAMPLES OF SERVICE-LEARNING

The following sections describe two examples of service-learning projects that have been required in the auditing and governmental/nonprofit courses of our institution for a number of years. Even though the logistics and grading of the projects differ to some extent between the auditing and governmental/nonprofit classes, the concept of service-learning has been and continues to be applied in both courses. Since implementing the projects, feedback from students, instructors, and clients has all been quite positive and, as a result, service-learning projects continue to be an important part of the accounting curriculum at our university. In fact, students report that they appreciate the opportunity to complete a class project in a real-life setting. Students not only have a opportunity to gain valuable work experience, but also have a chance to network with others in a professional setting. Internships and part-time positions often result from these relationships as well. In addition to the descriptions below, a summary of the objectives and general requirements of the service-learning projects can be found in Appendix A.

Auditing

At our institution, accounting majors generally take the auditing course during the fall semester of their fourth year. Students have previously completed Intermediate Accounting I and II and are probably enrolled in Intermediate Accounting III simultaneously with the auditing course.

Background

The service-learning component of the auditing class evolved from earlier internal control analysis projects. The original real-world projects used in the auditing course included analysis, documentation, and critique of accounting and information systems in mid-size to large businesses. Normally, a single system, such as payroll or accounts payable, would be selected. The student team would visit the company, interact with the staff to learn the system, document the system through flow-charting, identify its weaknesses, and make suggestions for improvements. This project was conducted early in the semester, as it was important for the students to grasp internal control issues before learning about auditing and substantive-testing processes. These projects were successful in that students saw accounting applied in a business setting and began to appreciate the importance of internal control. Companies used in early projects were gracious and cooperative, but realistically did not plan to implement student suggestions. Initially, companies perceived they were doing the business school a favor and, as a result, the projects lacked a sense of urgency and/or accountability that an accounting professional experiences every time he or she undertakes a client engagement.

After attending a service-learning conference and conducting research in the area, the instructor converted the auditing class projects to "true" service-learning in that the projects were redesigned to provide benefits to both clients and students. The change involved clients not only becoming directly involved in student learning through project participation, but the receipt of needed accounting services in return. Selected organizations have come to rely on our university to solve accounting and financial-system problems in addition to reviewing internal control systems. As a result, the auditing projects have expanded beyond the traditional out-of-classroom experience and beyond critique. Students feel the demands of analyzing the client's situation and of designing a simple, inexpensive, yet adequate solution to each client's specific accounting problem(s). Depending on the client needs, project requirements vary and, in most cases, require the development of an understandable procedures manual. At times the projects may even involve the installation of computer software or the training of employees for proper implementation of suggested accounting procedures.

For the auditing course, the objectives for the service-learning component include:

1. an enhanced understanding of how to document and flowchart an existing accounting system and its internal controls,

2. an enhanced understanding of how to identify problems and formulate solutions,
3. an enhanced ability to draft proposed changes,
4. enhanced skills associated with implementing changes in an organization,
5. enhanced skill in developing visual aids, and
6. enhanced presentation skills.

Making contact with nonprofit agencies or financially struggling small businesses meets these objectives. Even though Zlotkowski (1996) indicates that service-learning projects should involve clients that are not "desperate to be rescued" by college students, our experience suggests that, because of need, either nonprofit or financially struggling small businesses are more willing to participate in service-learning projects, and students receive a great deal of benefit from working with these types of organizations.

Initial Contact

Prior to the start of the semester, the auditing instructor makes initial contact with several community alliances of small businesses or nonprofit organizations offering reviews of accounting systems and auditing-type services. From this communication, inquiries are received to provide enough available organizations for the semester's projects. On occasion, students may be aware of potential service-learning clients and may contact the instructor with a suggested organization. If selected, these situations may be especially rewarding for the student or students involved due to the sense of ownership of these projects.

The Project

Once the semester begins and the service-learning organizations are assigned to the student groups, a representative from each team contacts the client to schedule an initial visit. The instructor accompanies the students on the first site visit and although she is previously aware of client needs, the instructor helps to facilitate an understanding between the client and student team members concerning project requirements and any accounting services to be performed throughout the semester. Therefore, the instructor, client and students combine to establish specified goals and required procedures of the service-learning project.

