Journal of Statistics Education

Service-Learning for Graduate Students through a Student-run Consulting Program

Nilupa S. Gunaratna
Purdue University

Craig A. Johnson
Brigham Young University – Idaho

John R. Stevens
Utah State University

Journal of Statistics Education Volume 15, Number 2 (2007),
http://www.amstat.org/publications/jse/v15n2/gunaratna.html

Keywords: Community service; Graduate Education; Service-learning;

Abstract

Statistics in the Community (STATCOM) is a student-run statistical consulting program that has been serving its local community since 2001. Directed and staffed by graduate students from Purdue University's Department of Statistics, it provides professional consulting services to governmental and nonprofit groups free of charge. Students work in teams to help community clients address specific problems and needs. Past clients include school corporations, libraries, community assistance programs, and the city of West Lafayette. Participation in STATCOM allows students to apply statistical concepts and classroom material to solve real problems. It also develops skills in leadership, management, and written and oral communication of results to the general public. Though important for any future career in statistics, these skills are not typically

emphasized in graduate courses, research, or the on-campus academic consulting service. The university and academic department also benefit through increased interaction and visibility in the local community. STATCOM can serve as a model for integrating service learning into graduate statistical education at other colleges and universities.

1. Introduction

There have been several efforts to implement service learning in undergraduate statistics courses (e.g., Anderson and Sungur 1999; Root and Thorme 2001). Service learning also offers benefits to graduate students; however, to our knowledge, no published examples demonstrate the successful implementation of service learning in graduate statistical education. In this paper, we describe a student-run consulting program that provides free, professional statistical consulting as a volunteer service to local governmental and nonprofit organizations. The consulting program, known as Statistics in the Community (STATCOM), is an alternative to classroom-based service learning and can serve as a model for integrating service learning into graduate statistical education at other colleges and universities.

STATCOM was founded in 2001 by Purdue University Statistics graduate students in response to a university-wide effort to increase engagement with the surrounding community. Every semester, 35-40 students, or about one-third of the graduate students in the department, volunteer their time to work in teams on one or more community projects. The number of projects for each volunteer depends on the nature of the projects and the schedule of the student volunteer, but involvement in more than three projects is rare. Most volunteers are masters or doctoral students from the Department of Statistics, while a few are graduate students from other academic departments or senior undergraduate students majoring in Statistics or Actuarial Science. The time commitment from each student is rarely more than 2-3 hours per week, and students are free to excuse themselves from projects should their coursework or other obligations demand more attention.

In the past six years, STATCOM students have worked with over 35 community clients. The program's mission has also expanded to serve clients outside the University's immediate surroundings and to include activities such as P-12 outreach and undergraduate recruitment. The projects provide opportunities for students to gain consulting experience while serving their community. One unique aspect of the program is that student teams complete all aspects of a project outside of the classroom with minimal faculty oversight.

2. Examples of Projects

Below are a few examples of past STATCOM clients, illustrating areas where graduate students have engaged in service learning activities. The program maintains a strict confidentiality policy on all projects (Appendix A). Clients have given permission to use their names and information in the descriptions below. Section 2.6 includes a brief discussion of the more common types of statistical questions that arise in these projects.

2.1 Lafayette School Corporation

STATCOM's first client was the superintendent of the Lafayette School Corporation, who wanted to study the impact of the state funding formula on the Corporation's schools. The Lafayette School Corporation employed many seasoned faculty members, and the superintendent was concerned that the state of Indiana's current funding formula may adversely impact school districts with experienced employees. Students analyzed data on public school funding in Indiana, focusing on the relationships between educational outcomes, teachers' years of experience, and funding sources. A partial correlation analysis revealed that the current funding formula did in fact penalize school districts with more experienced employees. The results were used by state lawmakers to change some funding policies. This project clearly demonstrated the contribution that graduate students could make in their community and was a strong motivator for future involvement.

Schools can be a good source of projects, as they have large data sets on students' performance over time. Many school corporations are required by law to assess their performance. Other projects with schools and school corporations have included an assessment of the performance of students admitted under special circumstances, analysis of standardized test scores across grades, and development of simple graphical methods to visualize large amounts of data.

