



Curricular and Research Support at Carleton College: A Report and Recommendations for Future Planning

Advisory Committee for Curricular and Research
Support (CARS)

June 30, 2010



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Acknowledgements

Dean of the College Beverly Nagel and Vice President for Student Development and Dean of Students Hudlin Wagner commissioned this report. At its core, the purpose of the present report is to prepare for planning exercises that will more closely align curricular and research support with the needs of Carleton students and faculty.

The report is based on a six-month study undertaken by the Advisory Committee for Curricular and Research Support (CARS). Committee members in this inaugural year were: Nicholas Bellos (student), Joel Cooper (director of Information Technology Services), Samuel Demas (college librarian), Kathy Evertz (director of the Academic Support Center), Heidi Eyestone (curator of the Visual Resources Collection), Nathan Grawe (associate dean), Will Hollingsworth (professor), Danya Leebaw (reference and instruction librarian), Stephen Mohring (associate professor), and Chico Zimmerman (professor and coordinator of the Perlman Center for Teaching and Learning). The CARS Committee advised the design of the research project, analyzed resulting data, proposed recommendations and identified key issues to guide the College's planning.

In addition, members of the College's Academic Standing Committee (ASC) identified issues germane to students who have struggled at Carleton. Colleagues from the offices of Intercultural and International Life, Chaplain, Gender and Sexuality Center, and TRIO/Student Support Services provided insights rooted in their experiences with specific subpopulations represented in Carleton's student body. Mary Savina and Cherry Danielson proposed a model to incorporate curricular and research support into departmental planning exercises. Students in leadership roles such as intercultural peer leaders, student departmental advisors, writing consultants and prefects generously, contributed insights into their own work and the ways other Carleton students engage campus more broadly.

I offer a sincere thanks to members of the Carleton community who contributed thoughtful insights and analyses to this report.

Andrea Lisa Nixon, Ph.D.

CARS Chair and Director of Curricular and Research Support

Executive Summary

This report is based on a six-month study designed to identify sources, needs and prospects for curricular and research support at Carleton College. Put into a larger context, the study is intended to be an important contribution to the College's discussions about how best to align institutional resources with work demanded of contemporary students and faculty.

During the previous two years, discussions about how to more effectively provide curricular and research support have touched on five core elements: changing Carleton's institutional culture to ensure curricular support is perceived as a resource for all students not just those who are struggling; accounting for differing needs of students, recognizing differences in class years or acculturation; recognizing the multifaceted roles that students, educational associates, staff members, and faculty members play in providing support; coordinating support efforts that span academic departments and offices; and providing expert reference among sources of curricular and research support on campus. These five elements are represented and more fully developed in this report.

The first segment of the report includes recommendations from the CARS Committee of key issues or principles that should drive institutional planning. An important contribution of this report is the further development of our conceptualization of Carleton's coordinated support model. Concisely put, curricular and research support at Carleton should be designed both to encourage student *engagement* with expertise on campus and to foster *independent pursuit of knowledge*. These paired notions are important developments. This section may be of use to both long-term and near-term planning exercises.

The second segment of the report identifies current sources of curricular and research support in terms of drop-in centers and types of consultations available to all students. Also of note are the community-specific and mentored cohort programs. The portion of research support covered in this report relates to research activities that intersect with the curriculum. Resources available to faculty range from workshops, consultations, assignment collections, software and information resources, copyright and human subjects research expertise, as well as equipment and facilities.

The third section goes into greater detail about four critical themes that emerged in the Committee's discussions about coordinated support: student acculturation, facilities, expertise, and equipment and software. In this context, student acculturation refers to the process by which students enter into the campus-wide community of learning and then into discipline-specific communities. This report identifies initial signs of progress in outreach efforts and offers additional recommendations. Previous discussions of campus facilities and expertise have primarily focused on academic departments and campus-wide structures such, as the Gould Library. This study makes clear the importance of incorporating culture houses, e.g. Freedom House or Stimson House , into our conversations about places where students work and support one another. The section concludes with a series of observations about the College's provision of software and equipment that should inform future design and allocation discussions.

The final section is comprised of specific action items that emerged from the Committee's discussions. Where the previous sections of the report provide information and issues that should guide future planning, the action items are near-term recommendations relating to ways of using existing resources to greater effect, new or emerging needs, and resources that might not be as critical as they once were.

The CARS Committee has gone to great lengths to conduct focus groups, facilitate discussions, scan the literature, and collect data that promise to be of use in future planning processes. The appendices include these in the hopes that they will be resources of use to other members of the community. This study was intended to further efforts that identify existing pressure points, redundant efforts, and ways of freeing people up from tasks that are no longer critical so that resources and expertise can be focused on current needs. Given the College's new leadership and our dynamic curriculum, we hope to provide information the community will find useful our planning.

Introduction and Overview

Carleton College is at an exciting time in its history. We are about to welcome our 11th president, Steven G. Poskanzer, to the community. The faculty voted in a new curriculum and course requirements that will be implemented in three months. Interdisciplinary initiatives are underway in academic civic engagement, science and math, humanities, quantitative inquiry, spatial analysis and visualizing the liberal arts. This is a point in the College's history when a healthy momentum is paired with an enthusiasm to refine and improve upon the educational environment we create for our students.