Throughout the semester, class time is usually devoted to the project so the instructor can work with teams one-on-one. Historically, many group projects at our university have faltered because students have difficulty arranging times to work together outside of class. Therefore, setting aside class time has helped students to stay on weekly task and has also provided the instructor the opportunity to monitor student work. In addition, the instructor may find it necessary to schedule office visits to meet with team members. The instructor should try to work with students in terms of providing class-time support since students are required to work around the clients' schedules and also need additional time to analyze, document, and discuss each situation.

After meeting with the client, student groups develop a schedule to meet project requirements and typically begin the project by familiarizing themselves with the client's accounting system and documenting the existing internal control system. At this point, students identify any strengths or weaknesses of the client's current system and also analyze the strengths and weaknesses of the financial statements. Before students proceed with formulating their recommendations for changes in the client's internal control or accounting system, they are required to brief the instructor using their documentation. This briefing takes place during either allotted class time or a scheduled office visit. If the instructor understands the documentation and concurs with the recommendations, the students proceed. It should be noted, however, that the final evaluation and grading of the documentation takes place at the end of the semester and after the project is complete (see Appendix B).

Presentation and Implementation of Changes

During the second half of the semester and prior to making actual changes in the client's system, all student groups perform an oral and visual presentation to the class. Appropriate managers from

the client organizations are invited to attend the in-class presentations, but at times, client schedules may prevent attendance. Therefore, an additional presentation may be scheduled at the client's location. During the presentation, students provide the client representatives with a bound procedures manual and discuss any recommended changes in internal controls or changes to the overall accounting system. Additionally, the client is thanked by presenting a mug or shirt from our business school. In most cases, the students are given client permission to implement the suggested improvements. The instructor helps with any necessary adjustments to the recommendations to make them attainable. At this juncture, the instructor is basically functioning as a partner in a CPA firm who no longer performs the actual work on the engagement, but facilitates the implementation with the client. The students' recommendations, at times, may require a software change or computerization of a manual system. Fortunately, our university's accounting program has had discretionary funds available for the purchase of software for our clients. This eliminates funding as a reason not to implement certain student recommendations.

Generation of Manual

Throughout the semester, students create a manual of the client's accounting procedures and, as previously mentioned, present the manual to the client representatives during the oral presentation. Many firms have accounting policies and procedures in place, but lack the necessary documentation to support these procedures. Following the student presentations, the students distribute the manual for client use and typically receive permission to implement any recommended accounting changes. The manual describes each task in the accounting system sorted by staff position. Before completing the service-learning project, the students train each staff member affected by the implemented changes. The instructor for final evaluation also reviews a copy of the client manual.

Completed Project

At completion, each project, at a minimum, contains the system documentation, strengths and weaknesses of internal controls, strengths and weaknesses in financial reporting, proposed changes, and a procedures manual outlining specific procedures for each position relating to accounting functions and/or financial record keeping. The project grade is based both on the written project as well as the team presentation. The rubric for scoring the projects is included in Appendix B.

Governmental/Nonprofit Accounting

Unlike the auditing course, the governmental/nonprofit accounting class is a relatively new addition to our accounting curriculum. The class was first offered during the spring semester of 1997 and is generally taken by students during their fourth year.

Background

In developing the course for inclusion into the curriculum, the instructor spent time with several churches in the area to observe the application of accounting standards that differs from "for-profit" entities. It became apparent that many small, nonprofit entities could use accounting assistance and that the organizations' financial restraints precluded these groups from paying for such services. With the university's commitment to the community in mind, it was a logical step to offer nonprofit organizations the opportunity to receive accounting assistance from the governmental and nonprofit accounting students. As was expected, many small nonprofit organizations have welcomed the services provided by the university's governmental and nonprofit accounting classes.

Along with the need to assist small, nonprofit organizations in financial matters, the instructor also learned that most all of the textbooks available for use in governmental and nonprofit accounting classes were primarily written for governmental accounting. Since the information available to

provide instruction in nonprofit accounting is minimal, the service-learning projects have allowed students to become exposed to the nuances of the accounting systems needed for the nonprofit organizations.

Initial Contact

Governmental and nonprofit accounting is offered in the accounting curriculum during the spring semester. The work to identify and make the necessary arrangements with the nonprofit organizations for the upcoming spring semester begins during the fall semester. Using contacts from her involvement with local civic organizations, from alumni, particularly those that have a relationship with a nonprofit entity, and from referrals that are a result of previous work performed for nonprofit organizations, the instructor has been able to provide the students with different types of nonprofit groups for the service-learning projects. Churches with small congregations and charitable organizations with limited funding have been the main entities that have taken advantage of the service-learning projects.