2.2 Sagamore Parkway Task Force

The Sagamore Parkway Task Force was appointed by the mayor of West Lafayette to develop a revitalization plan for an economically important corridor within the city. STATCOM students worked with the task force to develop surveys assessing local residents' and businesses' opinions on (1) what should be done to develop the area economically and (2) ways to fund that economic development. The students advised the task force on survey implementation, analyzed the survey results, and presented their findings in written reports and oral presentations at public meetings. The survey results were used by the task force to formulate and prioritize their recommendations to the mayor and city of West Lafayette. The city has subsequently begun implementation of many of the task force's recommendations.

The Sagamore Parkway Task Force project had many desirable outcomes. Students regularly attended and participated in public meetings, allowing them to observe and contribute to the public process while developing their abilities to understand the client's needs and to communicate with a general audience. Members of the task force and the public also had the opportunity to ask questions of the students, thereby increasing statistical literacy among local residents and decision makers. In particular, members of the city government gained experience in how to conduct a meaningful survey and prepare the responses for statistical analysis.

The task force's activities received significant media coverage, which provided publicity for STATCOM and increased awareness in the local community of the services the

organization offers. Prior to the Sagamore Parkway Task Force project, students would actively seek out clients; after the project was completed, clients have regularly sought STATCOM's help, and it is currently unnecessary for students to search for clients or projects.

The project also led to a positive and ongoing relationship between STATCOM and the West Lafayette city government. STATCOM students have subsequently helped the city to design, implement, and analyze several other surveys including a survey of residents' satisfaction with city services, which was used for the city's strategic planning process, and an assessment of residents' and business owners' opinions on parking concerns in a commercial area of the city. The mayor and members of the city's Office of Development have referred other potential clients, including other local governmental agencies, to STATCOM.

2.3 Other Community Projects

STATCOM has successfully completed a variety of other community projects. For example, a team of students analyzed data on the frequency of checkouts at the West Lafayette Public Library to determine which collections were most popular and which were being underutilized. The project allowed students to work with a large data set and conduct an in-depth analysis using loglinear models. The results assisted the client in their allocation of limited resources. For example, certain relatively expensive collections were more likely to be used frequently by library patrons, suggesting that new items should be purchased for these collections despite the greater cost per item.

In addition to schools, cities, and libraries, STATCOM has completed many interesting projects for local nonprofit organizations. A retirement home wanted to assess residents' satisfaction with the quality of their food services. A community music organization wanted to identify potential donors in a more cost-effective manner. A drug rehabilitation center wanted to evaluate the effectiveness of an educational program in keeping its clients drug-free for a certain period of time. Occasionally, the university has

also served as a client. For example, an assessment of on-campus parking usage by students living in university residence halls was used to plan for future residence hall parking needs. Each of these clients' problems was translated into a straightforward statistical question that the STATCOM students were able to address.

2.4 P-12 Outreach

Many academic departments have or are interested in developing P-12 outreach programs. This is an area where graduate students could contribute significantly. Some statistics students come to graduate school with a P-12 teaching background, and others are interested in teaching careers after graduation. In 2004, STATCOM students decided to establish a P-12 outreach program to design and carry out educational activities in the classroom and at community events including local and state fairs.

There has been strong interest and participation by Statistics graduate students in P-12 outreach activities. Students enjoy the creative challenge of designing P-12 activities and the educational aspect of implementing them. Because P-12 events generally last only one or two days, they also suit students who are interested in community service but cannot commit to a longer term consulting project. Many students view P-12 activities as a break from their regular responsibilities and enjoy the opportunity to work with young children. Regardless of their motivations, students provide a valuable service to their department as well as the community through participation in these activities.

