Part 4. Facilitating Student Achievement: Mentored Advanced Projects (MAPs)

The idea of Mentored Advanced Projects originated in the Student/Faculty Research Workshop held during the summer of 1998, but its larger tenets and goals, we believe, emerge from campus-wide discussions that have been ongoing for some time. We began our discussions with a simple, yet potentially revolutionary, thesis: 
*every student at Grinnell College should have the opportunity to discover or create something new and significant.* Put another way, every student should have the opportunity to be what we consider ourselves: scholars who have mastered a certain body of material and now bring our own unique ideas and perspectives to that material as we create from it something new. To this end, we propose a program of **Mentored Advanced Projects (MAPs)** as a means of structuring such opportunities to the benefit of both students and faculty.

A. The Present Situation

We recognize that mentored individual learning in a variety of forms has become an important experience for increasing numbers of Grinnell students, and that this model of teaching and learning has broad benefits for the College. The pride the College takes in faculty/student collaboration in its admissions literature is evidence of a shared sense of these benefits. The scope of these activities is fairly broad, involving the full range of research and other types of educational experiences. Most of these activities are awarded student credit for "completed" work along with, in certain cases, a stipend. The existing opportunities for mentored independent learning are courses with the following designations:

- Directed Summer Research (399s)
- Independent Study (397s)
- Internship (397s)
- Guided Reading (297s)
- Senior Thesis Project (490s)
- Plus-2 (in association with a regular course offering)
- Study Tours

Most, if not all, faculty sponsor students in one or more of these activities at the present time. We discuss below what we believe to be some of the many advantages that will be secured for the College as a whole, and particularly for our students, in fully developing and implementing these resources. But we also have come to recognize that while there is a commitment *in principle* to the individual learning opportunities afforded by existing programs, there has been no systematic approach to developing these opportunities as a central component of our offerings to be made available for each and every student.

The costs to students and to faculty of the current haphazard approach to mentored independent learning have been substantial. For the most part this individual teaching is not accounted for in faculty’s teaching load. The faculty has had to make time for this important work out of the few spare hours that can be secured in the course of a semester. Thus, from the start, what should be one of the most important and focused teaching activities we as faculty engage in is necessarily fragmented and drained of much of its needed energy and focus. Moreover, there is no formal evaluation by students of these teaching activities unlike the end-of-course evaluations done in each formal course. This means that student input from what is possibly the most intense form of teaching is not available when a faculty member is considered for promotion or tenure. The
message of the College to students and faculty alike is that mentored independent learning does not merit the same institutional recognition as do conventional courses.

This reality means that faculty can mentor far fewer students than we might like and must turn away students who wish to do mentored projects. In addition, under the current system faculty must devote less time and energy to those projects they do mentor than many would like. This, we believe very strongly, is a situation that the College perpetuates at great cost to an invaluable learning experience for our students, to the teaching lives of our faculty, and to the general level of prestige accorded the College nationally. We therefore propose the development of a new Mentored Advanced Project program at Grinnell College. This is at once a radical proposal for a major redeployment of College resources and priorities on the institutional level, even as it is at the same time a very modest proposal: all we are asking is to do what we are already doing, but to be given the committed resources to be able to do it right. Properly developed, mentored individual learning will serve our most fundamental goals as teachers by providing each student with a unique opportunity for individual discovery, even as it serves our ambitions for the College by providing a dynamic and original program by which we can communicate what it is that makes Grinnell a unique and valuable learning environment.

B. The Basics of a MAP Program

Our goal is the expansion of the opportunities provided by the College for students to undertake original work as a central learning opportunity. Toward this end, and as an essential ingredient in achieving this goal, we are proposing the creation of a Mentored Advanced Project (MAP) as an opportunity to be afforded each student. The MAP will be a goal that each student will be asked to consider as an option and will not to be required. The MAP will provide a chance for each student to develop a mentored independent learning experience beyond that usually afforded a traditional one-semester independent project. This extended experience will permit each student to bring the project to a level at which it can be published and presented. An archivable written product as well as a public presentation will be requirements for all MAP scholars.

The Elements of a Mentored Advanced Project

The MAP is in no way conceived of as replacing the importance of a traditional (non-MAP) internship or independent study or other individual learning experience. Instead, we would define the full range of mentored independent learning as falling under the umbrella of a Mentored Independent Learning Program in order to integrate the College’s commitment to this mode of inquiry and teaching. Every mentored independent project is a potential building block or cornerstone of a presentable and publishable project: a MAP for the future.