The challenge in arranging service-learning projects for the governmental and nonprofit class has been the need to continually find new organizations that are interested in this service. Due to the fact that many of the organizations that have been a part of this program implement the recommendations from the governmental and nonprofit accounting students, the educational experiences gained by the students is sometimes diluted when performing a second service-learning project for the same organizations. In other words, a second service-learning project performed for the same client may involve less time and analysis since the client's accounting system and/or procedures have possibly been improved during the initial service-learning project. Although follow-up projects at our institution have been accepted and student benefits received, it is preferable that a new group of nonprofit organizations be identified each semester. This is, however, an instructor preference. In fact, the auditing course projects at our university do not include this restriction.

Once a nonprofit organization has been identified as a likely candidate for a service-learning project, the instructor makes contact with the appropriate individual within the organization that is responsible for the accounting functions. For churches this may be the head of the finance committee and for small, charitable organizations the responsible individual is typically the director or chairman of the board if the organization is unable to afford a director. It is during this initial contact that the instructor outlines the service-learning project for the organizations and makes special mention of the fact that the students will be performing accounting-related services in an effort to meet the client needs. Consistent with the project requirements of the auditing course, these services may include reviews of accounting systems and procedures, payroll services, and/or auditing-type services and may vary from client to client.

When the class roster is obtained, students are assigned to a nonprofit organization for the semester service-learning project. Typical group size is three or four students. Since many of the students in the governmental and nonprofit accounting class have taken other courses taught by the same instructor, pairings of students can be made that considers the various attributes of each team member in relation to others in the class.

The Project

After formation of the service-learning groups, the entire class is instructed as to the objectives of the project and is instructed that final program goals and requirements will be determined during the initial meeting with the client. Consistent with those projects from the auditing class, client needs may vary. Although the client has previously communicated with the instructor concerning specific needs, the instructor, client, and students meet simultaneously to establish specific project goals. Each group is required to keep a log of their contacts with the nonprofit organization and this log is submitted to the instructor at regular intervals to allow for tracking of each group's progress. Other

milestones (e.g., time frame to set up initial meeting, development of area of emphasis, time frame for completing review, etc.) are also established and allow the instructor to monitor progress. It is essential that students stay on track not only from a standpoint of receiving a grade for the class, but also to maintain a positive image with nonprofit organizations and eliminate any negative attitudes toward the university that may develop if the students fail to meet the objectives set for the nonprofit entity. Appendix C shows the information that each student receives prior to the start of the governmental and nonprofit accounting service-learning project.

The four basic components of the governmental and nonprofit accounting service-learning project are: (1) initial contact and meeting with the organization, (2) the review of accounting systems and procedures, (3) generation of paper outlining the findings of the review, and (4) presentation of the findings to the organizations board of directors or other appropriate committee and/or individual. Each of these components is vital to giving the student a service-learning project that provides "real-world" experience in applying governmental and nonprofit accounting principles. A description of these facets of the program follows.

Each student group is responsible for making contact with the organization to arrange for a meeting to discuss the parameters of the project. Although the instructor has already discussed the program with the particular organization, it is important for the students to take control of the service-learning project. The instructor also discusses with the class the objectives of the initial meeting and the points that are to be communicated with the organization's representative.

The most important objective that must be met at this phase of the service-learning project is the actual identification of the scope of the accounting services. The extent of services varies for each organization and has included such areas as: (1) pre-audit work, (2) analysis of computerization options for the accounting system and/or implementation of a computerized accounting system (i.e., Peachtree, QuickBooks, etc.), (3) financial statement development from bookkeeping records, (4) payroll assistance, and (5) review of entire accounting and internal control system. Once the scope of the project has been identified, each group presents the instructor with a weekly log and summary of work to allow her to continually monitor the progress of the students.

At this stage student groups typically identify a spokesperson and/or contact person for the group who will be the primary liaison with the nonprofit organization. One of the side benefits of the service-learning project is the participation of students in a group project. Team leaders are not designated nor are students dictated as how they are to be organized. As a result, each student has the opportunity to learn more about group dynamics. Because this project is a team project, it is important that each member contribute his/her fair share. In an effort to monitor individual contributions, part of the project requirements includes each member submitting a self-measurement report describing each team member's contribution to the project. See Appendix C under "Grading."