STATCOM's P-12 outreach program complements other P-12 efforts, including those sponsored by the American Statistical Association (ASA). Activities are designed and conducted by graduate students; the program operates at the local rather than national or chapter level; P-12 students are often targeted at events and programs outside the classroom; and interaction is primarily with P-12 students rather than with their teachers. One popular outreach activity is the STATCOM booth at a local community spring festival attended annually by thousands of P-12 children. The activities at the booth have ranged from constructing bar graphs using colored candies to studying a random

sampling scheme based on rolling dice. Activities conducted with junior and senior high school students who attend on-campus summer programs typically cover concepts in probability, appropriate methods for visualizing different types of data, and introductory data analysis. Tutoring at-risk youth enrolled in a county-level community program is another way to reach P-12 students outside the classroom. Weekly enrichment activities at a rural elementary school provide otherwise unavailable resources and ongoing mentoring for young children.

All activities are designed to be age-appropriate, focus on fundamental statistical concepts, and benefit from light-hearted and energetic presentations by STATCOM volunteers. Some of STATCOM's activities require funding for materials, and this is particularly true for the P-12 program. Though the department or college may have funds available for P-12 outreach, exploring other sources of funding provides valuable experience for students, especially for those seeking academic careers.

2.5 Undergraduate Outreach

STATCOM students have given presentations in several undergraduate courses. There are four main target audiences for these presentations: incoming freshmen, undergraduates in non-technical fields, undergraduates in technical fields outside of statistics, and statistics majors. The goals, content, and discussion topics for a presentation depend on the relevance of statistics to the given audience and to the course objectives.

Many incoming freshmen have not chosen a major and may not be aware of the opportunities in statistics. A presentation to this audience describes the variety of career opportunities in statistics, applications of statistics to emerging areas of research, and the contributions of statistics to society. The primary purpose is to encourage students to take statistics courses and to consider a major or career in the field.

Undergraduates majoring in non-technical fields often have limited quantitative backgrounds. Many will take an introductory statistics course that emphasizes statistical concepts without extensive application. Presentations to this audience emphasize the role statistics plays in society, with specific examples drawn from completed consulting projects. Detailed examples are used to illustrate and motivate basic statistical concepts that are taught in the course, e.g., the importance of random sampling and the appropriate interpretation of confidence intervals.

Students majoring in the sciences and social sciences will likely encounter statistics in their careers and may someday conduct a statistical analysis themselves or work with a statistical consultant. Undergraduates studying these disciplines may take one or two introductory statistics courses that involve the use of statistical software. Presentations to this audience describe the need for and application of statistics to their disciplines. The process of working with a statistician may also be discussed.

Statistics and actuarial science majors can be shown the opportunities and benefits of graduate studies in statistics. Recruitment efforts benefit both the department and the undergraduate students, since graduate students can address issues and questions that recruiting faculty may not be able to address. In addition, interested undergraduates are encouraged to join STATCOM teams, and their interaction with graduate students can motivate them to pursue graduate studies or help them to see additional applications for the material presented in their undergraduate courses.

Statistics graduate students also benefit from this "undergraduate outreach." Presentation skills are improved, a greater appreciation is developed for the needs and backgrounds of a wide range of audiences, and the ability to communicate with such audiences is enhanced. This benefits statistics graduate students who will work with non-statisticians in various fields as well as those who pursue academic careers**.**

2.6 Types of Statistical Questions

Defining the statistical question to be addressed by community service consulting is nontrivial. A detailed understanding of the needs and resources of a community organization is necessary to formulate a clear statistical question. For example, in the Sagamore Parkway Task Force project, the population of interest needed to be clarified and a sampling frame identified prior to selection of a random sample. The consulting team considered available population lists, including lists of public utility account holders, property tax payers, and mailing addresses. Ultimately the Sagamore Parkway Task Force sampled mailing addresses so that the random sample would represent those who lived in the local community, including the substantial population of renters who do not pay property tax and may not hold public utility accounts. STATCOM volunteers do not directly conduct surveys (such as physically telephoning or mailing the surveys), but the consulting team did provide advice to ensure a simple random sample when the task force used an outside list broker to select the sample.

