




L E W I S & C L A R K
C O L L E G E

OFFICE OF THE PRESIDENT

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TO: Arts and Sciences Faculty

FROM: Michael Mooney 

SUBJECT: Commission on Teaching

Herewith, in draft, is the final report of the Commission on Teaching, chaired by Professor Tom Schoeneman. I hope you will read it with the same interest that I have and that you will take the time to tell Tom and his fellow commissioners of any suggestions you have for its improvement.

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Commission on Teaching

Draft Report
April 29, 2002

President Mooney created the Commission on Teaching in the Fall of 2000. He charged the Commission to define the elements of good teaching at Lewis & Clark College, to explore and classify the varied teaching demands required by our curriculum, and to recommend ways to evaluate and enhance such teaching. The original members of the Commission included Tom Schoeneman as Chair, Ken Clifton, Chana Cox, Bob Goldman, Jim Grant, Diane Nelson, David Savage, Stephen Weeks, and Evan Williams. Micha Grudin served as liaison to the Writing and Speaking Committee. After several members left for sabbaticals, Barb Balko joined the Commission in the fall of 2001.

The Commission began with the assumption of a very high standard of teaching at the College, an assumption that the work of the Commission continually affirmed. For the most part, the Commission concerned itself with the task of identifying structures of support and recognition for good teaching. At the same time, we acknowledge that teaching is a complex and sometimes lonely enterprise. It demands continual attentiveness and renewal. It demands a sense of connection with others engaged in the same work, a host of resources available to the individual instructor, and opportunities for additional learning. Like any art form or scholarly pursuit, teaching requires innovation and self-reflection to remain healthy. It is the hope of the Commission that this report will contribute to a discussion of the most appropriate means to nurture teaching and learning at the College.

The first task was to divide the charge into specific areas of inquiry. A series of meetings in the Fall of 2000 produced the following focus areas and focus questions, which were then parceled out to the various members of the Commission for study.

1. Definition and Scope of Teaching (David Savage, Stephen Weeks, Diane Nelson)
 - Are there generally useful definitions of what constitutes fine teaching?
 - What pedagogical practices can be identified as useful and relevant to the art of liberal arts teaching?
1. Support and Development (Bob Goldman, Tom Schoeneman)
 - How can we support the development of good teaching?
 - What are the ways of providing more collegial support for teaching?
 - Is our teaching environment one that encourages good teaching?
 - How can we help faculty learn about and apply new technologies to their teaching?
1. Advising (Jim Grant, Evan Williams)
 - How can we enhance and support student advising?
1. Interface between Scholarship and Teaching (Ken Clifton, Barb Balko)
 - How is research related to good teaching?
 - How do we engage students in research?
1. Evaluating Documenting, and Honoring Good Teaching (Evan Williams, Tom Schoeneman)
 - How can we evaluate and document the results of teaching and learn from and honor those who do it best?

Although the Commission's discussions were wide-ranging, these focus groups and their research provide the structure for this report.

During calendar year 2001, the focus groups explored a wide variety of resources: the practices of other colleges, interviews with current faculty, colleagues' responses to e-mail requests for information, advising surveys, educational research, and books by experts in the field. Part of the task was to balance recommendations from the experts with an appreciation of our unique institutional context. In addition, we tried to balance recommendations that would benefit teaching and learning at the College broadly considered with the specific needs of individual departments and disciplines.

Several topics have been particularly prominent throughout the deliberations of the Commission. The first concerns the issue of pre-major advising and its connection to good teaching at the College and to the question of retention. The second is whether support for teaching and learning should be institutionalized in the form of a teaching/learning center. The third concerns the most appropriate means of identifying, evaluating and honoring good teaching. The Commission has made recommendations on all of these issues, but they cannot be simply resolved. Our role has been to try to shape the debate and to outline clearly the sorts of choices that confront us.

The Spring of 2002 was given over to the writing of reports based upon research and discussion, the review of those reports, and the construction of a draft document. We hope that the document that follows is regarded as a draft report in two ways: as a preliminary report of the Commission, subject to revision after feedback from interested parties, and as the beginning of an ongoing process of teaching development at the College.

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I. What Is Good Teaching?

Part of the Commission's charge was to define the elements of good teaching at Lewis & Clark. That turned out to be a rather elusive task. In order to gain some purchase on the question we interviewed members of the faculty, asked students what they experienced as effective teaching, and we read some books and reports. As we took in this information it became clear very quickly that there was not a single definition to be had; instead there existed in the literature and in practice at the College a very wide range of teaching techniques that produced satisfying results. This variety seems to be a result of a keen sensitivity of faculty to the variety of student learning styles in any one classroom and a lot of experimenting to find out what works. Students, too, gave us a myriad of answers when we asked them to recall the best moments of their college learning experience. It was clear, then, that we as a Commission would not come forward with any one model for good teaching at the College but instead would try to articulate some of what we learned about what students and faculty value in the teaching-learning relationship. We would then make recommendations to the community about how to create an environment that enhances that learning at all levels and circumstances.

While variety was the keynote of our findings we did not despair altogether of finding definitions. Certain themes continued to surface in our interviews and reading that suggested some fundamentals of good teaching—some features that seem in almost all circumstances to be valued by students and faculty.

Respecting Students

Faculty at Lewis & Clark seem to have moved away from the model of teacher-as-authority to something less formal, implying a less rigid hierarchy and firm division between teacher and student. As one member of the science faculty said, "What works for me is teaching **UNLIKE** the way I was taught through lecture and regurgitation." To do this requires paying attention to students as persons and learners—knowing their names, being sensitive to their different learning styles and levels of preparation. One faculty member said she had taken decades to learn that what worked best was allowing students to set their own agenda. With the Socratic method or Power Point presentations, several said, what they were really doing is expecting swallowing and regurgitation, not allowing interpretation or working through. Making lectures "interruptable" was seen as important, as well as early evaluations within the first 3-4 weeks. "Students say they can tell that I care that they learn the material. That I'm willing to try different methods to get it through." These findings were powerfully voiced during the final Presidential Forum of 2000-2001 when President Mooney pushed the faculty to recall their best teaching moments. One after another people told wonderful stories about the times they really let go and allowed the students to run with the class. Over and over we heard about a surge of creativity, a powerful teaching moment when, by trusting the students, they all learned something new. The stories we heard in interviews and in the Forum reiterate the centrality of trust and respect in creating a learning environment in which everyone is invested and brings the best they have to the collective project.

One important aspect of respecting students is to understand and appreciate the variety of learning styles and skill levels that appear in our classrooms. We found our colleagues as varied in the methods they use in the classroom as the literature suggests they should be, and all commented on the challenge they face as teachers as a consequence of this student variety. One of our colleagues consciously structures each class so that it includes lecture, discussion, video clips, and props—varied teaching strategies for varied learning styles.

Teaching and Learning as Collaboration

We discovered that there are many strategies for getting to know one's students and for assessing their performance and progress in class and for making mid-course corrections during the term. What was crucial was effective communication about the teaching and learning process. Faculty need to know their students and listen to them; students need to be able to communicate with their teachers; students need to be able to learn from each other, and faculty need to share with each other what they know as teachers. The American Association of Higher Education's Joint Task Force on Student Learning of 1998 couched their whole report in terms of shared responsibility among all participants in order to produce an effective learning environment. They called their report *Powerful Partnerships: A Shared Responsibility for Learning* (Appendix 1). What these professionals conclude resonates well with what we heard from our own students and faculty.

While we heard many voices valuing collaboration and cooperation, we also became alert to what a strange, protean thing teaching is. It is made anew each time students and teacher meet in the classroom, and yet it is far more than the time spent in that room. It is in constant flux. This means each individual teacher has less control over it than she might want to think. Because teaching is intersubjective, what worked last term may not work this term, what felt "just right" last week feels horrifyingly "off" this week. But teaching is also a strangely private, even solitary activity—the long, concentrating hours of preparing syllabi, lectures, assignments, exams, and grading. The classroom itself, once it's constituted, is also in many ways its own world. Too often the teacher is all alone with the students and the specific dynamics of that classroom, often without a clear sense of where to go if things aren't working, or whether this might be held against him when he is evaluated. One interviewee even said, "I feel very alone trying to deal with all this. The way I teach takes a lot of time, I can't always deal with the demands of the students and my own questions about teaching." It may be this contradictory and simultaneous public/private thing, this complex culture, that makes the classroom such an ambivalent place, one where we feel both pride in accomplishment and the joy of working with and learning from students as well as gnawing insecurity, frustration, and at times feeling overwhelmed by demands. As teachers we are putting ourselves on the line, performing for and with our students, but also making a self there. Supporting good teaching means treading very carefully through these imponderabilia.

We heard a good deal of sentiment among faculty for more opportunities to share teaching experiences. A number of interviewees voiced nostalgia for the Basic Inquiry method. Several said that techniques that they learned in BI (and often modified as time went by) such as freewrites, journals, having students keep a log and then starting each class with that, etc. had become a standard part of their teaching tool kit. Several also noted their enjoyment of team teaching, writing essay questions and exams together—although this seemed to work best with syllabi that were also team developed. Others harked back to summer NEH workshops where "we read commonly, talked commonly, had speakers. . . . There was an energy, you could feel it. That energy lasted for years." We were told that opportunities to talk about what works and what doesn't, to hear more particular stories about the classroom experience or even individual students, would help. While some of this occurs informally at lunch or in the hallways, time constraints affect this, and it is more likely in some departments or even buildings than in others. Several said that the faculty retreat devoted to writing had made an impact, giving them ideas and a chance to talk with colleagues about the issues that too often go without saying. Speaking of an experience before coming to LC one person said he had been encouraged to sit in on classes outside his field. "That made it easier.

I could look at the other person teaching. My ego wasn't so involved. I learned a lot through that detachment.”

The virtues of collaboration among faculty seem to apply to students as well. Richard Light in his study based on Harvard student interviews (*Making the Most of College*) stresses the importance students place on learning that takes place outside of the classroom—either in doing assignments the teacher designs or in student-centered study groups—and then coming back together to share what they have learned. Some of our students even told us that what happened in study groups reviewing for an exam, while not their favorite activity, was frequently a powerful learning time. Mostly they valued what some called “experiential” learning and talked about what happens overseas, in internships off-campus, and in collaborative exercises on and off-campus. The Student Academic Affairs Board report to CAP called for promoting experiential learning. “The realization of a theory or concept often lies in its application within a field and beyond. This is why it becomes important to experience the things one learns in class in action. In light of this, we would like to see more experiential learning integrated into the classroom Although one can certainly answer . . . questions by reading books, the inherent value of experiencing them oneself is astounding.”

Enthusiasm, Disciplinary Proficiency, and High Expectations

All agree that enthusiasm for one's subject matter is an essential characteristic of a good teacher. As a faculty we put the question on the student evaluation form in recognition of this truth. One of our best teachers simply said, “I love what I teach and I love who I teach.” Yet it is clear that professions of enthusiasm are not enough. Students need to have the confidence that their professor is knowledgeable even when teaching at the introductory level or outside his or her field of expertise in a general education course. In advanced level courses excellent teachers aim at teaching students to think like professionals—encouraging precision in language, teaching the use of evidence, and pointing to the areas of disagreement or controversy in the discipline. It is here that a teacher's own professional accomplishments come to bear on teaching. Students testify that a high point in college learning comes when they have accomplished some task—senior thesis, a collaborative student/faculty research project, a formal oral presentation—that is modeled on what the pros do. We found little evidence that students like “easy” teachers. The level of difficulty in a course must be appropriate to the level of the student and to the subject, but whatever the level there must be a challenge that pushes students beyond the edge of ease and comfort.

A Culture of Support

We learned from faculty colleagues about the importance of real structural supports for teaching. Doing all the things that constitute effective teaching takes time. Some said they saw good teaching as not only frequent office hours and informal meetings with students, but also participation in the less academic side of college life, going to sporting events, concerts, etc. All of this can take oceans of time, especially as all the faculty juggle campus work on committees and as advisors, research commitments, responsibilities to their scholarly communities, and personal lives. Many spoke of a sense of being overwhelmed, especially during the three-class term, unable to teach well or give individual students the attention they would like. And we heard about colleagues eating lunch at their desks, foregoing lectures or job talks in order to meet with students or to prep. For some with large classes, the 3-course term can mean teaching over 100 students while at the same time wrangling 30-40 advisees and managing other responsibilities. The idea that the College might adopt a 3-3 course load evoked expressions of shock and horror. This would seem strongly contradictory to efforts to

improve the quality of faculty-student contact and to enrich the shared intellectual life on campus.

Structural supports include things like adequate classrooms, audio-visual equipment, and other teaching aids. There have been great improvements in these areas in recent years, and faculty for the most part felt adequately supported. What many faculty found lacking was a rich culture of mutual support among faculty and administration for the improvement of teaching. Several interviewees said that they were never trained in any sort of pedagogy. “We were just thrown into a classroom and expected to sink or swim.” Granted, these faculty often succeed brilliantly. Still, the practice of teaching so thoroughly fills an individual instructor’s time that without a solid infrastructure to ensure the injection of new ideas and a safe space to think through how they work, it’s difficult to improve our teaching.

Supporting Materials

Appendix 1 gives the findings of the American Association of Higher Education’s Joint Task Force on Student Learning, *Powerful Partnerships: A Shared Responsibility for Learning*.

The various disciplines of the College’s departments, majors, and minors often have sections of professional associations or separate organizations that are devoted to teaching in those disciplines. We have put together a list of the websites of such organizations in Appendix 2.

References

- Joint Task Force on Student Learning (1998). *Powerful partnerships: A shared responsibility for learning*. (American Association for Higher Education, American College Personnel Association, National Association of Student Personnel Administrators) June 2. (http://www.aahc.org/teaching/tsk_free.ht)
- Light, R. J. (2001). *Making the most of college: Students speak their minds*. Cambridge, MA: Harvard University Press.
- Student Academic Affairs Board (2001). Recommendations to the Commission on Academic Priorities [Letter to CAS Dean Curtis Johnson.]

II. Supporting and Developing Good Teaching

The Commission's charge mandated not only that we seek definitions of good teaching but also that we recommend ways to enhance teaching at the College. Specifically, we posed two questions that, in the final analysis, were really about the same thing:

How can we support the development of good teaching? and

What are ways of providing more collegial support for teaching?

Findings

- A. Faculty members and administrators want to see more support for teaching and more teaching development opportunities at Lewis and Clark College. Professors here recall with great satisfaction previous teaching development experiences (Susan Hubbuch's workshops on teaching writing, Bard workshops, faculty retreats that have focused on writing, weekly meetings of faculty teaching first year core courses, team teaching). Junior and senior faculty alike are interested in more support for improving their teaching than currently exists.
- B. Faculty, students, and administrators all perceive that teaching at the College is of excellent quality. Interest in increased teaching support and development is *not* based in a perceived need for remediation. Rather, this interest is based in a motivation to improve and broaden skills and to acquire new skills in order to adapt to new teaching circumstances (e.g., new technologies in new buildings). Faculty also want more opportunities to interact and converse with teaching colleagues.
- C. The Commission's survey of teaching support and development on other campuses suggests three ways in which those efforts tend to be organized:
 - a *central* model in which there is a designated organization, committee or director who oversees and facilitates teaching support and development activities and often includes a physical space (i.e., a Teaching and Learning Center);
 - an *ad hoc* model that consists of a number of initiatives that deal with teaching development that appear (and disappear) over time;
 - an *informal* model that has no central coordination of teaching support and development and few ad hoc initiatives; instead, sharing of teaching information may be done in lunch lines and in faculty or departmental offices on an informal basis and faculty evaluation procedures may be used for both evaluative and development purposes.
- D. Teaching support and development at Lewis & Clark College currently includes a number of *ad hoc* programs: examples are the CAS Dean's mentoring program, Inventing America workshops and weekly meetings, and the President's Forum when it addresses teaching issues. The College also uses *informal* mechanisms such as (a) developmental and promotion and tenure reviews for teaching development, (b) collection of developmental information (e.g., early course evaluations) by individual instructors, and (c) informal mentoring and consultation among colleagues.
- E. It is likely that the College could benefit from a more *centralized* oversight of teaching support and development, for a number of reasons:
 - Ad hoc initiatives, although often recalled fondly, have tended to be ephemeral.
 - Informal mentoring, consultation, and collection of developmental information is likely to be variable in consistency and quality.