We propose that the Mentored Advanced Project have the following characteristics:

(a) The MAP is student scholarship of a high order, but broadly defined. It may involve any of Boyer’s four types of scholarship:

- The Scholarship of Discovery: dealing with new knowledge and new ideas. This is the type of work normally associated with scholarship or research by college faculty.

- The Scholarship of Integration: drawing new insights or meaning out of the discoveries produced by research specialists. This may be interdisciplinary, cross-disciplinary, or cross-specialty work.

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- The Scholarship of Application: bringing the insights of research to bear on social, organizational, or environmental problems. Sometimes this is thought of as policy research or applied research.

- The Scholarship of Teaching: transforming and extending knowledge as well as transmitting it.

(b) The MAP may be initiated by either a student or a faculty member.

c) The MAP involves mastering some subject matter. This subject matter may be within a student's major, in another discipline, or across disciplines.

d) The MAP involves the discovery of something original or the development of a body of knowledge in an original direction.

e) The results of the MAP activity must be made public beyond the bounds of a class.

(f) The final product of the MAP must be archivable in an appropriate medium.

The Logistics

The MAP Proposal MAP projects can take a wide range of forms, and it is not the goal of this proposal to limit the possible manifestations they might take. We offer a range of examples of MAP projects in Appendix H, attached to this proposal. Clearly a successful Mentored Advanced Project would require careful planning and preparation. To facilitate this planning, students will be required to submit a written MAP proposal no earlier than the beginning of the second semester of the sophomore year and no later than the last week of the junior year. This window of opportunity is designed to ensure that students are adequately prepared to undertake the MAP, and that their work begins in a timely manner that allows public presentation of the final product of the MAP. Proposals for MAP Projects must be approved by two faculty members, including the faculty mentor.

Course Enrollment and Grading for the MAP The MAP is a creative project, not a specific kind of teaching/learning unit. For this reason, we do not advocate creation of a new course rubric for the MAP. Instead, a student proposing to do a MAP would enroll in one, or a series, of the existing array of independent courses; this is illustrated in the figure following this page. These courses will be graded and credit awarded in the usual fashion. After a public presentation of a project of sufficiently high quality, that project will be recognized with a specific designation on the student’s academic transcript and will be listed prominently in the commencement program.

Presentation of the MAP Product Dissemination is an essential component of good scholarship, and it is a distinguishing feature of the MAP. We suggest a "Research Week" be set established toward the end of each semester. During the Research Week, the events calendar would be reserved for presentations of student and student/faculty research and creative products. Poster papers would be a good medium for efficient presentation of results in some cases; in other cases symposia or performances would be scheduled for focused presentations within areas of interest. In some cases, as in MAP projects that are also serving as senior theses within a given major, the department in question will handle the scheduling the presentation component.

The Research Week will also represent the College’s commitment to student/faculty research, and it will provide a showcase of College achievement in which the entire community can share pride. Research Week might plausibly be scheduled to coincide with visits by prospective students, thereby providing a model of what our students have accomplished and an invaluable advertisement of the strength of our unique program in faculty/student collaboration.

Archiving of the MAP Product The final requirement of a MAP is that there be some product that can be archived by the College. This product will often be a paper, but it might also be a video or
audio tape of a recital or other artistic presentation, a set of lecture notes or outlines for a teaching product, or a portfolio of some sort displaying creative works or the product of teaching experience. One possibility for archiving many types of materials is a Grinnell Journal, produced and published by the College in association with the Research Week events.

Why MAP?

Our goal in proposing the MAP as the cornerstone of the College's commitment to a foundation in student-faculty research is to help orient the campus culture toward a focus on student mastery, achievement, responsibility, and follow-through. We believe that the development of a body of student research brought to the level expected of MAP scholars will have a range of positive effects:

- the MAP will provide a strong foundation in student research at the College that we can use to help motivate structure and integration in students’ academic programs;
- the MAP will help develop a stronger commitment to the value of research – student and faculty alike, and in dialog with each other – at a liberal arts institution;
- the MAP will provide students with a fuller understanding of the excitement and the responsibilities of individual discovery and teaching by providing them opportunities beyond those afforded by a normal classroom or laboratory setting;
- the MAP will teach students skills they can carry beyond Grinnell into any endeavor;
- the MAP will allow faculty and students to collaborate in developing new and underrepresented areas of inquiry in our curriculum;
- the MAP will provide the institution with a concrete archive of student accomplishment in the MAP library.