STATCOM students also help clients understand the analysis performed so that they reach appropriate conclusions. For this reason, the projects are often limited to "simple" statistical approaches that the clients could themselves explain to their colleagues and to the general public.

Many of the STATCOM projects involve survey design and analysis, including improvement of response rates. Often simple summary statistics from existing data are utilized, such as in an analysis of client or donor characteristics. Effective graphical summaries of data are highly important in these projects, especially when clients express concern about their own quantitative background. Some projects involve regression approaches, but rarely do the needs of the client require anything beyond the undergraduate or introductory graduate level. In the event that the analysis requires higher-level statistical tools, the client can be referred to more appropriate consulting services.

3. Typical Project Cycle and Outcomes

STATCOM students work on all aspects of a project with a client, starting with the initial contact. If a student-run service is still not well-known in the community, it will be necessary for students to actively seek community clients. The STATCOM student director typically makes cold contacts with potential clients to explain the program and discuss past (or potential) projects in an effort to stimulate interest. Clients may not have a clear understanding of how statistical consulting could benefit them. Faculty and staff members typically have contacts in the community that could serve as a good place to start. County officials and a local registry of non-profit entities have also served as resources for finding potential clients.

Once contact has been made, a team of students is organized to attend an initial meeting, which typically occurs at the client's location. The team includes a student with prior consulting experience who is designated as the team leader. One of the student leaders of STATCOM also attends the initial meeting to advise on the project design, timeline, and implementation. The main purpose of the initial meeting is to define the project and the students' responsibilities. A timeline is developed for the completion of the project, and arrangements are made for follow-up meetings with the client.

After meeting with the client, the team meets to discuss plans to complete the project, and subsequent team meetings are held as needed. Because the students have limited time to commit to these projects, it is important for the workload to be shared so that the project can be completed on time without overwhelming individual students. As part of the students' work, a final report is written for the client. The project's statistical aspects and results are described at a level appropriate for the client. A final presentation is made to the client, occasionally at a public meeting. Most clients use this final meeting as an opportunity to ask questions and provide feedback on the students' work. While research and on-campus academic consulting experiences also include written and oral communication of results, the reports provided by STATCOM are for a more non-technical audience. The nature of this audience usually requires the consulting team to

better understand basic statistical ideas as they communicate them in the written and oral reports.

4. Organizational Structure

As a volunteer organization, STATCOM relies on students giving their time, but never at the expense of their academic responsibilities. The organizational structure of STATCOM allows for flexible scheduling of work and the involvement of many students in leadership roles. While all graduate students in the Department of Statistics are invited to participate, the extent of their involvement depends on their level of interest, experience, and available time.

Leadership of the organization is shared by two students who serve six-month terms as director or associate director. The director and associate director organize teams of students from a pool of volunteers to work with specific clients. They also appoint a team leader for each team. A team usually consists of 4-5 students, with the team leader, another experienced consultant, and other less experienced students who learn from interaction with the more experienced students on the team. Two project managers each oversee the general direction of a group of teams. One motivation for the project manager position is to give leadership opportunities to masters students, as these students are seldom in the department long enough to become director or associate director. A past director serves as a student advisor to the organization, providing continuity across academic years, serving as an additional resource for the student leaders, and decreasing the organization's dependence on faculty advising.

STATCOM students meet biweekly with each other to discuss the progress of their projects and to seek advice from other students. Peer mentoring builds a body of expertise among the students, further limiting dependence on direct faculty involvement. These biweekly meetings also allow a large number of students to participate in decision-making. Regular student presentations on statistical consulting and data analysis projects

during these meetings allow experienced students to practice their communication skills with a statistical audience, while newer students learn about statistical methodology.

5. Benefits

The volunteer consulting service offers the community the obvious benefit of free consulting. Community clients apply statistically sound methods to solve their problems and learn how to apply such methods to meet future needs. They also develop an ongoing partnership with the academic department and university. In some cases, the involvement of student consultants is specifically beneficial as they are viewed as an unbiased third party when there is disagreement over an issue within a client institution or when there is public or political debate regarding an issue.