The bulk of the work performed by the students during the semester is in the review of the organization's accounting systems and procedures. As would be expected, the available information varies for each organization. It is the student's responsibility to work with the nonprofit entity to determine the scope of the review based on existing data and current needs of the organization. The instructor is available for guidance in determining the scope of the project, but the student groups have primary responsibility for developing the areas of review for the nonprofit organization. Once a strategy has been formed, the students complete the appropriate accounting services applying nonprofit accounting principles. At this stage, the students schedule all contacts between the service-learning group and the nonprofit organization.

Along with monitoring the students' activities via reports, logs, etc., that are submitted for her review, the instructor is a resource for the students. She will attend at least one meeting between the organization and the student group to ensure that progress is being made and that the nonprofit is satisfied with the service-learning group. It is important for the instructor to remain visible to the

nonprofit organization because the work of the student group is not only a reflection on the accounting program, but also the university. By completing a financial project in a timely manner and exhibiting quality work, the instructor's governmental and nonprofit accounting class has gained valuable experience and assisted in portraying the university in a positive manner for the community and other nonprofit organizations.

Generation of Paper

Upon completion of the work defined by the student group, a report is generated that outlines the findings of the service-learning team. This paper is a compilation of the group's work and individual reports are not required. The generation of the paper allows the instructor to assess the student's work on the service-learning project and is the framework for the presentation that is given to the appropriate individuals in the organization. Guidelines and format for the paper is reviewed in class and an outline of the final evaluation process is given to each student as shown in Appendix D.

Presentation

The conclusion of the service-learning project for governmental and nonprofit accounting students is the presentation of the review findings to the appropriate individuals in the organization. Different from the auditing class project, the governmental and nonprofit accounting students make their presentation at the client's location. Representatives of the client's board of directors may also be in attendance. This presentation is scheduled by the students and is coordinated with the instructor's schedule as she attends the presentation meeting. The service-learning group will not only present the paper that outlines their findings, but will address any questions that representatives of the nonprofit organization may raise. The paper along with the student group's ability to handle the questions asked are the basis for the grade that each student receives on this project. See Appendix D for individual grading content.

As an added benefit, the student group gains experience in making a business presentation. Projects that require a student to make a presentation to the class is certainly beneficial, but allowing students the opportunity to prepare and make a presentation outside the classroom increases the students' understanding of the workings of different business environments such as those prevalent in nonprofit organizations.

The service-learning project in the government and nonprofit accounting has been very successful for the accounting program at our university. Students have gained valuable experience in working with nonprofit entities and gained an appreciation of how the concepts learned in class are applied. Coupled with the added benefits of working on a group project and preparation of a business presentation, the application of the governmental and nonprofit accounting curriculum through the service-learning project has allowed students to supplement the classroom instruction with "real-world" experiences.

EVIDENCE OF ENHANCED LEARNING IN AUDITING

It has been difficult for us to quantify the effect of service-learning on class performance because we are a small institution and normally offer only one section per year of upper-division accounting courses. Much of our positive feedback has involved instructor experiences or verbal feedback from both students and representatives from local organizations. During a recent semester, however, we had the opportunity to offer two auditing courses simultaneously and included only the service-learning component in one of them. Nine full-time accounting majors were enrolled in the section without the service-learning component and six full-time accounting majors were enrolled in the section including service-learning projects. Topics covered were the same. The section without service-learning participated in group discussion cases, which enabled the class time devoted to coverage of topics to be the same across both sections. The service-learning methodology used in the service-learning (SL) section is discussed later in the paper.

Methodology and Results

Class performance is defined as the percentage of total points possible in the course (*PERF*), the students' total points divided by the total points possible. Means for the entire group and each section are shown in Table 1.

A means comparison is inappropriate as the "type" or "ability" of the student, with or without a service-learning component in the curriculum, would be a predictor of how well a student would perform in any given course. The students' cumulative grade point averages prior to the semester they were enrolled in auditing were used to control for the "type" or "ability" of the students. The following regression model was used to determine the effect of participation in service-learning:

$$PERF = B_0 + B_1(PREGPA) + B_2(SL) + e$$

where:

PERF = class performance defined as total points earned divided by total points possible;

PREGPA = cumulative grade point average just prior to the semester enrolled in Auditing;

SL = an indicator variable set equal to 1 when the student was enrolled in the section with service-learning, and 0 otherwise.