We envision the Mentored Advanced Project as encouraging the responsibility, focus, independence, and the hunger for excellence we desire in all our students. By requiring the MAP scholars to bring their work to completion and to find modes of communicating (teaching) that will enrich the community as a whole, the MAP scholars program will enrich the scholarly and intellectual life of the community as a whole. We have every confidence that within a few years of the implementation of this program that it will be the goal not of an elite core of extremely motivated students, but of a broad range of Grinnell College’s students.

C. MAP and the Fund for Excellence

The MAP program is only feasible with appropriate recognition of faculty teaching activities and appropriate staffing support.

Mentoring as Teaching
It is essential that the substantial faculty investment of time and energy in mentoring all forms of independent work be accounted for by the College as a valuable form of teaching. A faculty workload accounting system of the kind outlined in this proposal provides the recognition and support necessary for the MAP proposal to succeed.

Staffing Implications for the MAP program
In the initial phases of the MAP program, no increases in faculty size are required. The new workload accounting system will allow us to shape the curriculum to meet our needs. By keeping the system under constant review we may find that it will become necessary to add a few faculty to the hardest pressed departments within the next 2 to 5 years. This approach has the virtue of not requiring an immediate commitment to a particular level of staffing. A phased increase in the number of faculty is anticipated, if the demand grows as we expect it to.

Support Staff
Implementation of the MAP proposal will require the hiring of a Mentored Advanced Projects Coordinator. The MAP Coordinator will be responsible for:

- editing an inventory listing the research and research collaboration interests of the faculty interested in mentoring student MAP projects. The booklet should also list the prerequisite course work that the mentor conceives of as background for a MAP. (This inventory should also be a valuable tool for the admission office)
- coordinating the fall and spring semester research presentations
- advising students and helping them develop materials (slides, posters, etc.) for presentations on campus or at conferences
- archiving the finished products.

The MAP Coordinator must have the computer and other equipment necessary for carrying out this activity, as well as access to other support staff and campus resources.

**MAP Assessment.**

The assessment of the MAP program will focus on the following goals:

- Enhance opportunities for independent mentoring
- Enhance student scholarly achievement
- Increase public recognition of mentored student scholarship
- Reward faculty for a wider range of mentoring activities
- Increase participation of the faculty in independent mentoring

These goals are key to a change in college culture that builds on our long-term commitment to a variety of forms of individual mentoring, starting with the first year tutorial. Specifically, the goals are components of a culture that emphasizes mentoring for achievement in longer-term projects.

**Enhance opportunities for independent mentoring**

Baseline data on the number, type and funding of mentored independent learning projects carried out in the current year will be gathered. Success of the MAP program will be indicated by an increase in number, types (such as study tours and field seminars), and funding of mentored independent learning projects. MILE funding should exceed the current total from all sources.

**Enhance student scholarly achievement**

Baseline data on student on and off-campus public presentations and publications can be assembled for the current year. Success of the MAP program will be indicated by an increase in the number of completed MAPs and on and off-campus public presentations and publications. Outside scholars from colleges that emphasize independent student scholarship will be invited to the fall and spring semester "scholarship weeks" to view and comment on the quality of the public presentations and archived projects. In addition, employers and graduate schools can be asked if a student’s having completed a MAP influenced their decision to hire/admit that student.

**Increased public recognition of mentored student scholarship**

Baseline data on media coverage of mentored student scholarship can be assembled by the Public Relations Office for the current year. Success of the program will be indicated by increased media coverage of mentored student scholarship and by increasing awareness of these activities on the part of prospectives and new students. Prospective students and/or new students can be asked about their awareness of mentored student scholarship. The current survey given to first-year students (CIRP) has a question under “reasons that influenced your decision to attend this college” reading “This college offers special education programs.” Grinnell tends to score comparatively low on this item (confirming Kane’s findings); our score should improve if the MAP program is advertised well.

**Reward faculty for a wider range of mentoring activities.**

Baseline data can be assembled from current and previous budget committees/executive councils on the degree to which mentoring of independents was taken into account in salary
recommendations and promotion and tenure decisions. Success of the program will be indicated by the establishment of a faculty workload accounting system that counts independent mentoring and by increased attention of the budget committee/executive councils to independent mentoring in salary recommendations and promotion and tenure decisions.

**Wider participation of the faculty in independent mentoring**

Baseline data can be established retrospectively for several years on the percentage of the faculty that has mentored independent learning. Success in the program will be indicated by an increase in that percentage over several years of the program. In addition, several questions about faculty experience in mentoring independent student work could be included in a faculty survey to be conducted this fall. These data would provide information to be compared to the results of a second survey several years from now.

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