

**Undergraduate Research Working Group
Gustavus Adolphus College, 2010-2011
Final report and recommendations**

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Commission Gustavus 150 and the Academic Strategic Plan call for strengthening and expanding our student research¹ programs, opportunities, and support. The Undergraduate Research Working Group met during the academic year 2010-2011 to discuss and gather information about the specific goals and needs of Gustavus Adolphus College in the area of student research, scholarship, and creative work.

In our discussions, we used the reports from Commission Gustavus 150, the Academic Strategic plan, and Department, Program, and Center strategic plans. We conducted a survey of department chairs and program and center directors to ask specific questions regarding ongoing activities and goals relating to student research. Three members of the working group (Kaiser, Russell, and Torres) attended a workshop sponsored by the Council on Undergraduate Research (CUR) about Institutionalizing Undergraduate research. After gathering information about goals and needs from across campus, we shared our findings with and sought feedback from the faculty at a Teachers Talking lunch and at a Department Chairs and Program Directors meeting.

As part of our work, we developed a definition of student research and a mission statement for student research at Gustavus.

Definition²:

Student research is student-driven, faculty-mentored inquiry, scholarly investigation, and/or creative activity. Student research or creative projects can occur in the form of student/faculty collaborations, independent student work, class assignments, off-campus projects, or co-curricular projects. The student researchers' work may contribute to outcomes including, but not limited to, independent or collaborative analytical or critical writing, oral presentations, poster presentations, products such as surveys or software, works of visual art, compilations of scholarship, exhibits, musical compositions, choreographed dance pieces, plays, performances, peer-reviewed publication, books, works of literary art, patents, or works of audio/visual art.

¹ In this document, the term "student research" will be used for brevity, but in each instance we refer to student and student/faculty research, scholarship, and creative work.

² Modified with permission from the definition crafted by the Arts and Humanities Division of the Council on Undergraduate Research.

Whatever the research product, its value is generally weighed by standards specific to experts in the field.

Mission:

The purpose of student research at Gustavus Adolphus College is to enhance and deepen liberal learning, independent and critical thought, and creative process. Participating in research gives students access to the larger scholarly conversations. By integrating curricular and co-curricular research experiences throughout all four years of a Liberal Arts Education, we ensure students initiate and participate in specific disciplinary practices both in and out of their major fields of study, thereby creating broader intellectual engagement and enhancing interdisciplinary connections.

Recommendations:

Our overall recommendations are that in order to develop a truly strong UR program, both students and faculty must have the support to be inspired and become interested in the work, develop ideas and specific plans, conduct the work, and disseminate their findings. The potential for increased student learning through expanding support for student research is great.

In Spring 2010, the faculty endorsed the academic strategic plan developed by the Provost's Office and the Faculty Senate. Several benchmarks were identified under Goal A.1: Student and Student/Faculty Research, Scholarship, and Creativity (see Appendix). We agree wholeheartedly with the recommendations made in this strategic plan. In our work, we focused particularly on those recommendations relating to direct support of student research and curriculum development. We have developed action plans for these recommendations and have added some additional recommendations based on our research.

Recommendation 1: Support students and faculty to be inspired and develop ideas for student research projects and integration of student research into the curriculum.

Action Plan 1.1

Create an "inspiration fund" to support student experiences that inspire involvement in research and/or specific project ideas. Students could apply to use funds to visit professional conferences, exhibits, or performances in a field of interest. Faculty could apply to use these funds to take a group of students to a professional conference, exhibit, or performance, to bring to campus a speaker, exhibit, or performance, to organize a discussion or reading group, or similar activities designed to inspire students to undertake independent research projects.

Action Plan 1.2³

Create a development fund to support faculty and staff who are creating or improving programs that provide curricular or co-curricular research opportunities for students. These funds could be used for summer stipends to spend time developing course materials, to develop a new community research project, to travel to a site to design/develop a new research project, to travel

³ This action plan partly addresses the Academic Strategic Plan goal A.1, bullet points 1 and 2 of the "three to five years" benchmarks.

to a site that students will later visit, to attend conferences or workshops in the area of student research or in an area that will support future research, to buy course, lab, or studio materials.

Action Plan 1.3

Support newly hired faculty with start-up packages that are competitive for their discipline. Support should include necessary equipment, software, supplies, travel to do research, photocopies, dissemination costs, and stipends for student collaborators in the first summer or two.

Action Plan 1.4

Engage departments and programs in conversations about how students develop research skills both within the major and across the entire curriculum, with an eye toward being more intentional in developing these skills in undergraduates. A ‘research across the curriculum’ initiative would ensure that all students are equipped to undertake sophisticated research.