The evidence in Table 2 indicates that enrollment in the section containing service-learning had a significant positive impact on students' class performance. Quantifying the impact of service-learning on students' mastery of material is difficult at best, but the above results add to the small number of studies isolating the service-learning impact on learning.

TABLE 1
Class Performance (*PERF*)

<u>Section</u>	<u>Number of Students</u>	<u>Mean</u>	<u>Standard Deviation</u>
With SL	9	.836903	.0379450
Without SL	6	.851646	.0553737
Total	15	.842800	.0444267

PERF = class performance defined as total points earned divided by total points possible.

TABLE 2
OLS Estimates of the Determinants of Class Performance

<u>Independent Variables</u>	<u>Estimated Coefficient</u>	<u>t-statistic</u>	<u>Significance Level</u>
Intercept	.349	2.12	.056
<i>PREGPA</i>	.129	2.973	.012
<i>SL</i>	.03727	2.286	.041
Adjusted R ²	.347		
F-statistic	4.722		
n	15		

PREGPA = cumulative grade point average just prior to the semester enrolled in Auditing; and

SL = an indicator variable set equal to 1 when the student was enrolled in the section with service-learning, and 0 otherwise.

CONCLUSION

As outlined in the AECC's Position Statement Number One, the utilization of service-learning projects within accounting curriculums can be used to enhance the strength of accounting programs. Through this process, students move beyond memorization and "number crunching" to critical analysis and problem solving. Utilizing service-learning in accounting classes such as auditing and governmental/nonprofit allows students to gain practical experience during the educational process and provides depth to the accounting program that will assist in attracting top students into the field. The projects described in this paper have shown that service-learning allows our accounting program to keep pace with the accounting needs of the business community and meet the demands of quality students.

APPENDIX A
Summary
Service-Learning Projects Objectives and Requirements

Objectives:

- To design service-learning projects where student groups interact with local organizations to provide accounting-related services.
- To design a class project whereby benefits are provided to both students and clients, i.e., clients are directly involved in student learning while simultaneously receiving accounting services in return.

Instructor and Student Team Requirements**Instructor:**

- Contact local organizations prior to the beginning of the semester to identify firms that are likely candidates for service-learning projects. Identify and consider the reasonableness of each firm's accounting needs.
- Assign groups of 3 to 4 students during the first week of the semester or, if preferred, allow students to select groups of 3 or 4.
- Assign a selected organization to each group.
- When preparing the syllabus, schedule adequate class or office time for one-on-one sessions with instructor and teams and monitor students throughout the duration of the project.
- Accompany students on first site visit with client and help facilitate initial interaction between the client and students. Consider the reasonableness of client accounting-service needs and the students' ability to address those needs. Establish project goals and required procedures.
- Review accounting procedure manuals and attend student presentation of recommendations to the client.
- Review completed projects and assign grades.

Student Teams:

- Meet with group members and contact the assigned organization to schedule an initial visit.
- Discuss accounting needs with the client and establish a tentative schedule of on-site visits. Maintain a weekly log of visits and document work.
- Document the existing internal control system and identify internal strengths and weaknesses.
- Identify suggested changes to the client's internal control system and determine procedures for recommending these changes to the client.
- Identify strengths and weaknesses in financial reporting and any recommended changes.
- Complete accounting services as requested by the client and agreed upon during the initial visit.
- Identify client accounting procedures and, with the client's permission, develop a procedure's manual for future client use.
- Prepare and present an in-class oral and visual presentation. Invite appropriate individuals from the client organization to attend the presentation.
- Implement final recommendations.

APPENDIX B
Auditing Project Evaluation

Organization _____
 Team members: _____

		<u>Points Possible</u>		<u>Points Assigned</u>
Situation analysis	Documentation of existing internal control system	6		
	Identification of IC and financial statement strengths and weaknesses	12		
	Development of solutions or proposed changes	7		
	Subtotal	25		
Implementation	Ability to convey solution to client	9		
	Implementation of IC system changes (may include software installation)	8		
	Completion of requested accounting services and/or training of client personnel	8		
	Subtotal	25		
Team work and presentation	Level of cooperation in group	9		
	Presentation of existing situation	8		
	Presentation of solution implemented	8		
	Subtotal	25		
Procedures manual	Completeness	10		
	Level of user-friendliness	10		
	Level of attractiveness to client	5		
	Subtotal	25		
	Project total	100		