- Experts make a distinction between collecting information on teaching for purposes of evaluation (summative information) and for purposes of development or improvement (formative information); these same experts often recommend different procedures for collecting summative vs. formative data. In some cases, it is recommended that formative information gathering be kept separate from evaluative/summative processes for the protection of the faculty member who is trying to improve his or her teaching. Our current review procedures (PCPT, Developmental Review Committees, etc.), mix the summative and formative functions and, in our opinion, subordinate the latter to the former. A more centralized teaching support organization could redress this imbalance by providing ideas and mechanisms for formative evaluation outside of the summative review processes.
 - Most of the concerns raised by faculty members about levels and kinds of teaching development and support (e.g., at the President's Forum in December 2001) involve issues that fuller, more open and regular occasions for focused attention to pedagogy could address.
- F. The recent history of *centralized* teaching support began with a Danforth Foundation grant in 1975 to five universities for the purpose of establishing teaching and learning centers (TLCs). When the Danforth Foundation stopped funding the five TLCs in 1978, two universities—Stanford and Harvard—continued to support their Centers. In the ensuing 25 years, TLCs have proliferated on university campuses. (For a list of TLC websites, see <http://www.ku.edu/~cte/resources/websites.html>.) TLCs at the larger universities often have a director and a staff of up to 7 professionals as well as secretarial support. In the past 10-15 years, TLCs have begun to appear on the campuses of small liberal arts colleges. (A list of those we have identified and descriptive information about TLCs at four liberal arts colleges are included later in this section.) TLCs at smaller colleges are often staffed by a director and an assistant. The director may be a faculty member who has release time or a salaried teaching development professional. As an alternative to the TLC, some colleges and universities have a faculty teaching and learning committee (FTL Committee) that serves as the central coordinator of teaching support and development. (Further description is given later in this section.)

The services offered by TLCs and FTL Committees include faculty workshops and lunches, visiting speakers and consultants, consultations with individual faculty members, feedback via classroom visits and/or videotaping, new technology demonstrations and training, a library of teaching-related materials, funding of faculty travel to teaching conferences, and faculty stipends for teaching development.

- G. The College's current level of support for teaching development activities is low. Funding for faculty travel to teaching development conferences and colloquia occasionally occurs, but at a far lower frequency than funding of travel connected to research and scholarship. In addition, a faculty member's publications, presentations and other activities that concern pedagogical matters do not seem to have a place or weight in our various review processes.

Recommendations

1. The Commission on Teaching recommends that the College should seek funding to establish a Teaching and Learning Center staffed by a Director and an assistant and housed in a suite of offices dedicated to TLC functions.

2. The TLC should be supported in an oversight and advisory capacity by a Faculty Teaching and Learning Committee. This FTL Committee should consist of 4 faculty members (one each from the Arts, Humanities, Social Sciences, and Mathematics and Natural Sciences), a student, and the Directors of Information Technology, the Writing Center, the Math Skills Center, and Academic Advising.
3. The Director of the TLC should be experienced in teaching development at the college level. The director could be a current L&CC faculty member or an expert hired from outside the current campus community. The Commission believes that the latter option would be preferable: If a current faculty member were asked to serve as director, he or she may have to take time to develop the necessary expertise and knowledge of teaching development across the disciplines; in addition, release time would be required, taking yet another excellent teacher out of the classroom. A Director who already has teaching development credentials would be ready to go as soon as he or she arrived here.
4. The Director should have a demonstrated record of excellent teaching and be expected to teach two courses in the first-year general education sequence. This would increase the credibility of the Director to current faculty and provide useful exposure to the real world of teaching at this College.
5. The TLC facility should include 2 offices, a conference room equipped with laptop computers, and a space that would contain a teaching library and capability of media and technology demonstrations.
6. The Director of the TLC should report to one of the divisional deans (as is the case for the directors of the Writing Center and the Math Skills Center) or to the CAS Dean.
7. Funding of the TLC should be sought by the President, through grants and donations.
8. As an interim measure, the FTL Committee should be constituted immediately. This Committee should be given a budget to begin teaching development initiatives (workshops, lectures, travel funds for faculty to attend teaching conferences, etc.). Also expected of the FTL Committee would be the planning of the transition to a TLC, for example, by using as consultants TLC Directors on other campuses. The chair of the Committee should be given a course release each semester prior to the arrival of a Director to facilitate these teaching development and planning initiatives and to chair the Search Committee for the Director. The FTL Committee could serve as the Search Committee. In the near future, the faculty should make the FTL Committee a standing committee of the faculty under the Faculty By-Laws. A merger of the FTL Committee and the Educational Technology Committee may be warranted and should be studied.
9. The faculty of the College should eventually—perhaps after a TLC is established—review its summative evaluation procedures to determine how teaching development activities by individual faculty members should be weighted in promotion, tenure, and salary reviews. Publications in refereed journals and presentations at professional conferences that relate to a discipline's pedagogy should be recognized as a component of scholarship in the review processes (cf. Boyer, 1990). Other teaching development activities should be viewed under the headings of teaching and perhaps service in summative evaluations.

Background Information

This section contains a list of small liberal arts colleges that have TLCs and FTL Committees and 4 "case studies" taken from websites and e-mail messages. The list of TLCs was

developed from an exhaustive search of the websites of 37 small liberal arts colleges and universities; the list of FTL Committees is based on a less exhaustive search that turned up committees that were featured in plain sight on websites. Note that the proportion of colleges that had TLCs in this search is 8/37, or 22%.

Teaching and Learning Centers at Small Liberal Arts Colleges & Universities

Bowdoin College: Baldwin Learning and Teaching Center
 Carleton College: Perlman Center for Teaching and Learning
 Colorado College: Crown Teaching and Learning Center
 Connecticut College: Center for Teaching and Learning
 Pomona College: Teaching and Learning Center
 Rollins College: Christian A. Johnson Institute for Effective Teaching
 St. Olaf College: Center for Innovation in the Liberal Arts
 Whitman College: Center for Teaching and Learning

Teaching and Learning Committees at Small Liberal Arts Colleges & Universities

Earlham College: Professional Development Fund Committee
 Trinity University: Teaching and Learning Committee
 Wabash College: Teaching and Learning Committee

Examples of Teaching and Learning Centers & Committees

Text from Carleton College, Colorado College, and Trinity University is a quotation from a website; text from Whitman College is a paraphrase of e-mail from the Director.

• Carleton College: Perlman Center for Teaching and Learning
<http://www.acad.carleton.edu/campus/LTC/>

The LTC coordinates programs for new and experienced faculty, circulates new information about teaching theories and strategies, and helps to identify problems and suggest solutions for classroom practice.

The LTC was established in 1992, the result of work done by a faculty-student committee. It was begun, in part, by a grant from the Bush Foundation. An endowment from the Bush Foundation now supports the Coordinator position in the LTC in the form of an endowed chair titled the Humphrey Doerman Professor of Liberal Learning.

We are now the Perlman Center for Learning and Teaching thanks to a generous endowment from Lawrence Perlman to support the operations of the center.

Located in Laird Hall 115, the LTC is home to a small library and reading room, open throughout the day while classes are in session. Drop by to read, research or talk. But also think of the LTC as a metaphor for the creation of the quiet space and the free moments it takes to examine the work we do and why we do it.

The LTC Advisory Committee assists the coordinator by suggesting ideas, and providing feedback on the Center's programs. [Membership: 10 faculty, 3 administrators, 3 students.]

• Colorado College: Crown Teaching and Learning Center
<http://www.ColoradoCollege.edu/TLC/>

The Crown Teaching and Learning Center aims to encourage effective student learning through the development and maintenance of imaginative, dedicated, self-reflective teaching. A part of the faculty development program at Colorado College, it is a space in Tutt Library where faculty can come together to discuss the challenges of teaching and to experiment with application of new technology for the classroom. The site includes a classroom equipped with a luminator projector, some multimedia computer equipment in a laboratory setting, and a lounge area.

More than a place, the Teaching and Learning Center is also a metaphor for a program of activities throughout the college: faculty working on course enhancement; meeting with each other to discuss the

ways students learn; thinking about the fundamentals of education in a liberal arts college; developing new approaches to teaching; implementing new technologies in the classroom; and evaluating the impact of teaching on student learning.

None of these activities is new to the college, but the Teaching and Learning Center, created through gifts from the Crown family and Edith Gaylord Harper and opened in the fall of 1996, seeks to reinforce them. The TLC programs reflect the central mission of the college: the education of undergraduate students. The center is committed to exploring new technologies as a means to enhance learning.

Paul Kuerbis, professor of Education, is the director of the TLC for the 2001-2002 school year. Becky Lane, a 2001 CC graduate in Psychology, is the paraprofessional.

Trinity University: Teaching and Learning Committee

<http://www.trinity.edu/org/tlc/>

The Teaching and Learning Committee shall be the organ of the Faculty for assessing the general status and needs of teaching and learning, and be a coordinating body for facilitating the enhancement of instruction in the University. Specific activities of this committee shall include, but not be limited to, new faculty orientation, facilitating discussion among faculty members and also between faculty and students on the subject of teaching and learning, by means of workshops, seminars, documents, etc., and acting as a conduit or clearing house for new and existing educational methodologies and materials. The Committee shall report to the Faculty Senate. The Committee shall consist of the Vice President for Academic Affairs or his/her designee, six members of the faculty, provided that each one of the divisions and the Library are represented, and two students recommended annually by the Student Association. Faculty members shall serve for three years in three classes of two, and will be recommended by the Faculty Senate after the usual process of nomination by the faculty Representation and Elections Committee of the Senate. One of the faculty members shall be the Chair of the Committee. The Committee shall not be involved in evaluation of specific courses or programs, or in evaluation of the teaching of individual faculty members.

• Whitman College: The Center for Teaching and Learning

http://www.whitman.edu/offices_departments/ctl/

- Director: Deborah Du Nann Winter, Ph.D. Professor and Chair of Psychology
- Center is in its 2nd year of operation
- Director worked hard to establish Center in the 1980s and had to give up until the arrival of the current President of Whitman from Colorado College in 1993; President's commitment was key in the genesis of the Center.
- Center's services and activities include: two luncheon series on teaching, library and resource room, private consultation with the Director, one speaker each semester.
- Faculty response has been good; consultations have occurred mostly with junior faculty but with some senior faculty also.
- Center is supported by a steering committee; Director gets one course release per semester.

Reference

Boyer, E. L. 1990, *scholarship reconsidered*. Princeton, NJ: Carnegie Foundation for the Advancement of Teaching.

III. Evaluating and Documenting Good Teaching

As we noted in section II, experts in the teaching evaluation field make a distinction between two purposes for collecting information on teaching effectiveness: Summative information is used for the purposes of evaluation while formative information is collected for the purpose of teaching improvement or development. In Lewis and Clark College's current system, summative information is collected as a part of the formal mechanisms described in the *Faculty Handbook*. This summative information is used by Department Chairs, Division Deans, Developmental Review Committees, the Faculty Committee on Promotion and Tenure, and the Dean of the College in making decisions about a faculty member's progress, promotion, tenure, and salary. The same summative information is also used for formative purposes: The faculty member receives both an evaluation and suggestions for improvement from the same decisions makers based on the same sources of information. Formative information is also collected informally: Individual faculty often ask students or colleagues to give formative assessments of a class on an ad hoc basis for the purposes of giving mid-course corrections or to inform the planning of the course in a later semester.

Findings

- A. The College has a well developed program of summative evaluation; it does not have a coherent teaching development program currently.
- B. The College's system of formative evaluation is also expected to provide summative information for development and improvement of teaching. Although current practices seem to be working well on the summative side, it is not clear whether this system is an acceptable way to foster formative goals (teaching development).
- C. Research shows that providing information on teaching (e.g., student ratings) along with consultation and advice about the information maximizes improvement relative to information without consultation (Cashin, 1995; Hoyt & Pallett, 1999). Currently, this consultation is provided on an ad hoc basis by department chairs and colleagues and on a more formal basis during the summative review processes. It is not clear whether ad hoc and formal consultation occurs with enough frequency, consistency or quality to be useful.
- D. The College's use of Teacher Evaluation Forms is consistent with research recommendations and with practice at many Colleges. Particularly important is (a) the use of a standard form that has both numerical ratings and opportunity for written comments and (b) a standard administration procedure (Cashin, 1988, 1989, 1990, 1995; Hoyt & Pallett, 1999).
- E. Many students are unaware of the importance of the Teacher Evaluation Forms to faculty evaluation and development. Educating students along these lines may be hard to do, since research shows that emphasizing the *evaluative* purposes of TE Forms tends to inflate students' ratings.
- F. Experts in the practices of evaluating college teaching uniformly recommend that sources other than student ratings and written comments be used in evaluating college teaching:

"Authorities are agreed that there are a number of important matters related to teaching effectiveness for which students are unqualified to provide valid reports There is a general consensus that students are unable to judge such vital matters as currency of course content or the degree to which it provides a representative (as opposed to biased) view of the subject matter.

Nor can they judge the clarity, comprehensiveness, or realism of objectives, the degree to which readings and other assignments are balanced and appropriate, the validity of procedures for assessing student achievement, or the degree to which grading standards are in line with the department's or institution's expectations or policies" (Hoyt & Pallett, 1999, p. 1; see also Cashin, 1989, 1995).

- G. Many sources of information on teaching effectiveness that do not use students as informants are in fact part of the teaching evaluation process here at the College. These include:
- self-reports and self-evaluative statements about teaching goals and experiences by those being evaluated;
 - course materials (syllabi, assignments, exams, handouts, etc.); and
 - opinions of colleagues and department chairs about indirect contributions to the instructional program such as contributions to the general learning environment, to course and curricular development, and to the teaching effectiveness of others.
- H. It is unclear whether the collection and use of information other than student evaluations is done in a standard fashion across review files; we suspect not. There are, in fact, standard ways to collect self-evaluations, course materials, and colleague/ chairperson opinions about indirect contributions to the instructional program (Hoyt & Pallett, 1999). In addition, there is an overall strategy of file construction known as the Teaching Portfolio that has been published (Edgerton, Hutchings, & Quinlan, 1991).
- I. One source of information about teaching effectiveness that is typically not used on this campus is classroom observations by colleagues. Experts suggest that informal observations for the purposes of evaluation are unlikely to be reliable or valid. It is possible, but very time-intensive, to construct a standardized, formal system of evaluative observation. [One expert estimates that in addition to 2-4 hours of training, each single 60-90 minute classroom observation will require 3-4 hours of one observer's time in meetings with the instructor and other observers.]
- J. Our current review procedures state that pre-major and major advising should be evaluated as an aspect of a reviewee's teaching (for example, see point g on p. 30 of the *Faculty Handbook*). The Commission believes that the evaluation of advising is not actually being done as a part of salary, developmental, tenure and promotion reviews.