The department and university benefit from increased interaction and visibility in the local community while developing strong relationships with community organizations and the local government. Involving graduate students as well as faculty and staff leads to an overall increase in community engagement by the academic department and university. In the process, the department and university work towards fulfilling the service component of their mission statement.

Satisfaction from applying statistical skills to provide significant service and fulfill community needs is a primary motivator for student involvement in STATCOM. However, there is also a significant educational component to participation that supplements graduate training through coursework, teaching, and research. Students develop skills in teamwork, leadership, and management of an organization of 40 or more volunteers who conduct multiple, simultaneous, and often long-term projects. Working with non-technical audiences and attending client and public meetings improve oral and written communication skills. As most clients have little or no statistical training, students gain experience in understanding a client's needs and constraints as they are described in non-technical language, translating those needs into a statistical problem, applying the appropriate statistical tools, and reporting findings in a format that is

understandable and useful for the client. Communication skills are further developed during the biweekly group meetings as students practice consulting presentations and discuss ongoing projects, lessons learned from completed projects, and solutions to specific consulting problems as they arise. Oral and poster presentations, journal articles, and other publications also contribute to students' professional development.

Because students work on all aspects of a project with a client, they learn consulting skills that may not be acquired or emphasized in an on-campus academic consulting service. The students seek out projects or respond to potential clients' initial inquiries. After discussion with the client, the students must assess whether they have the resources to meet the client's needs within the required timeframe. After the details of the project are determined at the initial meeting, the students form a project timeline with the client and may help the client to assess the cost of the project (e.g., the cost of conducting a mail survey). Because students may not always have the perspective to foresee the demands or difficulties in every project at the outset, the consulting teams need to make clear to the client that the students' primary obligations are to their coursework. While the consulting is provided as a good-will community service, the only guarantee is a good-faith effort at the projected timeline. At the same time, the students know that the reputation of the STATCOM program (and its ability to find future projects) depends on the successful completion of each project. In our experience, the consulting teams will exceed expectations more often than not, and the client will understand a change to the timeline as long as it is adequately communicated.

After understanding the client's needs and objectives, the students must identify the statistical problem and outline what they can and cannot do for the client. They must then agree on the appropriate methodology, recognizing that though many approaches and analyses are possible, not all of these would adequately answer the client's questions. Although students' coursework may have emphasized data analysis, design of the project and especially interpretation of the results may be the most critical aspects of these projects.

During a project, students may need to advise the client on methods of gathering or organizing data. This provides many students with their first experience in evaluating "messy data" that might be poorly organized or contain errors. Students may also need to address the ethical and legal requirements of handling human subject data. For example, some clients may inadvertently provide data sets that include sensitive or identifying information on subjects. In the initial meeting, it is helpful to advise clients on how to remove such identifying information before sending data to the consulting team. This places the burden of data de-identification on the client. The initial meeting also serves as a natural point to discuss the confidentiality policy. Because of the voluntary nature of the STATCOM consulting program, the only real penalty for violations of the confidentiality policy (which we have never experienced) is the suspension of the violating student's involvement in the STATCOM program.

Throughout the project, there is a need to document all activities, to handle problems as they arise, and to ensure that the team stays on schedule and the client's needs are properly addressed. At the end of each project, feedback from the client and discussion among student consultants are necessary to identify potential areas for improvement on future projects.

These skills and experiences are useful to any student, regardless of whether they are seeking a career in academia, industry, government, or elsewhere. The STATCOM program also offers some less tangible but significant benefits for senior undergraduates and beginning graduate students. Consulting teams are designed to accommodate two or more beginning students. These students become involved in the practice of statistics earlier in their education, often before they have completed the coursework necessary to join an on-campus consulting service. Discussions with STATCOM students indicate that such participation is a strong motivator for some students who are involved only in coursework and are unsure of their career or educational goals or lack confidence in doing independent work. Newer students also benefit from interaction with and mentorship from senior students.