Recommendation 2: Expand support for summer research, with the goal of internal support for 10-week research projects for at least 25 students per summer.⁴

Action Plan 2.1

Expand the Presidential Faculty/Student Collaboration Grants to support more students each year and to support their work more fully. We suggest an initial goal of 10 students per summer. Clarify the selection criteria and goals of the program. Increase support for research expenses in this program (recently about \$500 per project) up to \$1000 per project where the need can be justified. Include support for dissemination (publication costs and/or expenses for both the faculty and student to travel to give conference presentations) within the grant.

Action Plan 2.2

Create a summer research fund for students who are doing summer research either on or off campus that is not necessarily in close collaboration with a Gustavus faculty member. We suggest an initial goal of supporting 15 students per summer. Budgets should support the following, if warranted for the particular project (and if not already supported by another institution): stipend and benefits for the student, housing (if on the Gustavus campus), a stipend for a Gustavus faculty mentor, supplies, travel to the research site(s), copies, dissemination expenses, etc. This fund should be available to students who have just graduated from Gustavus, at least in special cases where the student became interested in research late in his/her career.

Action Plan 2.3

Create and maintain a vibrant academic atmosphere on campus in the summer for students. Current programming in the summer focuses on opportunities for presentations and community-building for students. This programming is quite successful, but has been heavily underwritten by grants in the science division, along with some support from the Kendall Center. Funds are needed to ensure that these activities continue.

⁴ Parts of this recommendation correspond to the Academic Strategic Plan goal A.1, bullet point 2 of the “one to three years” benchmarks.

Action Plan 2.4

Elevate the academic atmosphere on campus for faculty. Many academic buildings are currently desolate in the summer, which can leave faculty less interested in spending the summer on campus working with a research student. A fund to support engaging activities for faculty during the summer (book discussion groups, Shop Talk, etc) could help make the campus a more welcoming and intellectually stimulating environment for faculty mentors.

Action Plan 2.5

Increase support resources for students and faculty in the summer. During the summer, administrative support for research and student support in general (eg, counseling services, residential life programming) are drastically reduced. This can have a negative effect on productivity and morale. For effective research during the summer, it is essential to ensure the library and library staff are properly funded. A shared secretary would be of great help to faculty in departments without summer secretarial support. Finally, to support a community of student researchers, it would be wise to consider some summer hours for student services such as the counseling center.

Recommendation 3: Create a substantial fund to help underwrite student research that takes place during the academic year.⁵

Action Plan 3.1

Create a fund to which students can apply for funds to support research expenses during the academic year. The Sigma Xi chapter on campus has an excellent model for this. Funds should be available to all Gustavus students conducting research projects with a faculty mentor. Eligible expenses would include supplies, photocopies, travel to research sites, survey incentives, etc.

Action Plan 3.2

Explore the feasibility of providing a limited number of work-study positions in which students could be paid to do research with a Gustavus faculty member during the academic year. This type of approach can help make academic-year research opportunities more accessible to students who must work to support themselves and/or their families.

Action Plan 3.3

We expect that Departments and Programs will support courses with student research components through their normal budgets. We note, however, that some such courses may have somewhat larger budget needs than other courses, and urge the administration to consider this when deciding department and program budgets.

Action Plan 3.4

Explore strategies to help faculty manage the supervision of student research during the academic year. In many departments on campus, student research outside the classroom requires substantial work by the faculty mentor on top of his/her normal teaching, advising, research, and service duties. We encourage the College to urgently consider how to make this kind of work

⁵ This recommendation corresponds to the Academic Strategic Plan goal A.1, bullet point 1 of the “one to three years” benchmarks.

more sustainable. One strategy would be to find a way to wrap student research mentoring into a faculty member's regular teaching load.

Recommendation 4: Celebrate and share student research on campus. Support the dissemination of student research beyond campus in publications, exhibits, performances, and conferences.

Action Plan 4.1⁶

Expand support for student conference travel, both in quantity and extent of support and extend this fund to include support for all kinds of dissemination of student research. Conference travel is expected to remain the major usage of this fund. Kaiser and Russell have tracked use of the student conference travel fund in recent years and found that most requests of this fund are for small amounts of money, but a limited number of students attend national or international conferences for which the current \$500 maximum is inadequate. Include poster printing costs. This fund should be open to recent graduates who are presenting work completed as a Gustavus student. Offer some support for faculty to attend professional conferences with their students in cases where they would not otherwise attend the conference.

Action Plan 4.2

Continue to fully fund the Celebration of Creative Inquiry and other campus-wide celebrations of student research. For example, a Senior Week celebration of graduating seniors' work has been suggested.

Action Plan 4.3

Recognize faculty who do excellent work engaging our students in research. Tenure and promotion guidelines should be updated to clarify that scholarship done in collaboration with students is part of a faculty member's scholarship. Create an award for faculty who have an excellent track record of engaging students in research over some time and/or for particular faculty/student collaborations that have had excellent outcomes.

Recommendation 5: Create a structure that will allow effective oversight of these programs, continual strategic planning, and additional support to the campus.