Recommendations

1. The current Teacher Evaluation Form and standard administration procedures should not be changed.
2. Sources of information about teaching effectiveness other than student evaluations should continue to be used in the review process. In particular, we recommend the use of self-evaluative statements about teaching goals and experiences, course materials, and chair/colleague reports about indirect contributions to the instructional program. Appendices A, C and D of the Hoyt and Pallett (1999) report give forms that can be used in collecting some or all of these data and Edgerton et al. (1991) describe how materials may be assembled into a Teaching Portfolio.
3. Further scrutiny is warranted of *how* the information sources listed above are used. How much weight should these be given relative to student evaluations? How should the

information be collected (e.g., formally using the Hoyt & Pallett Appendices or informally as in current practice)? What kind of guidance should be given to review candidates in preparing their files? We recommend that the Faculty Committee on Promotion and Tenure or some ad hoc committee take up these issues.

4. We do not recommend the use of classroom observations for purposes of evaluation. Doing this adequately would require enormous time expenditures of faculty, and the research literature shows that such observations correlate with student evaluations.
5. However, we do recommend that classroom observations be part of a teaching development program at the College. In other words, classroom observations should be done for formative but not summative purposes.
6. To the extent possible, summative and formative processes should be separated. Teachers who seek assistance in developing their teaching should not have to worry that information from this endeavor will be used for evaluative purposes. More specifically, once a program of teacher development is established on this campus, the faculty should take a fresh look at the Developmental Review process. Our current DR program is both summative and formative in nature; perhaps those functions should be separated.
7. The evaluation of advising should be a routine feature of salary, developmental, tenure and promotion reviews. The Commission believes that the optimal way to do this is through the reviewee's self-evaluative materials and the observations of the department chair. We do not recommend adding another formal evaluative system (e.g., Advisor Evaluation Forms) to assess the quality of reviewees' advising.
8. Students need to be routinely reminded that the current Teacher Evaluation forms (a) were designed with considerable input from students, (b) represent an advance over the previous ad hoc system, and (c) therefore provide students with a considerable amount of input about instruction at the College. These reminders should *not* be a part of the administration of Teacher Evaluation forms. We suggest that a presentation to incoming students at New Student Orientation would be a good idea. In addition, presentations to SAAB during the fall semester might keep the above information current. The Dean of the College should undertake to organize these presentations on a regular basis.
9. All faculty members should be kept informed of recent developments in the literature on the evaluation of teaching. The IDEA papers published by the IDEA Center (formerly the Center for Faculty Evaluation and Development) at Kansas State University can supply this information. In the immediate short term, we recommend that the Dean of the College provide copies of IDEA papers 32 and 36 (Cashin, 1995; Hoyt & Pallett, 1999) for all tenure-track and adjunct faculty members. In addition, faculty members who are candidates for Tenure and Promotion should receive the booklet of Edgerton et al. (1991) that describes the Teaching Portfolio.

Background Information

The Current Review Process

The "Policies and Procedures for Faculty Reviews" are given on pp. 21-30 of the *Faculty Handbook*. The original proposal of these policies and procedures was approved by the CAS faculty on May 31, 1991 and amended on November 2, 1993; April 23, 1996; and November 4, 1998.

The Current Teacher Evaluation Form and Administration Procedures

Prior to the 1995-96 academic year, student ratings of teaching were done on an ad hoc basis. The faculty review documents mandated that some kind of student feedback be collected by the instructor for every course, but there were no guidelines on how to collect this information. A standard teacher evaluation form had been available for use since the early '80s, but its use was voluntary.

A number of students, faculty members, and administrators were unhappy with this ad hoc system. In the fall of 1991, VPAA Susan Parr initiated a Teacher Evaluation Committee (TEC) to review current practices and propose new guidelines and a measure for collecting student evaluations. Tom Schoeneman was appointed as chair of this group. Committee members included one faculty representative each from Math & Natural Sciences, Social Sciences, Humanities, and Fine Arts, and three students from each of the three divisions.

The TEC reported its findings and recommendations at the October 1994 faculty meeting. After a number of amendments, the Teacher Evaluation Form and Guidelines for Administration and Reporting were approved by the faculty in January 1995. Changes went into effect the following fall semester. Since 1995, there have been a few revisions of the Teacher Evaluation Form involving reformatting and additional items that were proposed and adopted by the faculty.

Information Sources for Findings and Recommendations

The Kansas State University IDEA Center continues to provide useful summaries of information on teaching evaluation and development. In addition to the 3 IDEA papers that were used by the TEC in the early 1990s (Cashin, 1988, 1989, 1990), two newer summaries have appeared that have updated earlier summaries of research findings on student ratings of teaching (Cashin, 1995) and suggested alternatives to student ratings in teacher evaluation (Hoyt & Pallett, 1999). These materials are available at the IDEA Center website (<http://www.idea.ksu.edu/products/Papers.html>).

Information on the Teaching Portfolio is available in the form of a booklet published by the American Association of Higher Education (Edgerton et al., 1991). This booklet was provided to faculty members in the early 1990s when Evan Williams was CAS Dean.

Information on students' views came from our meeting with SAAB members on November 15, 2001 and from subsequent discussions that a few of the COT members had with students in the classroom. We have also been alert to the occasional discussions and comments on faculty review procedures made in faculty meetings and the President's Forum.

References

- Cashin, W. E. (1988, September). *Student ratings of teaching: A summary of the research*. IDEA Paper #20. Manhattan, KS: Center for Faculty Evaluation and Development, Kansas State University.
- Cashin, W. E. (1989, September). *Defining and evaluating college teaching*. IDEA Paper #21. Manhattan, KS: Center for Faculty Evaluation and Development, Kansas State University.
- Cashin, W. E. (1990, January). *Student ratings of teaching: Recommendations for use*. IDEA Paper #22. Manhattan, KS: Center for Faculty Evaluation and Development, Kansas State University.
- Cashin, W. E. (1995, September). *Student ratings of teaching: The research revisited*. IDEA Paper #32. Manhattan, KS: Center for Faculty Evaluation and Development, Kansas State University.
- Edgerton, R., Hutchings, P., & Quinlan, K. (1991). *The teaching portfolio: Capturing the scholarship in teaching*. Washington, DC: AAHE Teaching Initiative.

Hoyt, D. P., & Pallett, W. H. (1999, November). *Appraising teaching effectiveness: Beyond student ratings*. IDEA Paper #36. Manhattan, KS: Center for Faculty Evaluation and Development, Kansas State University.

The IDEA Papers cited above are available on line at <http://www.idea.ksu.edu/products/Papers.html>.

IV. Honoring Good Teaching

The COT considered the question of how to “evaluate and document the results of teaching and learn from and honor those who do it best.” The first part of this question is addressed above in section III. Here we consider the question of how we can learn from and honor our best teaching colleagues.

An e-mail query to the faculty about their experiences at other institutions elicited several replies. Three colleagues had taught at institutions where teaching awards were given. In one case, departments nominated teachers; in another, the students were polled and 4-6 winners were selected every year. Several responses noted the difficulty of determining our *best* teachers.

Findings

- A. We concluded that while it is possible to identify good teachers, and, in fact, we must do so for the purposes of tenure, promotion and salary review, it seems far more difficult to establish who our *best* teachers are.
- B. Nevertheless, it seems that faculty have a general feeling that excellent teaching *ought* to be recognized. The only recognition of teaching at Lewis & Clark currently is by the Pamplin Society; those nominations and awards are appreciated by the recipients.
- C. There is currently in place a mechanism—developmental and biennial salary reviews—whereby faculty members across all divisions are regularly evaluated as to their performance as teachers. This mechanism involves: teacher evaluations by students, a self-evaluation written by the teacher, and evaluations by the department chair, the division dean, and the Academic Council.
- D. While there are a multitude of on-campus presentations of scholarly work at colloquia and symposia, presentations on the subject of teaching occur rarely.
- E. We sense a feeling among the faculty that there is a need for the College to reinforce more publicly and prominently the value of good teaching.

Recommendations

1. The College should develop annual awards that recognize excellence in teaching. These awards should recognize not only excellence in the classroom but also in such activities as teaching development and collaborative research with students.
2. The development of a process for recognizing excellence in teaching should be an early project of the proposed Faculty Teaching and Learning Committee [FTL Committee]. We offer the following suggestions to guide the FTL Committee in its deliberations:
 - Each year, the FTL Committee should solicit nominations from the Academic Council, Divisional Deans and Department/Program chairs of faculty with the goal of naming up to three faculty per year to receive an award for excellent teaching.
 - Supporting evidence for these nominations should come from current review process; in other words, chairs, deans and Academic Council members should be alert to possible nominees as they read files for developmental and salary reviews. Materials from these reviews should serve as the supporting documentation for nominations.
 - We recommend either that the award should be a one-time honor for a given individual or that there should be a specified interval—for example, 3 years—before a previous winner becomes eligible again.

- Those who receive a teaching excellence award should be publicly recognized at the annual events described in recommendations 3 and 4.
3. In order to honor the good teaching of the faculty as a whole, the College should stage an annual academic event that focuses on teaching. Such an event should feature a lecture by a recognized scholar who could also lead the faculty in a workshop on some aspect of teaching. New research results in the field of teaching, new use of techniques including technology, new ways of assessing learning and the like would be of great interest to the faculty.

A good example of a renowned educator with much to say about teaching would be Prof. Richard J. Light of Harvard. Light is the author of *Making the Most of College*, a book we have found useful in our discussions and one that we recommend to the faculty.

4. Another way in which we think that the College of Arts and Sciences should recognize and honor good teaching is to have workshops and seminars in which the faculty discuss their ideas on good teaching. Short presentations, possibly in the form of sample classes could enrich and inform faculty colleagues and spark valuable conversations on teaching. The COT believes that such workshop and seminars would honor teaching and would be popular to boot. These workshops should be sponsored by the Teaching and Learning Center in consultation with the FTL Committee. Those who have recently received an annual award for teaching excellence should play an important role in such workshops.

Reference

- Light, R. J. (2001). *Making the most of college: Students speak their minds*. Cambridge, MA: Harvard University Press.

V. Student Research as a Part of Good Teaching: Experiential Learning

As part of its charge to define the elements of good teaching, the Commission on Teaching at Lewis and Clark College drafted two questions that examine the interface between scholarship and teaching:

How is student scholarship or research related to good teaching?

How do we engage students in these scholarship or research opportunities?

For this report, the term “scholarship” is used synonymously with the term “research.” In this report we adopt the language of the Carnegie Mellon Foundation who, as part of their Undergraduate Research Initiative, broadly define research as: “scientific, scholarly, or artistic activities that lead to the production of new knowledge; to increased problem solving capabilities, including design and analysis; to original, critical, or historical theory and interpretation, or to the production of art or artistic performance” (<http://www.cmu.edu/adm/urif>).

Findings

- A. The interface between scholarship and teaching primarily occurs in two ways at Lewis & Clark College: research and creative **classroom** projects that are undertaken within the curriculum of a specific course and **extracurricular** research and creative projects, which could either be faculty or student-initiated.
1. In **classroom projects**, students undertake original research within the constraints of a class or laboratory setting or studio (for example, open-ended projects associated with classes). Such opportunities are generally limited in their scope, primarily because of the constraints of time and subject material associated with a single class or topic. Examples that can be found on campus range from classes where a portion of the assignments is research-based to classes based almost entirely on student-directed research. Classroom research projects may also include artistic events such as theatre, dance, and music productions that are rehearsed outside of the normal class schedule but which carry course credit and involve close collaboration with a faculty member.
 2. In **extracurricular projects** that are **faculty-initiated**, a student participates in a previously established research program in which many of the concepts and materials necessary to undertake the research have been formulated and acquired by a professor. This is the most common form of independent research in the sciences and psychology (not surprising, given the hierarchical nature of the disciplines) for senior theses, summer research, and research during the academic year.
 3. In **extracurricular projects** that are **student-initiated**, a student initiates a program of independent scholarship that is primarily self-designed and executed with only limited faculty mentoring or supervision. In many cases, the student’s efforts result in an original composition, artwork, or thesis that truly represents a stand-alone body of research. This mode of student scholarship is more commonly employed within the Arts, Humanities, and Social Sciences.
- B. Lewis & Clark students value their research experiences whether it be through classroom or extracurricular projects. When SAAB representatives were asked to describe times in

their academic careers when “real learning” occurred, many of them mentioned research experiences. They stated that they valued these experiences because of the connections that the research enabled them to make with a faculty member, department, or fellow student researcher and because they felt more engaged in the work. Our interviews with SAAB members suggested that research experiences are a significant factor in student satisfaction and, possibly, retention.

- C. Opportunity for students to work on extracurricular projects are currently available at Lewis & Clark and students and faculty make good use of these opportunities. Funding for faculty-initiated research projects are available from extramural funding (e.g., the National Science Foundation), the Rogers Summer Research Program endowment (for the sciences), and from college funds (primarily for non-science faculty). [Appendices 3 and 4 list the faculty who have supported student summer research since 1994.] Funding for student-initiated projects is available from SAAB.
- D. Research projects demand a broader understanding of material than is required in most traditional courses, leading to improved critical thinking skills. In addition, students often learn a broader array of skills: technical, collaborative, and communicative.
- E. Students who participate in research experiences are more competitive in national scholarship and fellowship programs. The success of these students can be an effective recruiting tool for attracting top students to Lewis & Clark.
- F. Those who have written about student scholarship suggest a number of possible benefits:
- Many benefits of research for students are subtle, yet important. Tackling such a project gives students a sense of accomplishment. A student’s research project is something that a faculty member can write about in a letter of recommendation.
 - The inclusion of students in a faculty research project is often viewed favorably during the review of a proposal.
 - Having good students involved in faculty research projects promotes faculty productivity; it is not uncommon for faculty to publish the results of their work with student co-authors.
- G. The literature on student scholarship also warns of a number of potential drawbacks:
- Professors may become more engaged with their research students or classes involving research and neglect their other students and classes. Worse, if a faculty member is given leave for scholarship (involving a student) or to develop new research-based classes, students may be taught by less-experienced and committed adjuncts.
 - Classes that contain significant amounts of student research cannot formally cover as much material as traditional lecture classes due to time constraints. This can be a disadvantage to students who take standardized tests (e.g. MCATs, GREs).
 - Instructing students in research techniques and “getting them up to speed” to conduct meaningful research takes time away from faculty research. Faculty may also be forced to limit the extent of their research to accommodate students with less expertise.

Recommendations:

1. Because the commission believes that all students benefit from research experiences, we recommend that all departments incorporate student research into their curriculum. There is much experience along these lines already in the faculty and within our curricula. The

Commission recognizes the extent to which the College has developed research opportunities across the spectrum of departments. As examples the Fine Arts Departments, through studio work and a myriad of creative projects, routinely engage students in artistic activities that lead to the production of new knowledge. The Sciences routinely involve students in research and experimentation through their labs. However, there is always more that can be done. Faculty should be encouraged to share ideas for incorporating student research into their classes. This could be done during TLC-sponsored brown-bag lunches or workshops, the faculty retreat, or some other faculty meeting (e.g., the President's Forums). Faculty should be supported in applying for funding for materials to support these classes (at least in the sciences, project-based classes tend to be more costly than traditional classes). When the degree of curricular innovation is significant, there should be a fund for course relief or a summer stipend to compensate faculty.