STATCOM consultants work with many different groups of their peers as they complete consulting projects. Students form friendships in STATCOM that carry over into their coursework. It is not uncommon to see a STATCOM team assembled to study and complete homework together. This camaraderie continues as students work together to prepare for qualifying exams and discuss their thesis research. Thus the emphasis on teamwork creates a greater sense of collaboration and community within the student body that extends itself into other areas. In addition, the team projects and biweekly meetings allow interaction between groups of students that may otherwise have limited interaction. Examples we have observed include graduate students with undergraduates, students in theoretical statistics with those in applied statistics, statistics students with those in other academic disciplines, masters students with doctoral students, and domestic students with international students. Experiences in pro bono statistical consulting during graduate school prepare all students, regardless of their interests or background, to engage in similar community service as they pursue their careers.

6. Challenges

The organizational structure of a student-run consulting service must be flexible to accommodate students' schedules, and it must ensure continuity over time as student leaders and experienced consultants graduate. STATCOM's organizational structure has been designed to distribute responsibilities and involve many students in decision-making. This prepares interested students for senior leadership positions. While experience in teamwork is valuable in itself, the organizational structure also allows individual students to restrict volunteer activities when more time is needed for other responsibilities. Interaction between newer and more senior students within individual teams and within the larger group develops consultants' skills and builds expertise within the body of students, helping to ensure continuity over time. The organizational structure should also evolve as new needs arise. For example, the project manager positions were created to facilitate significant contributions by two additional experienced students. The project managers can advise and assess the progress of an increasing number of project teams.

Potential clients are unlikely to be aware of the student-run consulting service as it is being established, and student consultants may need to seek out their first several clients. Many students do not establish strong community ties while in graduate school, and referrals from faculty and staff are therefore very beneficial. Over time, relationships are developed between the student-run consulting program and community institutions, and potential clients will seek the program's services without being actively approached by student consultants. The students' challenge then includes assessment of their capacity to accept new clients.

Faculty and departmental support is essential to the ongoing success of the program. Specifically, the encouragement from graduate research advisors for their students to pursue these extra-curricular (and non-research-focused) activities helps foster a healthy supply of volunteers. In addition, the STATCOM program benefits from permission for meeting space and the availability of faculty time to field occasional student questions. Since the primary focus is community service, the benefits of involvement to students or the academic department may not be apparent to faculty advisors when students have other responsibilities such as coursework, teaching, and research. A clear statement of the program's objectives and documentation of activities and outcomes help to communicate the program's benefits to the department and to graduate students' education.

The student-run nature of the program poses particular challenges when problems arise. The student leaders must develop procedures to identify problems early, know when a project is off schedule, and make decisions when there is disagreement over methodology. They must also promptly address situations in which fellow students do not follow accepted procedures. If work is not shared equally among team members, for example, the STATCOM director can meet with the team to discuss cooperation and delegation, or make team reassignments. Since all work is voluntary, participation should be a positive experience for all. However, it is crucial to maintain professionalism and quality of service.

Given the transitory nature of the graduate student population, documentation is an essential component of continuity. This information is necessary for recordkeeping on activities and services rendered and also serves as a resource for future consultants. Student leaders must decide what information to record, the format for keeping and storing records, and who is responsible for the documentation. Since all work is voluntary, keeping accurate and up-to-date records can be a challenge for the organization.

7. Factors of Success

The success of the STATCOM program is evidence that service learning in graduate statistics education need not be classroom-based. Community service in the context of a course limits the services students could provide for a client. The client's needs may not match the course's objectives, or the client's schedule may not match the timeframe of the course. Many experiences that would be valuable to students, such as making initial contact with a client and deciding on the feasibility and appropriateness of a project, may be performed by the faculty member supervising the course. These tasks may be time-consuming and cause problems for the faculty member or course if the client drops the project or takes longer than expected to provide necessary information or data.

Because students volunteer to handle all aspects of a STATCOM project, their motivations are very different than they would be in a course. Students develop a sense of ownership and assume full responsibility for their work. The project is adaptable and not limited by the academic calendar or course syllabus; it is instead developed only to meet the needs and deadlines of the client. Nevertheless, it still has educational value for the students, and its benefits lead most students to continue involvement in future projects.

