

Report of the Review Committee for the Center for Statistics and the Social Sciences

January 9, 2003

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Goals and Achievements

The Center for Statistics and the Social Sciences is an organization unique among American universities, bringing together statisticians and quantitatively oriented methodologists from across the social sciences and fostering cutting-edge research and interdisciplinary approaches to the teaching of quantitative methods. According to its original stated goals, the CSSS has a triple mission:

1. To foster interdisciplinary research between social scientists and statisticians;
2. To develop graduate courses in statistical methods for social science graduate students; and
3. To develop an innovative case-based undergraduate statistics sequence for social science students.

Individuals at other universities are clearly engaged in similar related work at the interface of statistics and the social sciences, but no other university has taken the bold step to provide a home for such interdisciplinary activities. In a little over three years CSSS has been able to (a) make a series of outstanding faculty appointments of individuals who would have been unlikely to come to the University of Washington otherwise, (b) establish a presence through an interdisciplinary seminar series, (c) develop new courses in statistics and methodology that draw in the perspectives from multiple disciplines, and (d) change the expectations associated with quantitative social science research on the campus. Interviews with students, post-doctoral fellows, affiliated faculty, social sciences department chairs, and representatives from various deans' offices make clear that CSSS is an unqualified success, fulfilling the broader set of goals established by the University of Washington for UIFs. All those we met with were effusive in their praise for the accomplishments of the Center and the impact it had on their individual activities as well as upon their other academic homes.

Taking CSSS to the Next Level

The impact of CSSS on activities at the University of Washington has been profound and immediate: CSSS today provides legitimate, protected, and shared intellectual space for collaborative learning, teaching, and research activities. The CSSS has done a remarkable job in bringing new and more appropriate statistical methods to social science faculty and graduate students. The seminar series and the seed grants have made possible cutting-edge research on par with some of the best social science empirical research. The graduate courses have drawn graduate students from several social sciences. But the expectations for what CSSS might do for the departments involved and for the University go far beyond the achievements to date. Within the University, faculty in departments associated with CSSS would like to see efforts expanded into related domains, and are just beginning to see CSSS's impact nationally and internationally. A number of other universities have also initiated efforts to build ties between faculty in their departments of statistics and the social sciences and many of them are looking to the Center for Statistics and the Social Sciences as a model for their activities and as a source for new faculty. The challenge for CSSS, presuming that the current review leads to long-term budgetary support from the university, will be to take this leadership role, inside the University and outside, to a new level.

Leadership at a national level takes many forms, including involvement in activities on interdisciplinary committees at the National Research Council where quantitative methodology is critical to many panels and committees, and in organizational forums that advance the role of statistics in the social sciences. Such external organizations need to view CSSS core and affiliated faculty as the natural ones to be seeking out for involvement in these enterprises.

Relations with Other Units

Among the initial goals of CSSS was the development of courses at the graduate and undergraduate levels, and it has been quite successful in this regard, as we describe below. Some of the courses already existed in other units and have been enhanced through connections to and support from CSSS; others were developed *ab initio*, with Center resources; and some appear only with a CSSS label. But ultimately courses are the province of departments and degree programs and thus we see the need to regularize arrangements for the instructional efforts of the CSSS that continue to lie at the core of its mission. While CSSS should continue to initiate innovative approaches to the teaching of statistics in the social sciences, such courses ultimately need to be endorsed and adopted by one or more departments or schools and be integrated into their curriculum and programs. CSSS can thus continue to play the role of catalyst, bringing together faculty with mutual interests and providing leadership for curricular innovation across the University.

The structural arrangements between CSSS and the Department of Statistics differ fundamentally than those between the Center and other social sciences units on campus, which led to a special memorandum of agreement spelling out various structural arrangements early in the life of CSSS. Despite the successes of CSSS, tensions exist when activities in the Center appear to conflict with other goals of the Department. The future of CSSS depends on a healthy relationship with the Department and an infusion of ideas and resources from it into the Center. In return, the Department clearly looks to benefit from the appointment of top-notch faculty who can contribute to its international reputation and the recruitment of top-notch students with interests at the interface with the social sciences.

Similarly, CSSS can improve its already good relationships with all the social science units through institutional arrangements facilitating regular, open interaction with the leadership of those units. We believe that regularly scheduled meetings with the heads of all the academic units and the CSSS will enable the CSSS to be more responsive to the research and instructional needs of those units, while facilitating its role as leader in enhancing quantitative methodology across the University.

The primary goals of the University Initiative Funded Center for Statistics and the Social Sciences are to elevate the social sciences at the University of Washington to a position of national prominence by fostering collaborative research between social scientists and statisticians and substantially increasing the quantitative sophistication of graduate and undergraduate students in the social sciences.

Graduate Training

CSSS has enhanced the statistical training for graduate students in a variety of ways. It has introduced several courses that have drawn social science as well as statistics graduate students. It has drawn some social science students directly into the CSSS as CSSS fellows where they interact informally and regularly with graduate students in statistics. It has funded a third statistics course in Sociology's two-course required statistics sequence for all graduate students (including a teaching assistant) that has better prepared sociology graduate students to take CSSS graduate statistics courses. In addition, CSSS faculty offer short courses to help social science students bridge any gap in language and conceptualization between department-offered courses and CSSS and statistics courses. All of these courses are positively evaluated by graduate students. It has organized the weekly seminar series that many social science graduate students regularly attend. Through its seed

grant program, it has supported research that involves social science graduate students, thereby enhancing the statistical sophistication of their training. There is no question in our minds that the CSSS has substantially improved the caliber of statistical training available to graduate students.