2. A great number of our undergraduates are eager to participate in some form of research and the research opportunities on campus typically receive a surfeit of applications. Lewis & Clark College needs to increase the number of research opportunities available to students on campus. The committee recommends that additional support be provided for the current research programs on campus and that the College establish an endowment for summer student-faculty research in the arts, humanities, and social sciences analogous to the Rogers Summer Science Program in the mathematics and natural sciences.
3. To engage more of our students in research, we need to reassure students that, although they may not find an opportunity on campus, there are still others that they should investigate. Many departments advertise these opportunities by posting information. However it is unknown how many students avail themselves of this resource. Advertisement, "word of mouth" examples, discussions of faculty research opportunities in the classroom, and faculty seminars that describe/advertise research opportunities would all enhance a program's profile. With the ever-increasing use of the Internet by students, developing a "Scholarship Resource Page" as part of the College web site would probably help connect students to a research opportunity.
4. To ensure that every student has some research experience, the Commission recommends that the College move towards its goal of requiring a senior research experience within the major (the capstone/keystone course).
5. It is important to have faculty commitment for these research experiences so steps should be taken to minimize the negative consequences for faculty research with students. This can be done with summer salaries (i.e., funding), teaching credit (or some other compensation) for faculty who mentor student research during the academic year, and help with proposal writing.

Supporting Materials and References

Appendices 3 and 4 list faculty-student summer research collaborations supported by the Rogers Summer Research Program and by the College.

There are numerous books, articles and websites devoted to undergraduate research. We have collected some of these in Appendix 5.

VI. Academic Advising

Academic advisors at Lewis and Clark College see two categories of students: pre-major advisees and major advisees. The Coordinator of Academic Advising initially assigns each faculty member a number of entering students as pre-major advisees. She attempts to match students with faculty according to common interests and to distribute the advising load evenly among the faculty. Transfer students usually receive department Chairs as academic advisers. After the orientation session, a student at any time may seek the permission of a different faculty member to be his or her academic advisor. Students choose a major and major advisor simultaneously. The student's major advisor becomes the primary academic advisor.

The College maintains a half-time Coordinator of Academic Advising. Our current coordinator is Kristi Williams, who is also an instructor in English. An Administrative Assistant, Barbara Roady, supports the coordinator. Among the Academic Advising coordinator's duties are to assign pre-major advisees to faculty, and to provide advisor training, information and other support to faculty and students. This support includes maintaining the College's academic advising web site (<http://www.lclark.edu/dept/advising/>), a resource that can be used by students and faculty.

Findings

- A. The College's academic advising structure described above is consistent with those of other similar institutions. ACT Inc. reports, in its most recent survey, that among its sample of 4-year private institutions 29% have an advising structure similar to ours; 43% rely on faculty advising exclusively; and 14% have split academic advising programs in which a professional staff handles a portion (commonly pre-major advising), and faculty handle a portion (commonly major advising). ACT does not break out liberal arts colleges as a separate subset of 4-year private institutions and no other survey exists covering only small 4-year liberal arts colleges. Our own survey of web sites of a handful of liberal arts colleges similar to Lewis and Clark reveals self-descriptions of academic advising that also range among these three types. The predominant type is that of faculty academic advising, usually coordinated through an academic advising support office or through a Center for Teaching and Learning. Levels of staffing of such centers vary.
- B. Surveys show that the faculty members at Lewis and Clark College serve primarily as guides to the registration process. The literature in the field indicates that effective academic advising involves more: It is developmental. Experts identify personal faculty-student relationships as an important factor in the quality of the student's academic experience. Students who are so connected are more likely to thrive in our liberal arts environment (Chickering, 1969; Light, 2001, ch. 5). The earlier such connections can be made, the greater is the likelihood of student success.
- C. According to experts there are three characteristics of effective advising (National Academic Advising Association, 2001). The acronym ACT is a helpful reminder of the purpose of academic advising:
 - **Aware:** An effective advisor is aware of the information and the kind of advice the student needs. The advisor knows the institution, knows the advisee and guides the advisee accordingly.
 - **Care:** An effective advisor cares about the student and communicates that caring to the student.

- **There:** An effective advisor is available to the student for ongoing, developmental advising, not just for course registration advising.

D. Academic advising at Lewis & Clark is primarily the responsibility of the faculty. The college recognizes academic advising by its faculty as an important aspect of teaching. According to the faculty review document, evaluation of a faculty member's teaching *should* include academic advising as one component. There is no established procedure for reviewing and evaluating faculty academic advising at the College.

E. As a faculty we are not performing the range of our academic advising duties well. While our registration advising efforts may be hitting the mark, as a group, our other advising efforts fall short.

Over the past few years the College has surveyed its students regarding teaching and advising matters. At the 2001 faculty retreat, faculty participated in an advising survey. The College also participates in student surveys with other institutions. From these sources the following description emerges.

- Lewis and Clark students do not report high levels of satisfaction with pre-major academic advising. At the same time, our students value faculty highly in areas of teaching, availability, and fairness.
- When Lewis & Clark student satisfaction of advising is compared with student satisfaction at other institutions, a smaller proportion of our students is satisfied with their academic advising experience, especially pre-major advising.
- Though our faculty members value their roles as academic advisors, they identify less with their roles as pre-major advisor and more with their roles as major advisor.
- Our faculty advisors do not give high priority to aspects of academic advising other than registration. Survey responses indicate that faculty give low priority to: meeting with advisees outside of the registration process, long-term planning with pre-majors, appreciating the goals of a liberal arts education, and career planning.
- Faculty advisors underrate the level of student concerns regarding advising. Students are less convinced that advisors value their advising roles—especially pre-major advisors. Advising other than for registration is a higher priority for students; for example, advising about long-term planning and career issues are given higher priority by students than by our faculty advisors.

F. One aspect of good advising that is cited by experts is helping students to make long term plans of their 4-year curriculum. In the course of our discussions, we have identified a number of factors at the College that may hinder and even thwart such planning in particular and good advising in general:

- Students find that planning in both the short- and long-term is too often undermined when they are closed out of courses during pre-registration.
- For reasons that are unclear to us, many students—perhaps an increasing number—feel that they should have second majors and one or more minors. This can make planning difficult due to the tightness of scheduling that is required. (It also seems to contradict our supposed emphasis on a breadth of electives as a substantial part of a student's curriculum.)
- Staffing issues often render departmental scheduling of courses unpredictable from year to year.

- Students in many departments take classes off-campus in the summertime to fulfill their major and general education requirements. This is both a planning issue and a quality control issue; we note that in the case of departmental approval of courses to count toward the major, there seems to be no campus-wide coordination of practices and standards.
- The uneven distribution of advisees among faculty members can result in situations in which faculty feel overwhelmed with pre-registration advising alone. Good long-range planning is hard to do in such cases.

Recommendations

1. The Commission recommends that the Admissions, Advising and Academic Standing Committee (AAAS) continue its investigation of the advising system at the College and appoint a special subcommittee or task force to make specific recommendations to the faculty concerning advising. This subcommittee or task force should coordinate their work with the Curriculum Committee, the Academic Council and other bodies as recommended changes dictate. The information gathered by the Commission can be made available to this faculty and staff group, and the faculty discussion of this report should give direction to the task force. We also recommend that the AAAS task force carefully consider the several issues and problems enumerated in finding F above that make advising and planning of individual students' programs difficult.
2. To guide the AAAS task force, the Commission offers the following observations:
 - A. It may be possible to retain the present structure and to make adjustments for its improvement. Such improvements might involve:
 - Providing greater staff support for academic advising.
 - Designing and instituting a program of faculty advisor development. Faculty advisors should receive feedback from their advisees regarding advising effectiveness and there should be opportunities for faculty advisors to develop their skills by learning from peers and experts.
 - Once a faculty advising development program is in place, establishing criteria for evaluating academic advising effectiveness in the faculty developmental, promotion, and tenure review process (see Section III, recommendation 7).
 - Devising appropriate rewards for effective faculty advising.
 - B. It may be the case that making minor improvements in the present system will not be enough to change the advising climate at the College. The AAAS task force should therefore consider the advisability of more radical changes in what we do to assist students in doing effective academic planning. Possibilities that have been discussed by the commission are the following:
 - Add an academic advising component to Inventing America. The Commission supports a currently proposed pilot project to do just that in a few Inventing America sections with the professor serving as his or her students' academic advisor. Sufficient incentive such as a stipend or course release should be provided.
 - Set aside a time each semester separate from pre-registration when all students prepare and submit course plans and meet with advisors for plan approval. Information from these sessions could become data informing departments about needed course sections and the like.

- Structure time in courses taken by pre-majors for academic advising.
 - Develop and support, and compensate a small set of faculty who would specialize in pre-major advising. They would carry the College's pre-major advising load. Compensation could include course release or a salary bonus.
 - Move to an academic advising model where professional staff (class deans, for example) coordinate and undertake a large portion of pre-major advising.
 - Revise the general College requirements so that students prepare mandatory course plans rather than picking courses from a list.
3. Whatever model of advising is in place in the future, the Center for Teaching and Learning proposed in Section II (recommendation 1) should provide information, training and developmental support for the advising activities of faculty members.

Background

We made use of several surveys of students and faculty to paint a picture of perceptions of academic advising. Jay Beaman, the College's institutional researcher, provided additional survey information.

• *In-House Student Surveys*

Since the fall semester of 1998 the College has conducted a First Year Student Advising Survey. Summary results from the most recently collated survey, November 2000, are reported in the *2001 Advising Handbook*. Students responded to questions regarding the New Student Orientation experience, their perceived relationship with their faculty advisors, and other aspects of advising. The sense that we have after reviewing the summary statistics is that first-year students feel they are well advised during the initial registration process. However, students generally feel less satisfied with their subsequent advising experiences. For example only two-thirds of the first-year students responded that the advisor "shows interest in my academic course of study" at some level. While three-fourths of the respondents claim, "my advisor is available when needed," only half of the respondents "have met with my advisor at times other than registration." When asked to respond to the statement, "I am satisfied with the academic advising process at Lewis & Clark College," only 62% of the respondents agreed. Throughout the years of this survey, first-year-students have consistently given responses of this type.

• *Comparative Student Surveys—NSSE*

The College participated in the 2001 National Survey of Student Engagement. Lewis and Clark students responded to the question, "Overall how would you evaluate the quality of academic advising you have received at your institution," on a 4-point scale with "1" being "poor" and "4" being "excellent."

	Lewis & Clark College	Other Liberal Arts Institutions offering Baccalaureate degrees
<i>First-Year</i>	2.66	3.09
<i>Senior</i>	2.89	3.16

As the preceding table indicates, each of the Lewis & Clark College student mean responses was statistically significantly lower than the mean response of students from other liberal arts institutions. A more complete summary of the responses is given at the end of this report.

• *Comparative Surveys—HEDS*

Lewis & Clark also participates with a small group of Colleges that share similar interests (but that, due to a confidentiality agreement cannot be identified). This "HEDS" group conducted a Spring 2001 survey of senior satisfaction. When asked about overall satisfaction with their education 89% of Lewis & Clark seniors responded as very satisfied or generally satisfied; this compares with an average (across remaining institutions) response of 92%. When asked about satisfaction with first year student advising 54% of Lewis & Clark students gave a response of very satisfied or generally satisfied; this compares with an average of 71% from the other institutions. When asked about the satisfaction with major advising, the differences are not quite as striking. 73% of Lewis and Clark seniors, compared with 86% of seniors from the other institutions, responded that they were either generally satisfied or very satisfied.

• *Faculty In-House Survey*

The Committee on Admissions, Awards, and Academic standing developed and administered the AAAS Faculty Advising Questionnaire during the August 2001 faculty retreat. 82 tenured and tenure track faculty completed the survey. Summary tables of these data are included as Appendices 6 and 7.

Faculty members were asked how much priority they gave various advising activities. They could rank priorities from Very Low to Very High. Survey results indicate that faculty members perceive pre-major advising and major advising differently. For either type of advisee the highest faculty priority is to meet with advisees during registration and to help advisees select courses. 95% of the faculty members give either high priority or very high priority to these tasks for both pre-major and major advising. It appears that the functions of faculty advising, other than registration, receive too little priority among the faculty. This observation is quite striking regarding pre-major advising. Faculty members appear not to prioritize highly meeting with advisees (64.2% give at least a high priority for major advisees, 41% for pre-major advisees). While 4-year planning is valued for major advisees (94%), it is much less valued for pre-major advisees (53%). Faculty members place not much emphasis on helping advisees appreciate the goals of a liberal arts education (41% pre-major, 39% major). Regarding advising related to life goals or student career plans, again there is strikingly less emphasis by our faculty for pre-major advisees.

The survey also enabled a comparison of advising priorities between tenured and tenure-track faculty. One the whole tenure-track faculty appear to prioritize all measured dimensions of academic advising more highly than do tenured faculty (save meeting during registration and advising students on career plans).

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VII. Final Notes: Unfinished Business

In the past 18 months the Commission on Teaching has covered a lot of ground. The President's charge to the Commission and the specific areas of inquiry that we identified (see p. 1 of this report) made for a very full agenda. Inevitably, at the end of this journey there are some unexplored territories. What follows is an accounting of issues that we might have covered but did not.

Definition and Scope of Teaching

Most of our efforts in this area focused on defining good teaching (section I). Three aspects of the definition and scope of teaching at the College that were a part of our charge and our initial list of areas of inquiry received little attention:

- our charge to classify the differing demands imposed by the kinds of teaching required by our curriculum;
- a question about the relationship between the characteristics of our students and our teaching practices; and
- a question about how the balance of subject specialization and liberal education at this college contributes to fine teaching.

The second of these areas is touched upon in section I in the final paragraph on p. 3. The other two items remain open for investigation.

Support and Development of Teaching

Section II of this report focuses on supporting the development of good teaching and fostering more collegial support for teaching. We were unable to adequately deal with two other questions relevant to teaching support and development:

- Is our teaching environment one that encourages good teaching—our schedule, our facilities, class size, the teaching load?
- How can we help faculty learn about and apply new technologies to their teaching?

We do refer to the teaching environment and specifically to the teaching load in Section I under the subheading of "A Culture of Support" (pp. 5-6). Aspects of this area of inquiry are also implicit in many other sections of this report.

The question of helping the faculty to learn about and apply new teaching technologies is very important. We made a start by conducting interviews with colleagues and with Dan Terrio, Director of Information Technology, but our data collection and discussions only began to scratch the surface of the very extensive universe of information in this area. Our findings concerning the support and development of teaching technologies are incomplete.

Nevertheless, we do have some observations and suggestions to pass on to others who may attempt to address this issue. These others include, currently, administrative officers who have oversight of technology issues and budgets as well as the faculty's Educational Technology Committee. In addition, the future Center for Teaching and Learning and the faculty committee that supports and advises it will be major organizers of efforts to assist faculty with their needs for learning about new technologies. Here are some of our suggestions for future deliberations:

- We know from our survey of Teaching and Learning Centers that many of them offer support for faculty to learn about new teaching technologies—see descriptions of the

Colorado College Crown Teaching and Learning Center and the Trinity University Teaching and Learning Committee on pp. 10-11 above. These and other TLCs and FTL Committees have a variety of types of relationships with the Information Technology offices on their campuses. How this relationship will be constructed here at Lewis and Clark College will be a priority of the new TLC Director. In addition, the faculty as a whole will need to clarify the relationship between our new FTL Committee and our current Educational Technology Committee (see recommendation 8 on p. 9).

- Expertise and interest in educational technologies would be an important part of the job description of the new Director of the College's CTL.
- The College should seriously consider funding a Summer Teaching and Technology Program that supports project ideas by teams of faculty, information technology specialists, and students who collaborate to develop new technological resources that support teaching and learning within the curriculum. The proposal for this should come from the FTL Committee, assuming that they take over the functions of our current Educational Technology Committee.
- We note that the construction of the new Howard Building, with its technologically "smart classrooms," offers the faculty an opportunity to rethink the way that we use our classroom spaces. This rethinking will, we hope, be enabled by workshops, demonstrations, and support for grant-writing.