Institutional commitment is most important to the program's success. STATCOM is viewed as an integral and permanent part of the Statistics Department. It is featured on

the department's website, and articles on its activities appear regularly in departmental publications. Information on the program is a regular part of graduate student orientation, and a "STATCOM Community Service Award" is given annually to one or more graduate students for leadership demonstrated within the program. Students are encouraged by the faculty to get involved in STATCOM activities as a supplement to their education.

8. Available Resources

This paper describes the structure and many advantages of a student-run statistical consulting service. The service benefits the community while enriching graduate student education and highlighting the academic department and university. The STATCOM program in the Department of Statistics at Purdue University offers a successful model for implementing service learning for graduate students in statistics and mathematics departments at other colleges and universities. Starting such a program requires a core of interested graduate students as well as a supportive academic department and faculty. The STATCOM group is willing to work with groups who are interested in starting pro bono consulting programs at other colleges and universities. It also shares resource materials, including the following:

- A procedures handbook that details STATCOM's organizational structure, client interactions, legal issues, and documentation.
- Publicity materials including a tri-fold color brochure for potential clients.
- A template for an initial meeting handout.
- A confidentiality form required for all student consultants (Appendix A).
- Sample reports to clients.

More information and materials can be obtained at www.stat.purdue.edu/external_relations/statcom and www.amstat.org/education/statcom.

Appendix A. Confidentiality form required for student consultants.

Purdue University

Statistics in the Community (STATCOM)

POLICY REGARDING CONFIDENTIAL INFORMATION

In order to promote a free exchange of information and complete openness with clients, Statistics in the Community (STATCOM) maintains a policy of strict confidentiality on all projects. When requested by the client, confidentiality statements will be signed. However, only the Purdue forms will be used for this purpose.

Confidential information includes:

- Name, services, location, and size of client
- Written materials provided by the client
- Client evaluations of STATCOM services
- Software, parts, materials, equipment, etc., provided by the client
- All correspondence, technical information, reports, etc., provided by STATCOM
- Any other information or items that could reveal our work with a client to people or groups outside of the STATCOM staff, management and faculty.

With the consent of the client and the STATCOM manager, information may be given to persons outside of STATCOM on an as needed basis. This situation usually occurs when a faculty colleague is consulted on a project, or when a referral is being made. With the consent of the client, information about the client and a project may be used for various promotional purposes such as annual reports, brochures, newspaper articles, job interviews, etc.

No information may be disclosed without the full knowledge and consent of STATCOM and the client.

_____ _____

Signature Date

_____

Full Name (please print)

Acknowledgement

The athors would like to thank the Manager of the Statistical Consulting Service Regina Becker, Department Head Mary Ellen Bock, Professor George McCabe, staff member Teena Seele, and the other faculty and staff in the Department of Statistics at Purdue University for their support of the STATCOM program. They would also like to thank Thomas H. Short (Indiana University of Pennsylvania), Bebra L. Hydorn (University of Mary Washington), Brian Jersky (Sonoma State University), and K. B. Boomer (The Pennsylvania State University) for their comments and contributions.

This paper was presented at the Joint Statistical Meetings 2005 at the invited session on "Service Learning in Undergraduate and Graduate Statistics Education," sponsored by the Section on Statistical Education and organized and chaired by Thomas H. Short, Indiana University of Pennsylvania.

The authors all served as directors of the Statistics in the Community (STATCOM) program at Purdue University.

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Nilupa S. Gunaratna
Department of Statistics
Purdue University
250 N. University Street
West Lafayette, IN 47907-2066
U.S.A.
gunaratna@purdue.edu

Craig A. Johnson
Mathematics Department
Brigham Young University – Idaho
232w Ricks Building
Rexburg, ID 83460-2155
U.S.A.
johnsonc@byui.edu

John R. Stevens
Department of Mathematics and Statistics
Utah State University
3900 Old Main Hill
Logan, UT 84322-3900
U.S.A.
John.R.Stevens@usu.edu