Undergraduate Training

The contribution of CSSS to increasing the sophistication of the statistical training of undergraduate students has been more modest. Two CSSS faculty have developed a three-course sequence of case-based undergraduate statistics courses that our committee found to be impressive. But these courses do not meet the statistics/research training requirements for majors in social science departments, so that the demand for them is not large. In addition, the staffing and administration of these courses stretches the capacity of the CSSS. Martina Morris is currently offering the first of the three courses as an unpaid overload. Given the impressive success of the CSSS in the other two domains, its most modest accomplishments with respect to undergraduate training do not detract from our overall positive assessment.

We believe, however, that given institutional support and appropriate resources, the CSSS could serve a catalytic role in genuinely enhancing the statistical literacy of undergraduates in ways that will be consequential for the overall caliber of their education, their access to and success in graduate and professional education, and their marketability. The CSSS already has in place most of the pieces necessary to do this. It has already begun to develop innovative approaches to these courses and it has the interdisciplinary orientation to foster their implementation across departments. The necessary changes for this to happen are (1) additional resources to permit the collaboration between statistics, CSSS, and the other units—if only in a coordinating and supervising capacity—the instruction of many more undergraduates (Professor Morris is currently teaching the first course in this sequence as an unpaid overload basis), and (2) support of this change by the social science departments that currently require undergraduate statistics of their majors. One possibility to usher in this training might be to connect completion of two or three of the courses in this sequence as part of a BS degree or make it part of honors programs within the social science departments. One way CSSS could enhance its contribution to undergraduate teaching and enrich the pool of African American and Hispanic students interested in pursuing training and research in quantitative social science would be to offer some version of CSSS 320 in the summer in an outreach program for members of disadvantaged groups. CSSS 320 is an engaging course that teaches statistical and research methods in the context of actual research studies that readily engage students' interest.

Ensuring the Success of Junior Faculty Members

CSSS faculty lines usually involve a joint appointment between Statistics and another department (e.g., sociology, social work, political science, etc.). The two departments each have responsibility for .25 FTE of the course assignments and CSSS controls the remaining .50 FTE. Joint appointments are often difficult for professors because they involve negotiating roles and responsibilities between three units that have different cultures. Junior faculty members have an additional concern because they must establish their identity and credibility within each department. This places junior faculty in an extremely difficult situation in understanding the outcomes that are needed to facilitate a favorable tenure and promotion decision. We recommend that appointments for junior faculty be made between CSSS and one department to make academic life more manageable for junior faculty. This recommendation should be implemented with the next junior faculty appointment. Given the proliferation of similar centers it seems likely that there will be competition for its junior faculty. Thus, it is important to retain UW's investment in them by creating optimal professional environments.

Consistent with this principle governing appointments, we recommend that the College of Arts and Sciences grant exceptions to the 'one office' rule. While we understand the rationale for this policy,

this rule places an undue burden on junior faculty members because it prevents them from establishing a presence in both CSSS and an academic department. If junior faculty members do not have office space in a department, they can become marginalized within the department, and this could place their retention or promotion in jeopardy.

Space

As the CSSS looks ahead to realizing its potential, space will be a problem. In the short run, to facilitate interaction among all members of the CSSS, offices should be contiguous. Currently, all but one of the CSSS offices is located on one floor in Padelford Hall. The exception is an office located below the other CSSS offices and within the physical space of the English Department. The College could assist CSSS in switching office space with the English Department to create contiguous office spaces within the Center. Beyond this specific issue, a space problem remains that the University will need to address as CSSS grows, if it is to achieve its ambitious agenda.

Flexible Use of Resources

Currently a distinction exists between faculty appointed initially with CSSS resources and other faculty who are affiliated with the Center. As junior faculty interests evolve and the Center's agenda develops, a more flexible approach to the support of faculty lines is in the long-term interests of CSSS and the University. It should be possible to swap and alter faculty lines between CSSS and other units through joint decisions with those units.

For example, one-quarter research sabbaticals at CSSS would permit social science faculty to dedicate a block of time to the kind of collaborative, statistically cutting-edge research that the seed grants support. The presence of a changing pool of social scientists at CSSS would both facilitate future collaboration and provide participating faculty with the opportunity to learn about other statistical techniques that can enhance both their teaching and research. This will ensure the best use of University resources for this fundamentally collaborative and ground-breaking enterprise.

Summary and Recommendations

The CSSS is unique among American universities, bringing together statisticians and quantitatively oriented methodologists from across the social sciences and fostering cutting-edge research and interdisciplinary approaches to the teaching of quantitative methods. Interviews with students, post-doctoral fellows, affiliated faculty, social sciences department chairs, and representatives from various deans' offices make clear that CSSS is an unqualified success, fulfilling the broader set of goals established by the University of Washington for UIFs. We recommend that the University continue its support of CSSS on an on-going basis. In this on-going role we would expect it to build on the successes it has achieved to date, including the seminar series and the seed grant program, both of which stimulate community and interdisciplinary research.

To take CSSS to the next level, we see the need to address several issues that we discussed above.

1. The organizational arrangements with the academic units whose faculty and students are engaged in CSSS.
2. The structure of appointments of junior faculty.
3. Flexibility in the deployment of CSSS resources to achieve its goals.
4. Expand the base of involvement in graduate training.
5. Work with the units to extend and coordinate undergraduate training in statistics.
6. Provide suitable space for CSSS to carry out this expanded mission.