Student Research as a Part of Good Teaching: Experiential Learning

The Commission recognizes the value of experiential learning and the inclusion of artistic activity into the definition of research (see the Introduction to section V, p. 19 above). Yet we have noted that some of the instructors in studio art (and there are many versions of studio art, from acting to music composition to training on a musical instrument to painting and ceramics) have a limited role on campus with respect to faculty rank and the prospect of tenure. Should this system be re-evaluated? If so, by what body?

Teaching vs. Scholarship?

One question that came up late in our deliberations, a question that was not a part of our charge or defined areas of inquiry, concerns the relative weighting of teaching and scholarship in our review procedures. Currently, teaching and scholarship are regarded as equally necessary to success in developmental, salary, promotion and tenure reviews. Should this relative weighting change? More specifically, should we emphasize teaching more than scholarly pursuits?

Our report touches on the interface between teaching and scholarship at several points, but we did not engage the questions posed above. They are large and serious questions. We regarded them as beyond the scope of our focus on the support and development of teaching. If the faculty should wish to engage the weighting of teaching and scholarship in the review process, there is much work to be done in gauging the opinions of colleagues and the practices of other liberal arts colleges.

VIII. Index of Recommendations

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2. The TLC should be supported in an oversight and advisory capacity by a Faculty Teaching and Learning Committee (FTL Committee).	9
3. The Director of the TLC should be experienced in teaching development at the college level. It would be preferable that the Director be an expert hired from outside the current campus community.	9
4. The Director should have a demonstrated record of excellent teaching and be expected to teach two courses in the first-year general education sequence.	9
5. The TLC facility should include 2 offices, a conference room equipped with laptop computers, and a space that would contain a teaching library and capability of media and technology demonstrations.	9
6. The Director of the TLC should report to one of the divisional deans (as is the case for the directors of the Writing Center and the Math Skills Center) or to the CAS Dean.	9
7. Funding of the TLC should be sought by the President, through grants and donations.	9
8. The FTL Committee should be constituted immediately. This Committee should begin organizing teaching development initiatives, plan the transition to a TLC, and serve as the Search Committee for the new director. In the near future, the faculty should make the FTL Committee a standing committee and study a merger of the FTL Committee and the Educational Technology Committee.	9
9. The faculty of the College should review its summative evaluation procedures to determine how teaching development activities by individual faculty members should be weighted in promotion, tenure, and salary reviews.	9
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1. The current Teacher Evaluation Form and standard administration procedures should not be changed.	13
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process. These include self-evaluative written statements about teaching goals and experiences, course materials, and chair/colleague reports about indirect contributions to the instructional program.

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| 3. Further scrutiny is warranted of <i>how</i> the information sources listed above are used. How much weight should these be given relative to student evaluations? How should the information be collected? What kind of guidance should be given to review candidates in preparing their files? | 13 |
| 4. Classroom observations of teaching should not be used for purposes of evaluation. | 14 |
| 5. However, classroom observations should be part of a teaching development program at the College. | 14 |
| 6. To the extent possible, summative and formative processes should be separated. | 14 |
| 7. The evaluation of advising should be a routine feature of salary, developmental, tenure and promotion reviews. The optimal way to do this is through the reviewee's self-evaluative materials and the observations of the department chair. A formal evaluative system (e.g., Advisor Evaluation Forms) to assess the quality of reviewees' advising is not warranted. | 14 |
| 8. Students need to be routinely reminded of the importance of the Teacher Evaluation forms. These reminders should <i>not</i> be a part of the administration of Teacher Evaluation forms. | 14 |
| 9. All faculty members should be kept informed of recent developments in the literature on the evaluation of teaching. | 14 |

Honoring Good Teaching

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| 1. The College should develop annual awards that recognize excellence in teaching. | 17 |
| 2. The development of a process for recognizing excellence in teaching should be an early project of the proposed Faculty Teaching and Learning Committee. | 17 |
| 3. In order to honor the good teaching of the faculty as a whole, the College should stage an annual academic event that focuses on teaching. | 18 |
| 4. The College of Arts and Sciences should also recognize and honor good teaching through workshops and seminars in which the faculty discuss their ideas on good teaching. These workshops should be sponsored by the Teaching and Learning Center in consultation with the FTL Committee. Those who have recently received an annual award for teaching excellence should play an important role in such workshops. | 18 |

Student Research as a Part of Good Teaching: Experiential Learning **19**

1. All departments at the College should incorporate student research into their curriculum. Faculty should be encouraged to share ideas for incorporating student research into their classes and should be supported in applying for funding for materials to support these classes. [See p. 19 for the relevant definition of “research.”] 20
2. The College needs to increase the number of research opportunities available to students on campus. Additional support should be provided for the current research programs on campus. An endowment should be established for summer student-faculty research in the arts, humanities, and social sciences analogous to the Rogers Summer Science Program in the mathematics and natural sciences. 21
3. Students should also be informed about off-campus research opportunities. A “Scholarship Resource Page” as part of the College web site should be developed to help connect students to research opportunities. 21
4. To ensure that every student has some research experience, the College should continue to move towards the goal of requiring a senior research experience within the major (the capstone/keystone course). 21
5. The possible negative consequences of faculty commitment to undergraduate research experiences should be offset with summer salaries and funding, teaching credit (or some other compensation) for faculty who mentor student research during the academic year, and help with proposal writing. 21

Academic Advising **22**

1. The Admissions, Advising and Academic Standing Committee (AAAS) should continue its investigation of the advising system at the College and appoint a special subcommittee or task force to make specific recommendations to the faculty concerning advising. 24
2. The feasibility of retaining the present advising structure with adjustments for its improvement should be studied. If this seems insufficient to change the advising climate at the College, more radical changes—i.e., a different advising structure—should be implemented. 24
3. The Center for Teaching and Learning should provide information, training and developmental support for the advising activities of faculty members. 25

IX. Appendices

Appendix 1: AAHE Joint Task Force on Student Learning “Powerful Partnerships: A Shared Responsibility for Learning”

Appendix 2: Teaching Divisions of Professional Associations and their Websites

Appendix 3: Faculty-Student Summer Research Collaborations Supported by the Rogers Foundation (Sciences)

Appendix 4: Faculty-Student Summer Research Collaborations Supported by the College (Arts, Humanities, & Social Sciences)

Appendix 5: Readings and Websites Related to Undergraduate Research

Appendix 6: Pre-major advising versus major advising: Combined tenure and untenured faculty priority rankings

Appendix 7: Pre-major advising: Comparing the priorities of tenured faculty with those of untenured faculty

Powerful Partnerships A Shared Responsibility for Learning

A Joint Report

**American Association for Higher Education
American College Personnel Association
National Association of Student Personnel Administrators**

June 2, 1998

Despite American higher education's success at providing collegiate education for an unprecedented number of people, the vision of equipping all our students with learning deep enough to meet the challenges of the post-industrial age provides us with a powerful incentive to do our work better. People collaborate when the job they face is too big, is too urgent, or requires too much knowledge for one person or group to do alone. Marshalling what we know about learning and applying it to the education of our students is just such a job. This report makes the case that only when everyone on campus -- particularly academic affairs and student affairs staff--shares the responsibility for student learning will we be able to make significant progress in improving it.

Collectively, we know a lot about learning. A host of faculty, staff, and institutional initiatives undertaken since the mid-80s and supported by colleges and universities, foundations, government, and other funding sources have resulted in a stream of improvement efforts related to teaching, curriculum, assessment, and learning environments. The best practices from those innovations and reforms mirror what scholars from a variety of disciplines, from neurobiology to psychology, tell us about the nature of learning. Exemplary practices are also shaped by the participants' particular experiences as learners and educators, which is why a program cannot simply be adopted but must be adapted to a new environment.

Despite these examples, most colleges and universities do not use our collective wisdom as well as they should. To do so requires a commitment to and support for action that goes beyond the individual faculty or staff member. Distracted by other responsibilities and isolated from others from whom they could learn about learning and who would support them, most people on campus contribute less effectively to the development of students' understanding than they might. It is only by acting cooperatively in the context of common goals, as the most innovative institutions have done, that our accumulated understanding about learning is put to best use.

There is another reason to work collaboratively to deepen student learning. Learning is a social activity, and modeling is one of the most powerful learning tools. As participants in organizations dedicated to learning, we have a responsibility to model for students how to work together on behalf of our shared mission and to learn from each other.

On behalf of such collaboration, we, the undersigned members of this Joint Task Force on Student Learning, offer the following report. It begins with a statement of the insights gained through the scholarly study of learning and their implications for pedagogy, curricula, learning environments, and assessment. Each principle is illustrated by a set of exemplary cooperative practices that bring together academic and student affairs professionals to make a difference in the quality of student learning, a difference that has been assessed and documented. The report ends with a call to all involved

in higher education to reflect upon these findings and examples in conjunction with their own and their colleagues' experience and to draw on all these sources of knowledge as the basis for actions to promote higher student achievement.

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Powerful Partnerships A Shared Responsibility for Learning

The following ten principles about learning and how to strengthen it are drawn from research and practice and provide grounds for deliberation and action. All those who participate in the educational mission of institutions of higher education --

students, faculty, and staff -- share responsibility for pursuing learning improvements. Collaborations between academic and student affairs personnel and organizations have been especially effective in achieving this better learning for students. We advocate these partnerships as the best way to realize fully the benefits of the findings.

Learning Principles and Collaborative Action

1 Learning is fundamentally about *making and maintaining connections*: biologically through neural networks; mentally among concepts, ideas, and meanings; and experientially through interaction between the mind and the environment, self and other, generality and context, deliberation and action.

Rich learning experiences and environments require and enable students to *make connections*:

- through learning materials that stimulate comparisons and associations, explore relationships, evaluate alternative perspectives and solutions, and challenge students to draw conclusions from evidence;
- through opportunities to relate their own experience and knowledge to materials being learned;
- through pedagogies emphasizing critical analysis of conflicting views and demanding that students make defensible judgments about and demonstrate linkages among bodies of knowledge;
- through curricula integrating ideas and themes within and across fields of knowledge and establishing coherence among learning experiences within and beyond the classroom; and
- through classroom experiences integrated with purposeful activities outside of class.

To make and maintain connections, faculty and staff collaborators design learning experiences that:

- expose students to alternative world views and culturally diverse perspectives;
- give students responsibility for solving problems and resolving conflicts;
- make explicit the relationships among parts of the curriculum and between the curriculum and other aspects of the collegiate experience; and
- deliberately personalize interventions appropriate to individual students' circumstances and needs.

University of Maryland, College Park offers the College Park Scholars program, a two-year living/learning opportunity for freshmen and sophomores. Students reside and attend most of their classes within residence hall communities. Residence life staff, faculty, and other program staff offices are in the halls. Student scholars live on floors corresponding to thematically linked academic programs. For participating commuting students, access is provided to common areas in host residence halls. The thematic programs **deliberately connect** what the students learn in the classroom to the larger world through weekly colloquia, discussion groups, and field trips dealing with related issues.

The scholars program has improved recruitment and retention of talented undergraduates and has provided an enriched learning experience and a more personalized and human scale to campus life. Faculty offices and classrooms within the residence halls lead to enhanced interaction with faculty.

At University of Missouri, Kansas City, Supplemental Instruction and Video-Based Supplemental Instruction help students **make connections**. Supplemental Instruction uses peer-assisted study sessions to increase student academic performance and student retention in historically difficult academic courses. In the sessions, students learn how to integrate course content and develop reasoning and study strategies, facilitated by

student leaders who have previously succeeded in these courses and who are trained in study strategies and peer collaborative learning techniques. The video-based program offers an alternative course delivery system. Faculty offer courses on videotape and students enroll in a video section. A facilitator guides review of the video lectures, stopping the tapes in mid-lecture to engage in class discussions, integration, and practice of learning strategies.

More than three hundred studies nationally have documented the impact of supplemental instruction, demonstrating its special impact on students with weak academic preparation. The U.S. Department of Education designated supplemental instruction as an Exemplary Education Program in 1982, noting its ability to increase academic achievement and college graduation rates among students. Program staff at UMKC have further investigated the effects of this instruction through the study of neurological processes. Using a Quantitative Electroencephalography instrument, they have found evidence of improved brain electrical activity in students who participate in the programs.

2 Learning is enhanced by taking place in the context of a compelling situation that balances challenge and opportunity, stimulating and utilizing the brain's ability to conceptualize quickly and its capacity and need for contemplation and reflection upon experiences.

Presenting students with *compelling situations* amplifies the learning process. Students learn more when they are:

- asked to tackle complex and compelling problems that invite them to develop an array of workable and innovative solutions;
- asked to produce work that will be shared with multiple audiences;
- offered opportunities for active application of skills and abilities and time for contemplation; and
- placed in settings where they can draw upon past knowledge and competencies while adapting to new circumstances.

To create compelling situations, faculty and staff collaborators:

- articulate and enforce high standards of student behavior inside and outside the classroom;
- give students increasing responsibility for leadership;
- create environments and schedules that encourage intensive activity as well as opportunities for quiet deliberation; and
- establish internships, externships, service-learning, study abroad, and workplace-based learning experiences.

The First-Year Experience at the College of New Jersey is a collaboration between General Education and Student Life. Students live in residence hall communities with a volunteer non-resident faculty fellow for each floor. Faculty fellows, student life staff, and students plan residence hall activities. Students also take an interdisciplinary core course, *Athens to New York*, taught by full-time faculty and selected student life staff in residence hall classrooms, and incorporating service-learning. Four questions drive the mission of the First-Year Experience: What does it mean to be human? What does it mean to be a member of a community? What does it mean to be moral, ethical, and just? and How do communities respond to differences? Service-learning provides a *compelling situation* in which students can confront complex social issues, apply their talents to marginalized communities, interact and work with diverse populations, and enhance their career preparation.

Student service-learning journals show a clear understanding of the work of the course and its objectives and core questions. Community agency staff provide feedback and guidance to students, and the staffs' evaluations offer evidence that students learn about and contribute to their communities. Students express high levels of satisfaction with the residence hall, the classroom experience, workshops, field trips, and enrichment lectures associated with the core course.

Community College of Rhode Island's 2+4 Service on Common Ground Program is part of the college's extensive service-learning activities. Supported by funds from the Campus Compact National Center for Community Colleges and the Corporation for National Service to develop service-learning partnerships between community colleges and four-year institutions, the college cooperates with Brown University's Center for Public Service. One joint project connects the community college's nursing faculty and students with the university's medical school faculty and students. Students work in many **challenging situations** to meet community needs and discuss and write in journals observations and experiences that relate the activity to their course of study and to social issues.

Student affairs staff began the program with a core team of five faculty. Now the collaborative effort includes some fifty faculty who employ service-learning in more than a dozen academic disciplines.

3 Learning is an *active search for meaning* by the learner – constructing knowledge rather than passively receiving it, shaping as well as being shaped by experiences.

Active participation by the learner is essential for productive learning, dictating that:

- instructional methods involve students **directly** in the discovery of knowledge;
- learning materials challenge students to **transform prior knowledge and experience** into new and deeper understandings;
- students be expected to **take responsibility** for their own learning;
- students be encouraged to **seek meaning** in the context of **ethical values and commitments**; and
- learning be assessed based on students' ability to **demonstrate competencies and use knowledge**.

To stimulate an **active search for meaning**, faculty and staff collaborators:

- expect and demand student participation in activities in and beyond the classroom;
- design projects and endeavors through which students apply their knowledge and skills; and
- build programs that feature extended and increasingly challenging opportunities for growth and development.