Action Plan 5.1

We recommend the creation of a Director of Student Research position. Significant expansion of our student research program will create additional administrative duties. The Kendall Center is perhaps a natural home for student research funds and programming, but the work required to maintain these budgets and give adequate attention to planning and growth is beyond the scope of the Faculty Associate for Undergraduate Research position. {need to discuss further Margaret to clarify the FA goals} The budgets could perhaps be managed by the Dean of Academic Programs, but this office already has full-time responsibilities and we believe that a Director of Student Research whose focus is dedicated to student research will be best able to maintain a vibrant student research program that can grow and adapt with the College's needs over time.

⁶ This part of the recommendation corresponds to the Academic Strategic Plan goal A.1, bullet point 3 of the "one to three years" benchmarks.

Beyond these necessities, a Director could further enrich the student research climate on campus by providing additional support. It may be appropriate for the Director to advise students seeking research opportunities on- or off-campus through the production of advising materials and direct advising contact. A Director could engage the campus in the exploration of the curriculum development goals in the Strategic Plan Goal A.1, on the “Three to five years” list, and a possible “research across the curriculum” initiative.

We envision that this would be at least a half-time position, although we can easily see a full-time workload for the Director. This person might be drawn from the faculty in three-year terms or hired directly.

Action Plan 5.2

Create a student research committee or advisory board to ensure that diverse views from across campus are represented as student research programs grow and evolve.

Action Plan 5.3

Ensure that adequate administrative support is in place to support these expanded initiatives and to support the Director in his/her work.

Recommendation 6: Support other strategic planning needs that ultimately support student research.

Action Plan 6.1

We stress that a strong library and library collection are essential to conducting research. The library has been forced to cut back on periodical subscriptions in recent years; reinstating and increasing the periodical budget is crucial to conducting current research on this campus. As journal costs continue to skyrocket, current allocations continue to fall further and further behind, thus negatively impacting the ability of students to adequately conduct research. Funds for library acquisitions have likewise been unstable; funds are needed to not only stabilize library acquisitions, but to make up for multiple years of falling behind. We enthusiastically support the library’s digital archive initiative, which will serve as both a repository of student research and a tool to showcase the work of our students.

Action Plan 6.2

In our surveys and in reading strategic plans, some departments and programs noted unmet needs for optimal student research involvement. We agree that in some cases, expanded or renovated spaces, additional faculty or staff, and/or equipment or software purchases may be crucial to creating a sustainable student research environment. We encourage support for departments who wish to host regional undergraduate research conferences to campus (like Political Science and Geography have in recent years).

Other recommendations that I could not fit in to the above:

Incentives for sustained work

Simplifying multicomponent projects/initiatives by not requiring multiple applications to different “pots” of money—also reducing reporting and paperwork.

Academic Strategic plan goal A.1.

Student and Student/Faculty Research, Scholarship, and Creativity

To ensure that our students engage in original and authentic research, scholarship, and/or creative pursuits, shared with the Gustavus community and beyond, by establishing and sustaining financial resources to support these endeavors.

Rationale

As students and faculty work collaboratively on scholarly projects of significant rigor, they form productive mentoring relationships and develop a capacity and passion for lifelong learning. Opportunities for independent scholarship enhance students' understanding, independence, and sophistication. As students share their work both within the Gustavus community and beyond, we create a more vibrant intellectual culture among all members of the campus community.

Timeline and Benchmarks

YEAR ONE

- The Dean of Academic Programs and the Kendall Center Faculty Associate for Undergraduate Research will coordinate the assessment of the effectiveness of current undergraduate scholarly programs at Gustavus and will clarify the role of and goals for the Kendall Center in supporting this work.
- The Dean of Academic Programs and the Kendall Center Faculty Associate for Undergraduate Research will work together to establish criteria for distributing college funds to students traveling to conferences to present their work and will track applications for this funding.

ONE TO THREE YEARS

- A substantial fund will be created to help underwrite student and student/faculty scholarly projects that take place during the academic year.
- The amount of money for student summer stipends will be increased in order to provide competitive, ten-week student summer stipends for scholarly pursuit for at least 25 students.
- The amount of money budgeted for student travel to present their scholarship will be increased to adequately fund up to an additional 50 students per year attending national conferences.
- The Fellowships Office, working together with the Louis Stokes Alliances for Minority Partnership (LSAMP) coordinator, the Career Center, and department chairs will, where appropriate, establish mentoring programs for students applying to post-graduate fellowships and off-campus summer research experiences such as NSF-REU.

THREE TO FIVE YEARS

- Departments will engage students in high-order, integrated thinking skills within their majors/minors as a means of developing fundamental research skills earlier in their curricula. These initiatives should strive to have the presentation of a tangible scholarly outcome as a primary product.
- Faculty in related departments will explore and implement ways to coordinate curricula to enable students to use fundamental skills that extend across disciplinary lines.