APPENDIX C

Governmental and Nonprofit Accounting Project

GROUP MEMBERS: _____

 ORGANIZATION: _____
 CONTACT PERSON: _____
 PHONE NUMBERS: _____

Nonprofit Organization Review

This assignment will require basic knowledge of financial accounting, auditing, and governmental and nonprofit accounting. Your group will be required to review the financial and accounting structure of your assigned organization. The review will include as a *MINIMUM* (you can provide more detail) the following items:

1. Signed engagement letter
2. Complete and thorough review of current accounting systems
3. A weekly log of contacts with the organization (submitted at intervals)
4. Review of internal control system
5. Evaluation of current computer system
6. Documentation of work completed in items 1 through 4
7. Recommendations for improvement including accounting and computer systems if appropriate
8. Compilation of financials if appropriate
9. Summary of review letter to organization's board
10. One (1) bound copy of review to be provided to the organization's board
11. Presentation to organization's board of review unless organization prefers not to have a board presentation
12. One (1) unbound copy of review with *ORGANIZED* working papers to be turned into me
13. Self-measurement report

GRADING:

All group members receive the same grade so it is up to you to involve **ALL** group members. **DO NOT** rely on one or two members to complete the project. Grading is somewhat subjective so it is important to make the review as professional as possible.

Because this project is a team project, it is important that each member contribute his/her fair share. In an effort to monitor individual contributions, part of the project requirements includes each member submit a self-measurement report describing each team member's contribution to the project. Therefore, each member should keep track of meetings, attendance, and team assignments. If a member fails to meet his/her team assignment(s) or misses meetings on a regular basis, points will be deducted from that member's final score. At the conclusion of the project, the instructor will compare the individual reports for consistency. *Should the results of the individual reports indicate that any member failed to put 100 percent effort into the project, the instructor will subjectively reduce that member's assigned point value for the project. It is possible to receive a zero should you not actively contribute to the group project throughout the semester.*

TOTAL PROJECT POINTS: 100

Example Schedule of Due Dates

Weekly	Logs of client contacts and notes summarizing weekly progress
January 30	Document initial contact with assigned nonprofit. Plan schedule of future meetings, estimated completion date, date of Board meeting, etc.
March 1	First progress report due Includes weekly logs to date of documented actual meetings, work completed, work-in-progress, schedule of future meetings and anticipated deadlines, etc.
April 5	Second progress report due All meetings with nonprofit personnel should be complete Prepare for Board meeting
April 19	Rough draft of final project due All accounting services should be complete. Teams should be working on final documentation and board presentation
April 26	FINAL PROJECTS AND SELF-MEASUREMENT REPORTS DUE <i>Turn in "thank-you" notes for mailing to the client</i>

APPENDIX D
Governmental and Nonprofit Accounting Project
Final Evaluation

Review Team: _____

CONTENT:

Engagement Letter	_____	
Review Planning and Documentation	_____	
Background Information	_____	
Documentation of Accounting Process	_____	
Internal Control Evaluation (S & W)	_____	
Budget Information	_____	
<i>Computer System Analysis</i>	_____	_____ /30 points

REVIEW OF FINANCIAL STATEMENTS:

Collection of Evidence	_____	
Sales and/or Collection Cycle	_____	
Sampling and/or test of transactions	_____	
Payroll and Personnel Cycle	_____	
Acquisition and Payment Cycle	_____	
Purchasing and Payment Procedures	_____	
Inventory	_____	
Obligations/Liabilities	_____	
Cash Balances	_____	
Financial Statement Presentation	_____	_____ /20 points

MEETINGS WITH NONPROFIT ORGANIZATION:

Dates of meetings	_____	
Logs/Notes from Meetings	_____	_____ /10 points

RECOMMENDATIONS:

Future Accounting Processes	_____	
Budgeting	_____	
Computer Systems	_____	
Financial Statement Presentation	_____	
Summary Letter to the Board of Directors	_____	_____ /20 points

ORGANIZATION/PROFESSIONALISM OF PRESENTATION: _____ /10 points

WRITING STYLE, GRAMMAR, PUNCTUATION: _____ /10 points

TOTAL PROJECT SCORE _____ /100 points

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