Bloomfield College (New Jersey) offers the Student Advancement Initiative, curricular and co-curricular experiences that **develop student competencies** in aesthetic appreciation, communication, citizenship, cultural awareness, problem solving and critical thinking, science and technology, and other professional skills. The program emphasizes computer-aided self-appraisal for students and a student development transcript. The objectives are to **involve students actively** in the assessment process, to provide continuous feedback to students on their progress toward the competencies, and to strengthen programs based on aggregate information about student achievement of the competencies.

Faculty and student affairs joint task forces have defined the competencies and linked them to the general education program. Faculty draw upon student affairs staff expertise in designing course assignments. Student portfolios and assessment information direct students toward self-analysis and synthesis of theoretical and practical knowledge gained through the curriculum and through developmental activities. Faculty and staff participate together in "reflective practice" sessions to improve programming and administration.

DePaul University (Illinois) offers two writing-intensive interdisciplinary and experiential programs for new

students to ease the transition to the university. All first-year students enroll in either Focal Point or Discover Chicago. Focal Point highlights an important event, person, place, or issue and is taught using a multidisciplinary format. Students also enroll in a "common hour" course where student affairs professionals help students evaluate their contributions to shared learning, develop their study and decision-making skills, create a learning plan, and reflect upon the nature of diversity at the university and in the city. Academic and student affairs personnel are involved in curriculum development, the design of classroom experiences, and student learning outside the classroom. Discover Chicago brings new students together a week before the first term for a course team-taught by a faculty member, a professional staff member, and a student mentor. The course investigates a particular topic using the city as a learning site. The work of the course involves readings and discussions, visits to city locations, and a community service project.

Assessments of the programs are designed to determine their impact on student retention and include qualitative and quantitative pre- and post-test surveys, a standardized test (the College Student Inventory) that is a predictor of student retention, syllabi review, and focus groups. Results provide information about retention and staff-faculty partnering, student expectations about the university and coursework, and the nature of assignments and forms of evaluation in each program.

4 Learning is developmental, a cumulative process involving the whole person, relating past and present, integrating the new with the old, starting from but transcending personal concerns and interests.

The *developmental* nature of learning implies both a holistic and a temporal perspective on the learning process. This suggests that:

- any single learning experience or instructional method has a lesser impact than the overall educational experience;
- curricula should be additive and cumulative, building upon prior understandings and knowledge toward greater richness and complexity;
- intellectual growth is gradual, with periods of rapid advancement followed by time for consolidation, an extended and episodic process of mutually reinforcing experiences;
- the goals of undergraduate education should include students' development of an integrated sense of identity, characterized by high self-esteem and personal integrity that extends beyond the individual to the larger community and world; and
- assessment of learning should encompass all aspects of the educational experience.

To create a developmental process integrating all aspects of students' lives, faculty and staff collaborators:

- design educational programs to build progressively on each experience;
- track student development through portfolios that document levels of competence achieved and intentional activities leading to personal development;
- establish arenas for student-faculty interaction in social and community settings; and
- present opportunities for discussion and reflection on the meaning of all collegiate experiences.

Virginia Polytechnic Institute and State University attends to the overall health of students through its Wellness Environment for Living and Learning. Students who participate make a commitment to a substance-free lifestyle and residence environment. Faculty and student affairs professionals co-teach a wellness forum, a one-credit course in the residence halls in which undergraduate resident advisors also assist. Additional programming emphasizes social, physical, intellectual, career, emotional, and spiritual purpose and philosophy. A student-run community board enables students to develop programs and to take responsibility for managing the housing experience. Campus speakers share personal experiences with substance abuse and wellness issues, and faculty and student affairs staff relate their life experiences in class discussions. The

residential community, hall programs, and course curriculum encourage students to reflect on past behaviors and to determine how new knowledge can assist them in college and in developing holistic approaches to a healthy life.

Participation in the program has increased dramatically in two years, with a significant rate of returning students and requests for additional residents. The first group of students had a significantly higher grade-point average than a control group in the beginning semester of the program.

University of Richmond (Virginia) provides a four-year experience at its women's residential college, the Women Involved in Living and Learning Program. Participants enroll in an interdisciplinary women's studies minor and in required gender-related educational programs. Goals include increasing self-awareness, self-confidence, independence, and leadership through structured educational experiences; stimulating critical thinking and analysis about gender roles and relationships; nurturing and promoting student potential and talent; fostering awareness and acceptance of difference; and providing students with curricular and co-curricular opportunities to inform and enhance academic, career, and life choices. The professional program coordinator works closely with the women's studies faculty to plan course offerings, serves on its advisory board, and teaches courses. Students complete a supervised internship and attend monthly membership meetings of a student-run organization and sponsored events that complement program goals. Events form the basis for discussion and reflection in the courses and informally in the residence halls.

Wellesley College's Center for Research on Women recently completed an assessment of this program using course effectiveness instruments, an annual survey to determine the overall impact, a self-esteem measure, an alumnae survey to evaluate the long-term program impact, and student focus groups. Results confirm the cumulative and developmental effects on participants. The study found the greatest effect on those who completed all four years of the program. Students and alumnae of the program speak of the transformational aspects of their involvement, the ways they learned to think critically that benefit them in diverse situations, their ability to question their own world views, and their tolerance of different viewpoints. Alumnae of the program express greater satisfaction with their undergraduate experience than non-program alumnae.

5 Learning is done by individuals who are intrinsically tied to others as social beings, interacting as competitors or collaborators, constraining or supporting the learning process, and able to enhance learning through cooperation and sharing.

The *individual and social nature of learning* has the potential for creating powerful learning environments that:

- take into account students' personal histories and common cultures;
- feature opportunities for cooperative learning, study, and shared research;
- cultivate a climate in which students see themselves as part of an inclusive community;
- use the residential experience as a resource for collaborative learning and for integrating social and academic life;
- use school, work, home, and community as resources for collaborative learning and for integrating social and academic life; and
- give students a chance to fathom and appreciate human differences.

To relate individuals to others as social beings, faculty and staff collaborators:

- strive to develop a campus culture where students learn to help each other;
- establish peer tutoring and student and faculty mentorship programs;
- sponsor residence hall and commuting student programs that cultivate student and faculty interaction for social and educational purposes; and

- support activities that enable students from different cultural backgrounds to experience each other's traditions.

The Program on Intergroup Relation, Conflict, and Community at the University of Michigan, Ann Arbor offers undergraduate coursework and co-curricular programming in several departments, emphasizing intergroup relations and using a variety of pedagogical approaches. Beginning as a faculty initiative, the program is managed and funded by the College of Literature, Science, and the Arts and the Division of Student Affairs. Program features include:

- first-year departmental course seminars, linked through a faculty seminar and taught by faculty seminar and taught by faculty and student affairs teams and incorporating out-of-classroom experiences designed to build communities of students beyond the individual seminars;
- Intergroup Dialogues, two-credit courses bringing together students from social identity groups for intensive peer-facilitated dialogues based on integrated readings, discussions, and experiential exercises;
- facilitator training and practicum courses for Intergroup Dialogue leaders;
- advanced courses in intergroup relations in sociology and psychology;
- consultation and workshops by program staff working with university departments and offices, training programs for staff and organizations, and special campus events;
- a resource center on intergroup relations equipped with books, articles, and videos on related topics.

A current study of the program assessed a course that included required Intergroup Dialogues. The study found that the course increased students' structured thinking about racial and ethnic inequality, enabled them to apply this thinking more generally to social phenomena not explicitly covered in the course, and affected the kinds of actions students advocated in intergroup conflicts.

Portland State University (Oregon) faculty developed their general education program using research on student learning and retention and working with student affairs professionals with expertise in student learning, group dynamics, peer facilitation, and the development of community and feelings of inclusion. The program emphasizes **the integration of both affective and cognitive modes of learning** into all aspects of its classes. It strives to overcome the limited opportunity for informal learning and casual interaction characteristic of urban, commuter campuses. Features of the program include:

- CityQuest, an orientation program designed as an activity in a freshman general education course;
- a "leadership cluster" of multidisciplinary upper-division courses on leadership fulfilling general education requirements;
- student affairs fellows who teach in the "freshman inquiry" and "senior capstone" courses;
- Metro Initiative, cooperative agreements with regional community colleges that connect academic support services and general education coursework across all institutions;
- Capstone, a collaboration to facilitate service-learning within the general education curriculum; and
- Student Snapshot, a student affairs newsletter with information about students to help faculty understand students' lives.

Since implementation of the program, student retention between the first and second year has increased, the institution has developed a better sense of who its students are, and it has information on which aspects of students' learning experiences are more or less effective. Faculty are now more likely to request assistance with students from student affairs staff and to involve the staff in teaching program courses.

6 Learning is strongly affected by the educational climate in which it takes place: the settings and surroundings, the influences of others, and the values accorded to the life of the mind and to learning achievements.

The *educational climates* in which learning occurs best:

- value **academic and personal success and intellectual inquiry**;
- involve **all constituents** -- faculty, students, staff, alumni, employers, family, and others -- in **contributing** to student learning;
- make student learning and development an integral part of **faculty and staff responsibilities and rewards**;
- incorporate student **academic performance and development goals** into the educational mission, and assessment of progress toward them into unit performance.
- include **subcommunities** in which students feel connected, cared for, and trusted.

To construct an effective **educational climate**, faculty and staff collaborators:

- build a strong sense of community among all institutional constituencies;
- organize ceremonies to honor and highlight contributions to community life and educational values;
- publicly celebrate institutional values;
- articulate how each administrative and academic unit serves the institution's mission; and
- share and use information on how units are performing in relation to this mission.

The Youth in Transition Program of James Madison University (Virginia) introduces academically underprepared minority students to college life beginning in the summer prior to their freshman year. Students are supported by an intensive, **nurturing educational environment** in which they can overcome prior negative learning experiences and develop new ways to succeed in academics. The program, offered jointly by university faculty and the Office of Multicultural Student Services, continues throughout the school year. Students receive ongoing academic support, educational enrichment opportunities, and mentors. Academic progress is monitored continuously. Faculty and student affairs staff work as an instructional team, with faculty teaching basic mathematics and writing skills and staff teaching study skills and time management and addressing issues of independence and self-confidence. Students live together in residence halls to establish peer relationships and work with their advisors through all four years of college.

A study of program participants tracked their academic progress over a one-year period. Results showed an increase in the proportion of minority students in good standing over the course of the year and a decrease in the number placed on suspension. Further analysis indicated that a significant proportion of those placed on suspension were later able to return to good standing.

New Century College of George Mason University (Virginia) coordinates Collaborations: Partnerships for Active Communities, a combination of programs designed to **place students in diverse educational settings**. "Adventure learning" courses, which fulfill the college's requirement for experiential learning, include the Chesapeake Bay Program and the Bahamas Environmental Research Center, where students engage the natural environment firsthand and learn about ecology in the broadest sense, including the people and cultures that shape the environment. Courses contain both a classroom component and a co-curricular final project. Students also can enroll in skill-based short courses, in learning communities that connect classroom study with life experiences, or in an alternative spring break through which they contribute to and learn about communities they serve. Students are encouraged to reflect on their experiences by developing portfolios representative of their work, providing documentation of work in progress, and presenting evidence of self-reflection on how their learning experiences have evolved.

Comparisons show that students who have participated in these programs have higher retention rates, academic performance, and satisfaction with college life than do non-participants.

7 Learning requires frequent feedback if it is to be sustained, practice if it is to be nourished, and opportunities to use what has been learned.

The importance to learning of *feedback, practice, and use* of knowledge and skills mandates that students be:

- expected to **meet high but achievable standards** and provided timely information on their progress toward meeting them;
- engaged in a recurring process of **correction and improvement**;
- encouraged to **take risks and learn from mistakes**;
- taught how to be **constructive critics** of each other's work;
- required to demonstrate their learning accomplishments through **active problem solving, applying concepts to practical situations**;
- **refining skills** through frequent use; and
- asked to **test theory against practice and refine theory based on practice**.

To provide occasions to use and practice what has been learned, faculty and staff collaborators:

- recruit students with relevant academic interests as active participants and leaders in related campus life programs and activities;
- organize work opportunities to take advantage of students' developing skills and knowledge;
- collaborate with businesses and community organizations to match students to internship and externship experiences that fit their evolving educational profiles; and
- develop student research and design projects based on actual problems or cases presented by external organizations to be resolved.

Iowa State University's College of Design and Department of Residence have created together the Design Exchange, a living and learning experience to promote academic success. The Exchange houses design students together in a learning community that includes a design studio and computer laboratory. The studio is available twenty-four hours a day and serves as the site of bi-weekly sessions ranging from academic survival skills to portfolio development. Sessions are facilitated by faculty, student affairs, and residence assistance staff; upper-class design students serve as peer mentors and advisors, role models, and programmers. Efforts are made to offer out-of-class activities that extend classroom learning, and to encourage informal interaction among faculty, staff, and students. First-semester survival programs are followed by more intentional faculty involvement in the second semester, during which they discuss with students such issues as design portfolios and career development. The program allows students to **create design projects and receive continual feedback** from peers and teachers. The studio space encourages this sharing on a cooperative rather than a competitive basis.

Preliminary data from a study comparing Exchange students with a control group suggest that students enrolled in the program have higher grade-point averages than design students not involved in the learning community. Students in the program also report higher levels of satisfaction with the university, a greater sense of community, and improved ability to work collaboratively to find solutions to curricular and social issues. Students surveyed cite frequent feedback and living together as major benefits of the program.

The undergraduate division of the Wharton School of the University of Pennsylvania has a mission to educate students to become broad-minded, articulate, and effective leaders in the global marketplace. Its course on leadership and communication in groups is a collaboration between student and academic affairs designed to serve this mission. It features community service projects that provide opportunities to **develop and refine leadership skills** both inside and outside the classroom. Other cooperative experiential activities over the course of students' four-year experience include leadership retreats, mentoring programs, skill-building workshops, a leadership lecture series, the management of forty student clubs and organizations, and student-run conferences. The academic and student service partnership is supported by team advisors, trained to offer both academic advice and peer counseling. The collaboration also works to temper the highly competitive business school culture and to foster cooperative community and college leaders.

Student surveys show appreciation for the school's ability to meet their needs for leadership skills. Students evaluate the leadership retreats highly. In addition, students from the school serve an already large and increasing proportion of leadership positions in the university's student organizations.

8 Much learning takes place informally and incidentally, beyond explicit teaching or the classroom, in casual contacts with faculty and staff, peers, campus life, active social and community involvements, and unplanned but fertile and complex situations.

Informal and incidental learning is enhanced by:

- activities beyond the classroom that enrich formal learning experiences;
- an institutional climate that encourages student interaction related to educational issues;
- mentorship relationships on and off campus;
- chances for students to meet faculty and staff in a variety of settings and circumstances; and
- student participation as volunteers and active citizens in the broader community.

To facilitate informal and incidental learning, faculty and staff collaborators:

- sponsor programs for students, faculty, and staff that serve both social and educational purposes;
- organize community service and service-learning activities performed by faculty, staff, and students together;
- design campus life programs that relate directly to specific courses;
- link students with peers and with faculty, staff, and community mentors; and
- build common gathering places for students, faculty, and staff.

The First-Year Program at the College of the Holy Cross (Massachusetts) is a thematically based academic experience for about one-fourth of the first-year class. Each year a new theme is built around the question "How then shall we live?" by connecting that question to a specific issue. The theme gives an explicit ethical focus to the year and is the touchstone for all other components of the program, including a pair of first-year courses extending through both semesters, a two-semester common reading program, a variety of co-curricular events with faculty and students, and a common residency experience. The intellectual community associated with the program encompasses classroom, studio, laboratory, performance space, faculty offices, and residence hall. The program extends into all aspects of students' lives, connecting the learning experience with fundamental questions about how to live, to be part of a community, and to make moral choices. The intent is to provide shared experiences that embrace the entire first-year environment and in so doing to provide a framework that promotes informal learning.

Student interviews and institutional records show high levels of participation in class discussion and co-curricular events, extensive discussions outside the classroom, and a strong sense of community in the residence halls. Compared with other students, First-Year participants had fewer alcohol-related incidents, received higher grades, and were more likely to assume campus leadership positions, to participate in honors and study abroad programs, and to be active in community programs.

The University of Missouri, Columbia creates Freshmen Interest Groups of students enrolled in the same sections of three general education courses, living in the same residence halls (usually on the same floor), and enrolled in a one-semester seminar. The seminar is designed to help students integrate material from the general education courses and to facilitate informal discussions on issues covered in the courses. The program's objectives are to make the campus psychologically small by creating peer reference groups of students, to integrate purposefully curricular and co-curricular experiences, to stimulate early registration for related

courses, and to encourage faculty to integrate course content and activities across their disciplines. Faculty and staff jointly plan the program, coordinate in- and out-of-classroom activities, and champion desired outcomes and assessment strategies to evaluate the impact of the learning experience. Shared projects and events associated with the courses are especially important for promoting opportunities for discussion. Peer advisors reinforce this learning, serve as study leaders, and use team-building approaches to increase interest group cohesion. Residence halls have been renovated to offer group study space, classrooms, and computer laboratories.

In comparison with other freshmen, students in the Freshmen Interest Groups demonstrate higher levels of interaction and involvement in college life in the first and second years, greater intellectual content in their contacts with faculty and other students, better performance in general education courses, higher grade-point averages, and higher freshmen-to-sophomore retention rates.

9 Learning is grounded in particular contexts and individual experiences, requiring effort to transfer specific knowledge and skills to other circumstances or to more general understandings and to unlearn personal views and approaches when confronted by new information.

The *grounded* nature of learning requires that students:

- encounter alternative perspectives and others' realities;
- grapple with educational materials that challenge conventional views;
- confront novel circumstances that extend beyond their own personal experiences and that require the application of new knowledge or more general principles; and
- share freely with others experiences that have shaped their identities.

To transform learning *grounded in particular contexts and individual experiences* into broader understandings, faculty and staff collaborators:

- sponsor events that involve students with new people and situations;
- champion occasions for interdisciplinary discourse on salient issues;
- foster dialogues between people with disparate perspectives and backgrounds; and
- expand study abroad and cultural exchange programs.

St. Lawrence University (New York) strives for a learning environment that integrates multicultural perspectives, influences, and ideas throughout the curriculum and the campus community. In its First-Year Program, students live together in residential colleges and take an intensive, year-long, interdisciplinary, team-taught thematic course in communication. Faculty members work with student affairs staff to ensure that the living and learning nature of the program encourages students to reflect on course themes, conflicts arising in the residence hall, and connections between the themes and living experiences. A "residential curriculum" is organized by residential coordinators, college assistants, and faculty to discuss in class and in the colleges both predictable and unique stresses in the residence communities. A residential education committee plans events and designs interventions to address student problems and conflicts. Students are expected to think through and resolve conflicts associated with differences in background, in behavior within the residence halls, and in academic perspectives. In doing so, students explore each other's personal histories, respond to others' views, and examine the relationship between individual perspectives and knowledge-based approaches.

Detailed evaluation forms ask students about the impact of living with people enrolled in a common course, the communication and research skills learned, the effects of the multidisciplinary, team-taught course, and the coverage of residential issues. Data indicate that residential goals and communications skills are being

achieved. Students are positive about living with others who share their academic and personal experiences and appreciate having faculty involved in their residential lives.

University of Wisconsin, Whitewater has a mission to serve students with disabilities and has had a formal program to provide services for these students for nearly thirty years. Instructional staff accommodate students with disabilities in classrooms, labs, field work, internships, student teaching, and the workplace. A new work experience project offering academic credit has received exceptional support from faculty and students. The project brings staff into close contact with faculty, and staff work with the State Vocational Rehabilitation Agency to organize the experience. For many severely and multiply disabled students, the work is one of the first successful validations of their capacity to succeed and to establish a strong identity. Efforts are focused on **matching students' needs with a work environment complementing their educational background** and likely to ensure success. The work is an intensive individual experience; however, the individual learning is tied directly to interaction with others in the workplace at several levels. It helps to provide self-definition as a person and to delineate a role and status within the task group. The combination of the workplace routine, supervisory and peer feedback, and the duties of the position offer opportunities for growth and for eliminating non-functional behaviors. The program has proved particularly important for individuals whose learning styles are not conducive to transfer of knowledge from one context to another.

At the university, students with disabilities are retained at a significantly higher rate than the institutional average for all students, and they obtain employment at exceptional rates. These results compare remarkably well with national studies of retention and employment rates for disabled students.

Bowling Green State University (Ohio) created its Chapman Learning Center as a "think tank for learning," to experiment with new pedagogies and program structures to engage students in classroom and outside-the-classroom activities. A freshmen residential program, the Center involves faculty from several disciplines, each with offices in the residence hall, a hall director and junior tutors who work with faculty on required anchor courses, elective courses, and a common learning day. Classes are thematically linked in two anchor courses each semester, and center on difficult social issues during the first term and on aesthetics and imagination during the second. Freshmen composition courses are linked to these disciplinary courses. Community events are planned to relate directly to the course themes. Teaching practices emphasize interactive, experiential activities, learning experiences outside the classroom, **critical thinking about challenging issues**, and support for learning by residential staff. Classes are small, to enable faculty to offer frequent written and verbal feedback on in-class and out-of-class assignments. Students are encouraged to **examine personal beliefs and values** in relation to broader perspectives on social issues, and peer-mediated discussions of social controversies are featured.

Chapman students show disproportionate satisfaction and adjustment to college life when compared with other freshmen. They feel less lonely, are more actively involved in their classes, experience more faculty approval, and are more willing to approach faculty.

10 Learning involves the ability of individuals to monitor their own learning, to understand how knowledge is acquired, to develop strategies for learning based on discerning their capacities and limitations, and to be aware of their own ways of knowing in approaching new bodies of knowledge and disciplinary frameworks.

To improve the ability of individuals to *monitor their own learning* requires that faculty and staff:

- assist students in **understanding the elements and structures of learning and the standards for learning achievements;**
- help students understand their **relative strengths and weaknesses in learning;**
- ask students to observe and record their **own progress in learning;**

- use **multiple pedagogies** suited to the content or skills to be learned and reaching students with different approaches to learning;
- **tailor education to the individual learner** rather than exclusively providing mass-delivered presentations;
- use **educational technologies** as a tool for **collaborative learning** and encourage reticent students to participate;
- cultivate students' **desire to know what they do not know**; and
- continue to learn what **factors affect student cognition and learning** and to design learning experiences responsive to **learning differences**.

To enable students to **monitor their own learning**, faculty and staff collaborators:

- help them delineate and articulate their learning interests, strengths, and deficiencies;
- reduce the risk to students of acknowledging their own limitations;
- help students select curricular and other educational experiences covering a broad range of learning approaches and performance evaluations; and
- create faculty and staff development activities to learn about advances in learning theory and practice.

The Western College Program of Miami University, Oxford (Ohio) is an interdisciplinary residential college featuring a core curriculum in the liberal arts for the first two years followed by individually designed upper-level interdisciplinary programs of study and a year-long senior project based on all four years of study. Completed senior projects are publicly presented using a professional conference format and including faculty respondents from outside the college who have not worked with the students. Two residence halls house the Scholar Leader program, which combines systematic study of leadership informed by the university's Leadership Values Framework. The purpose of this program is to assist students in **taking responsibility for themselves as a self-governing community of learners**. The Framework provides a set of principles for shaping the university community's understanding of leadership. Its values serve as a guide in working with students and developing their leadership potential. These values in turn are based on the university's "principles of liberal learning" and provide for the active translation of liberal education into co-curricular experiences. With faculty and staff advice, students take leadership responsibility for developing the educational community.

The program has a number of assessment projects under way, several under the auspices of the student affairs assessment committee of faculty and staff. The intent is to document the impact of the program, not only on students but also on faculty and staff participants. Measures include quantitative, nationally normed outcome assessment instruments and qualitative evaluations based on student interviews, free writing, focus groups, portfolios of student work, and ethnographies.

The vice presidents for academic and student affairs at William Rainey Harper College (Illinois) established a joint "Statement of Student Success" that endorses two concepts: all students have the right to succeed, and the college has the right to uphold high standards for achievement. Based on this statement, the college established a program to support students at this two-year open-door college with academic preparation and counseling services as a way to meet the college's standards and to help them attain success. The college developed five standards of academic performance, established requirements for entry into college-level courses based on level of preparation as determined by entrance tests, and coupled these actions with an "intrusive intervention" program administered by the student development office. The intervention program monitors student course taking and grades. Through computerized tracking and human interaction, students receive information on their progress and work with faculty and staff to create personalized success contracts. These contracts include academic, personal, developmental, and social strategies to assist students making decisions about college and careers. Individual students' strategies are recorded and tracked through a computerized interface with the registration system, allowing possible restrictions to course loads or future registrations, or triggering further interventions when performance falls below standards. Interventions are made by faculty and staff, and students are asked to **assess their own performance** and to learn ways to use the support system to assist them.

Survey results over the years document that at-risk students enrolled in the intervention program have a clear understanding of the academic system, know what factors result in low grades, have reasonable plans to improve their performance, and believe the required interventions will have a positive impact on their future academic success.

What We Have Learned

Collaborative Futures in Support of Learning

The evolving principles of learning, continually informed by future advances in our understanding and knowledge of the learning process, hold great promise for improved student learning. By applying these principles to the practice of teaching, the development of curricula, the design of learning environments, and the assessment of learning, we will achieve more powerful learning. Realizing the full benefit of these applications depends upon collaborative efforts between academic and student affairs professionals -- and beyond. It will require attention and action by all those affiliated with our institutions as well as by members of the larger community concerned with higher education to ensure that we achieve our mission of increased higher learning.

We call all those who serve the goals of learning to contribute to these collaborations. We ask that:

Students take charge of their own learning and organize their educational programs to include a broad array of experiences both inside and outside the classroom; become aware of the cumulative nature of their education, and consequently plan and monitor their development; and establish personal relationships with faculty and staff as an essential part of their education.

Faculty become masters of cognitive studies; develop pedagogy and curricula that draw upon and embody learning principles; become involved in all aspects of their institution's community life; and work in partnership with staff and community supporters to create learning activities based on the learning principles.

Scholars of cognition share their findings widely with faculty colleagues and higher education audiences and be attentive in their writings to the application of new findings to the conduct of teaching and learning.

Administrative leaders rethink the conventional organization of colleges and universities to create more inventive structures and processes that integrate academic and student affairs; align institutional planning, hiring, rewards, and resource allocations with the learning mission; offer professional development opportunities for people to cooperate across institutional boundaries; use evidence of student learning to guide program improvement, planning and resource allocation; and communicate information on students' life circumstances and culture to all members of the college or university community.

Student affairs professionals and other staff take the initiative to connect to each other and to academic units; develop programs that purposefully incorporate and identify learning contributions; and help students to view their education holistically and to participate fully in the life of the institution and the community.

Alumni reflect upon how what they learned in college contributed to their life after graduation and share these observations with current students and institutional officials; provide learning opportunities and mentorships outside the classroom for students; and contribute financial support to programs offering students the chance to use their knowledge in a variety of settings.

Governing boards understand the learning enterprise and how the institution conducts it; ask senior managers

for information on how the organizational structure supports learning and for evidence of learning outcomes; and reward contributions to learning through promotion and tenure decisions and in evaluation of the president.

Community supporters volunteer workplace and other organizational venues for student learning; team with faculty and staff to design learning experiences in the community or workplace; serve as supervisors and mentors for student learning activities; evaluate student performance and provide models of reflective practice in their own professions; and help colleges and universities to understand the skills and knowledge needed by their graduates.

Accrediting agencies require in their review processes evidence of how institutions integrate learning experiences across administrative units and demand measures of learning effectiveness.

Professional associations disseminate best practices of collaboration on behalf of student learning in their programs, publications, and awards; exemplify the importance of partnerships for learning by establishing cooperative programs with other associations; and emphasize learning as a field of knowledge essential for graduate students planning careers in colleges or universities.

Families help students select a college or university based on its commitments to learning and student development and its learning environment; encourage students to choose and participate in a comprehensive program of educational activities throughout their collegiate experience; and help students to understand the value of reflection and to find time for concentrated study in their complicated lives.

Government agencies sponsor research and development on learning; offer incentives to institutions for new initiatives focused on collaboration for learning; and require evidence of institutional assessment of learning.

All those involved in higher education, as professionals or as community supporters, view themselves as teachers, learners, and collaborators in service to learning.

[Membership](#) | [Home](#)

Appendix 2: Teaching Divisions of Professional Associations and their Websites

The Arts

Art

College Art Association
<http://www.collegeart.org/>

Music

The National Council for Music Education (MENC)
<http://www.menc.org/>

Theatre

Association for Theatre in Higher Education
<http://www.bsu.edu/web/cfa/ATHE/>

The Humanities

English

Modern Language Association
<http://www.mla.org/>

History

American Historical Association. Teaching Division
<http://www.theaha.org/teaching/>

Foreign Languages

Council for the Teaching of Foreign Languages
<http://www.actfl.org/>

Philosophy

American Philosophical Association
<http://www.udel.edu/apa>

Religious Studies

American Academy of Religion. Spotlight on Teaching
<http://www.aar-site.org/publications/spotlight/spotlight-prof.asp>

The Sciences

Science in General

Project Kaleidoscope
<http://www.pkal.org/curriculum/index.html>

Biochemistry

American Society for Biochemistry and Molecular Biology
<http://www.asbmb.org/>

Cell Biology

American Society for Cell Biology. Education Committee
<http://www.ascb.org/committees/edcom/index.html>

Cell Biology Education (Journal)
<http://www.cellblood.org/>

Chemistry

American Chemical Society. Committee on Professional Training
<http://www.acs.org/portal/Chemistry?PID=acsdisplay.html&DOC=education%5Copt%5Cindex.html>

Mathematics

Mathematical Association of America. Teaching and Learning
http://www.maa.org/t_and_l/index.html

Physics

American Association of Physics Teachers
<http://www.aapt.org/>

The Social Sciences

Communications

National Communication Association. ComResources Online
<http://www.natcom.org/ctronline/>

Economics

American Economic Association. Teaching Resources
<http://rfe.wustl.edu/Teaching/index.html>

The Journal of Economic Education
<http://www.indiana.edu/~econed/>

International Affairs

International Studies Association
<http://www.isanet.org/>

Political Science

American Political Science Association (teaching tab)
<http://www.apsanet.org/>

Psychology

American Psychological Association. Society for the Teaching of Psychology
<http://www.apa.org/about/division/div2.html>

Sociology

American Sociological Association. Teaching Sociology
<http://www.asanet.org/sections/undergra.html>

Summer Research Interns
Summer 2000

Name	MISC	email	acct. number	supervisor	i-9/W4	salary	housing from acct: 1010	phone
Anthony, Vicki	2066	vanthony	02 0 1226	broide	/x	\$3,000.00	\$600.00	233-7631
Awana, Kukui	517	awana	020 1606	kuo	x/x	\$3,000.00	\$600.00	8631
Bower-Cooley, Joshua	403	jcb	000 1110	mache	/x	\$2,000.00	\$600.00	452-2491
Broadhurst, Robbie		reb	000 1110	mache		\$1,000.00	\$300.00	
Carter, Miles	547	mcarter	020 1238	randall		\$3,500.00	\$600.00	293-0665
Chin, Sharon	583	smchin	020 1613	duncan	x/x	\$3,500.00	\$600.00	768-6680
Clarkson, Katie	595	clarkson	000 1110	autumn	os	\$3,000.00	\$600.00	775-9162
Clements, Sarah	1943	clements	000 1110	clifton	x/x	\$3,000.00	\$600.00	754-7100
Cranfill, Jennifer	632	cranfill	000 1110	mache	?	\$2,000.00	\$600.00	293-0914
Ellis, Jesse	854	ellis	000 1110	clifton	os	\$3,000.00	\$600.00	
Hansen, Wendy	1064	whansen	000 1110	autumn	x/x	\$3,000.00	\$600.00	699-9822
Hofstra, Jennie	1158	hofstra	000 1110	reiness	/x	\$3,000.00	\$600.00	244-5183
Huff, Jason	898	jhuff	000 1110	reiness	x/x	\$3,000.00	\$600.00	8826
Kirkman, Clark	1329	clarkman	000 1110	mache	x/x	\$2,000.00	\$600.00	8978
Miyasaki, Christine	1601	miyasaki	000 1110	duncan		\$3,000.00	\$600.00	245-4180
Rocks, Lindsey.	1797	rocks	000 1110/020 1	tuffe	x/x	\$3,000.00	\$600.00	293-1141
Sherman, Mikal	1881	msherman	020 1238	randall	on file	\$3,500.00	\$600.00	968-5228
Smiley, Allison	1922	smiley	000 1110	olsen	x/x	\$3,000.00	\$600.00	293-1141
Smith, David	1925	dsmith	02 0 1628	abele	os	\$3,000.00	\$600.00	
Sponberg, Simon	1675	sponberg	02 0 1226	broide	x/x	\$3,000.00	\$600.00	8936
Spong, Marie	1947	spong	02 0 1613	duncan	x/x	\$3,500.00	\$600.00	768-6532
Still, Amelia	1980	still	020 1238	randall		\$3,500.00	\$600.00	293-0421
Tarpo, Shyla	1981	tarpo	000 1110	kuo	os	\$3,000.00	\$600.00	282-1637
Treiger, Benyamin	2019	treiger	020 1238	randall	x/x	\$3,500.00	\$600.00	736-9177
Tucker, James	2026	jtucker	000 1110	olsen		\$3,000.00	\$600.00	754-7800
Wilson, Jeremy	2124	jdwilson	020 1602	tuffe	x/x	\$3,000.00	\$600.00	293-1141

1999 Summer Science Research Students

Student	e-mail	Box	Phone	Professor	Congr at Letter	Con- tract	Funding	Acc't #	Salary/Liv Stipend	I9, W4
Blackwell, Aaron	adb	381	8521	Lochner	x	x	NSF	020 1236	3000/800	x
Bricker, Mary	bricker	429	244-6386	Bierzychudek	x	x	LCSSR	020 1110	3000/800	x
Broadhurst, Robble	reb	434	8602	Mache	x	x	LCSSR	020 1110	2000/800	x
Chin, Sharon	schin	583	8984	Williams	x	x	LCSSR	020 1110	3000/800	x
Christel, Carolyn	christel	521	8977	Clifton	x	x	LCSSR	020 1110	3000/800	x
Clarkson, Kathleen	clarkson	595	8735	Balko	x	x	LCSSR	020 1110	3000/800	x
Ellis, Jesse	ellis	854	8677	Clifton	x	x	LCSSR	020 1110	3000/800	x
Gekiere, David	gekier	816	288-4910	Mache	x	x	LCSSR	020 1110	2000/800	x
Goranson, Eric	eag	1002	2816	Duncan	x	x	RC	020 1813	3500/800	x
Ilias, Nasreen	@teleport	1215	524-6124	Lycan	x	x	Murdock	020 1803	3000/800	x
Kennedy, Scott	skennedy	1130	245-1460	Duncan	x	x	RC	020 1813	3500/800	x
Kirkman, Clark	ckirkman	1329	8973	Mache	x	x	LCSSR	020 1110	2000/800	x
Mabee, Laura	mabee	1480	513-6817	Bierzychudek	x	x	LCSSR	020 1110	3000/800	x
Muscarella, Bob	ram	1645	8522	Williams	x	x	LCSSR	020 1110	3000/800	x
Pereira, Melissa	mpereira	1584	8702	Scalettar	x	x	NSF	020 1236	1500/300	x
Rocks, Lindsay	rocks	1797	8413	Scalettar	x	x	NSF	020 1236	1500/300	x
Smiley, Alison	smiley	1922	8608	Olsen	x	x	LCSSR	020 1110	3000/800	x
Spong, Marie	spong	1947	8423	Duncan	x	x	LCSSR	020 1110	2400/480	x
Tucker, James	jftucker	2026	8607	Scalettar	x	x	NSF	020 1236	1500/300	x
Wilson, Jeremy	jdwilson	2125	8391	Scalettar	x	x	NSF	020 1236	1500/300	x
Researchers not governed by Rogers Program										
Collord, Jennitt	collord			Snodgrass			NSF			x
Perera, Nick	perera	1591	245-8435	Kuo			PRF	020 1808	3000/800	x
Rocks, Lindsay	rocks	1797	8413	Snodgrass			NSF		1400	x
Smith, Adam	aasmith			Snodgrass			NSF			x
Smith, David	dsmith			Snodgrass			NSF		1400	x
Sponberg, Simon	sponberg			Scalettar			NSF		1500	
Wagy, Mark	wagy			Olsen			Partners in Science		3000/800	x
Wilson, Jeremy	jdwilson	2125	8391	Snodgrass			NSF		1400	x

Student Interns - LC Summer Research Program 1997

Name	email	box	supervisor	email	funding
Azar, Joseph	jazar	311	duncan	duncan	murdock
Beathe, Johathan	beathe	394	duncan	duncan	murdock
Cutler, Bryan	cutler	586	scalettar	bathe	
Dion, Danielle	ddion	652	reiness	reiness	murdock
Gasser, Dante		1012	bierzuchudek	bierzuch	
Higa, Jose	jhiga	1222	balko	balko	murdock
Jurgenson, Colby	colby	1041	snodgrass	hbs	murdock
Lee, Ray	tree	1460	abele	abele	murdock
Lopez, Anthony	alopez	1208	brokde	brokde	murdock
Meliza, C. Daniel	meliza	1597	lochner	lochner	
Rager, Nicole	rager	1984	brokde	brokde	murdock
Robinson, Sean	smr	2041	abele	abele	murdock
Schulze, Chris	schulze	293	randall	randall	
Severson, David	severson	2138	balko	balko	murdock
Smith, Adam	asmith	1799	snodgrass	hbs	
Smith, Thomas X.	txs	1809	snodgrass	hbs	
VanderJack, Andrew	amv	2089	randall	randall	
Weiland, Annie	weiland	838	bierzuchudek	bierzuch	
Wilson-Seppa, Midori	midori	1157	reiness	reiness	murdock
Youngman, Jessica	youngman	2052	bierzuchudek	bierzuch	

FACULTY STUDENT
SUMMER RESEARCH AWARD HISTORY

Summer	Total # Awardees	Approved Awardee Name	Project Title
2001	3	Cortell, Andrew Goodstein, Eban Whitaker, Rachel	Globalization and National Divergence The Code of Kyoto: An Institutional Analysis Morrison Mission Records and a New Indian History
2000	5	Cortell, Andrew Eisinger, Robert Fosco, Kurt Fowler, Sherry Fritzman, John	Understanding the Domestic Consequences of International Institutions Reconciling Conceptions of Public Opinion among Political Elites The Romantic Animal: Representations and Subjectivity in Poetry and Painting 1785-1820 Research and Collaboration Project in Japan and Portland Hegel's Method: Phenomenological or Dialectical
1999	57	Arnold, Stephanie Beckham, Stephen Eisinger, Robert Young, Elliot Zahrtz, Leah, Elizabeth	Research and Development for the Second Edition of The Creative Spirit: An Introduction to Theatre Adam Clark Vroman: Photographer of the American West How Do Elites Concentralize Vux, Fygyll? Curanderismo and Bio-Medicine on the South Texas Border at the End of the Nineteenth century How Have Oregon's American Indians Fared Under Welfare Reform?
1998	9	Callahan, John Kono, Kurt Fowler, Sherry Nelson, Diane Nielsen, Eric	The Letters of Ralph Ellison Community and Mourning in Erikson's <i>Print Culture, 1775-1795</i> International Seminar in Duzheng, China Now That There's Peace, What about the Women? Gender in the Guatemalan Mayan Cultural Rights Movement Visual Search and Perceptual-Motor Interactions in Mamm Selection
1997	5	Beckham, Stephen Cole, Alan Eisinger, Robert Pack, Richard Zimring, Nicholas	Oregon's Native Americans: A Reader Buddhism's View of Nature The Illusion of Certainty: Explaining the Evolution of Presidential Polling Black Writing and Politics in Apartheid South Africa The Nation at Home: The Urban Domestic in Gissing, Conrad, James, and Rhys
1996	5	Goodstein, Eban Hunter, Jane	Green Conversion: Lessons from Clinton's Forest Plan and the Clean Air Act School Girls in Late-Victorian America
1995	5	Callahan, John Fugal, Gerald Haskewy, Kevin Taylor, Michael Yes, Phyllis	A Posthumous Edition of Ralph Ellison's Second Novel (Introduction by JFC; essay on identity by AB) Mediating and Memorializing War History: Japan, Okinawa, and the Textbook Controversy Sexual Conditioning: Instrumental Behaviors Myths, Legends, Stereotypes Retrospective Exhibition
1994	67	Aas-Rouxparis, Nicole Beckham, Stephen Carlson, Helen Grant, James Hart, Jack Majumdar, Bob	Antileban Voices in Francophone Literature Ocoa Ethnohistory: Indians of the Oregon Seashore Ireland's Normans: The Travellers Studies in the efficiency of Production of Nursing Home Services Cassidy's Migrants in North American Collections What Are We Professors? Security Complexities in the Post-Cold War World

Appendix 5: Readings and Websites Related to Undergraduate Research Experiences

References

- Goodwin, L., Miller, J. E., & Cheetham, R. D. (1991). Teaching freshmen to think—does active learning work? *BioScience*, 41, 719-722.
- Light, R. J. (2001). *Making the most of college: Students speak their minds*. Cambridge, MA: Harvard University Press.
- Mervis, J. (2001). Student research: What is it good for? *Science*, 293, 1614-1615.
- Reisberg, L. (1998). Research by undergraduates proliferates, but is some of it just glorified homework? Interest in students' projects grows as universities face criticism over teaching. *The Chronicle of Higher Education*, May 22, 1998.
- Joint Task Force on Student Learning (1998). *Powerful partnerships: A shared responsibility for learning*. (American Association for Higher Education, American College Personnel Association, National Association of Student Personnel Administrators) June 2. (http://www.aahe.org/teaching/tsk_froe.ht)

General Websites:

Carnegie Mellon Undergraduate Research Initiative:

<http://www.cmu.edu/adm/urif>

Council on Undergraduate Research (CUR):

<http://www.cur.org/>

Joint Task Force on Student Learning:

http://www.aahe.org/teaching/tsk_froe.htm

Journal of Young Investigators (Undergraduate, peer-reviewed science journal):

www.jyi.org

National Conferences for Undergraduate Research (NCUR):

<http://www.ncur.org/>

Examples of Undergraduate Research Programs (almost exclusively in the sciences):

At larger colleges and universities:

Summer Undergraduate Research Experience, UNC, Chapel Hill:

<http://www.med.unc.edu/pmbb/sure.htm>

University of Miami's Rosenstiel School of Marine and Atmospheric Science:

<http://www.rsmas.miami.edu/grad-studies/sumfel.html>

University of Minnesota:

http://www.cbs.umn.edu/summer_research/

University of Texas Medical Branch (UTMB) at Galveston:

<http://gsbs.utmb.edu/surp/>

University of Delaware:

<http://www.udel.edu/UR/>

At smaller colleges and universities:

Miami University Summer Scholars Program:

<http://www.muohio.edu/undergradresearch/usa/>

Harvard University:

<http://www.hms.harvard.edu/dms/diversity/shurpintro.html>

Lewis and Clark College: John S. Rogers Science Research Program

<http://www.lclark.edu/~mnad/rogers.htm>

Lewis and Clark College: Behavioral Health and Social Psychology Labs Team Model

<http://www.lclark.edu/~jerusha/bhamodel.htm>

At independent laboratories:

Cold Springs Harbor Laboratory

<http://www.cshl.org/URPsite/URP.html>

Department of Energy Undergraduate Program

<http://www.sclcd.science.doe.gov>

Mayo Clinic:

<http://www.mayo.edu/mgs/surf.htm>

NASA:

<http://education.nasa.gov/usrp/>

Appendix 6: Pre-major advising versus major advising: Combined tenure and untenured faculty priority rankings

How much priority do the following activities receive from you when you work with advisees?		
1 = Very Low Priority 2 = Low Priority 3 = Moderate Priority 4 = High Priority 5 = Very High Priority		
	PRE-MAJOR Mean (S.D.) pct. 4 or 5	MAJOR Mean (S.D.) pct. 4 or 5
Meet with advisees during registration	4.72 (.575) 96.1	4.57 (.651) 93.5
Help advisees select courses	4.57 (.589) 94.8	4.60 (.626) 94.7
Help advisees plan their four years at Lewis & Clark	3.50 (.892) 53.3	4.46 (.615) 94.4
Help advisees to appreciate the goals of a liberal arts education	3.27 (1.007) 40.3	3.26 (1.04) 38.6
Talk with advisees about their academic interests and abilities	4.07 (.782) 76.7	4.16 (.813) 77.6
Talk with advisees about their life goals	3.22 (.969) 36.4	3.88 (.954) 69.7
Advise students on personal, nonacademic matters	2.43 (.956) 10.4	2.79 (1.104) 25.0
Advise students on career plans	2.98 (.851) 23.7	4.13 (.691) 75.2
Provide information about college policies, procedures, resources, and programs	3.66 (.919) 55.9	3.43 (1.05) 44.7
Make referrals to other college services	3.57 (.847) 49.4	3.43 (1.00) 44.0
Meet advisees at times other than registration	3.23 (.952) 40.8	3.85 (1.026) 64.2
Assist advisees in choosing a major	3.40 (.873) 37.6	
Help advisees find an extracurricular connection with LC	2.51 (.997) 10.4	

Appendix 7: Pre-major advising: Comparing the priorities of tenured faculty with those of untenured faculty

How much priority do the following activities receive from you when you work with advisees?		
1 = Very Low Priority		
2 = Low Priority		
3 = Moderate Priority		
4 = High Priority		
5 = Very High Priority		
	TENURED pct. 4 or 5	UNTENURED pct. 4 or 5
Meet with advisees during registration	96.3	95.4
Help advisees select courses	92.7	100.0
Help advisees plan their four years at Lewis & Clark	56.4	45.5
Help advisees to appreciate the goals of a liberal arts education	36.4	50.0
Talk with advisees about their academic interests and abilities	76.4	77.3
Talk with advisees about their life goals	32.8	45.4
Advise students on personal, nonacademic matters	5.5	22.7
Advise students on career plans	27.8	13.6
Provide information about college policies, procedures, resources, and programs	52.7	63.6
Make referrals to other college services	41.8	68.2
Meet advisees at times other than registration	37.0	50.0
Assist advisees in choosing a major	41.8	40.9
Help advisees find an extracurricular connection with LC	7.2	18.2