Concomitant with these developments, the College also faces budgetary challenges associated with the national economic downturn that began in earnest in 2008. While the College has a long history of fiscal prudence, the community has come together in new ways to preserve and strengthen Carleton's academic excellence in these challenging times.

One of the advantages that comes from working in an academic community so infused with interdisciplinary initiatives is that before the financial crisis, members of the faculty and academic support professionals had already begun to think about ways of working across departmental and office boundaries to provide curricular and research support. During the planning process associated with what is now the Visualizing the Liberal Arts (Viz) initiative, the Steering Committee articulated the importance of working in closer coordination. "While existing sources of support in this domain are significant, it is important for the College to think holistically about the curricular aspirations of the faculty, the support needs of students and faculty, and the ways in which existing sources of support can be coordinated more effectively."¹ The present report is a natural extension of this ongoing conversation.

This report draws upon a six-month study designed to identify sources, needs and prospects for curricular and research support at the College. The purpose of this report is to assess what Carleton is currently doing to provide curricular and research support, and to identify needs and key issues for future discussions. Put into a larger context, the study

¹ Please see Appendix A for a full copy of the steering committee's recommendations.

maps out strategies to aggressively support the work demanded of contemporary students and faculty while recognizing budget challenges.

Organization of the Study

Dean of the College Beverly Nagel and Vice President for Student Development and Dean of Students Hudlin Wagner commissioned the study that is the basis for this report. The full charge for the study is included in Appendix B. The purpose is to prepare for planning exercises that will more closely align curricular and research support with the needs of Carleton students and faculty.

Members of the Advisory Committee for Curricular and Research Support (CARS) worked together to:

- Review extant institutional documents
- Scan relevant literature
- Analyze results of the most recent administration of the Student Engagement with Curricular Support survey
- Conduct and analyze focus groups with student leaders
- Facilitate discussions with faculty and staff from the Academic Standing Committee as well with representatives from the Chaplain's Office, Office of Intercultural and International Life, Gender and Sexuality Center, and TRIO/Student Support Services
- Survey academic support professionals and departmental assistants in an effort to identify documents associated with relevant planning exercises, "best practices" from relevant fields and professions, and additional sources of support new to the CARS Committee.

The materials associated with the underlying study are included in the appendices of this report. The Committee hopes that as the College engages in planning processes in the coming years, that these materials will be of further use.

Literature Scan and Extant Documents

While the Committee did not have sufficient time to conduct a formal literature review, a series of works were important in framing the study and recommendations. Kuh,

Kinzie, Buckley, Bridges, and Hayek's (2006) *What Matters to Student Success: A Review of the Literature* was important in both identifying and contextualizing recommendations.

Internal documents that were helpful included the precursor to this study, *Curricular Uses of Visual Materials: A Mixed-Method Institutional Study (CUVM)*.² The CUVM study contained the student survey designed to gather information about the ways Carleton students engage the campus while working on assignments. The Committee also reviewed a summary of future action items identified in the College's most recent reaccreditation process.³

Principles and Key Issues to Drive Institutional Planning

The CARS Committee further clarified principles underlying the coordinated support model and identified eight key issues to drive institutional planning. Curricular and research support should be designed both to encourage student *engagement* with expertise on campus and to foster *independent pursuit of knowledge*. This entails making clear, early in a student's career, resources and sources of support, as well as countering the notion that going to support centers is a sign of failure. Particularly as students progress into advanced studies, curricular and research support must be provided in ways that foster independent exploration and analysis. In keeping with the larger institutional conversation about campus climate the College must ensure that spaces and conversations are welcoming, regardless of an individual's particular background.

During the last two years, members of the Carleton community have worked to encourage students to engage people with expertise that complements their own. That is, as students engage difficult materials or modes of expression, they avail themselves of Carleton's rich academic community. Students themselves play a critical role in this process, both as employees who provide curricular and research support, and as members of referral networks that may include student departmental advisors, peer leaders, and residential assistants. Their work should be augmented by efforts to encourage students to

² The full report is available at: <http://go.carleton.edu/cuvvm>.

³ Please see Appendix C for Items for Future Action as Articulated in Carleton College's Accreditation Self-Study Report: 2008-2009.

increasingly engage with faculty members and to work productively in groups. The following are eight key issues the committee identified that will help our community work toward these principles.

1. *Campus-wide and departmentally based sources of support are complementary.* For example, forms of support apropos to students in their first two years or that are broadly relevant to the student body are likely best provided by centralized support units or locations on campus. Conversely, support that is more domain-specific may be best provided through academic departments or in departmental spaces on campus.
2. *Service improvements and cost-efficiencies can be realized by coordinating the work of existing curricular and research support services.* Identifying the common cause among existing campus-wide and departmentally based sources of support, thinking creatively about how they can collaborate and coordinate in providing support services, and thoughtfully co-locating certain activities can potentially both improve services and reduce costs.
3. *We must continue to emphasize that learning takes place in community.* In particular, far from being a sign of weakness, wisdom compels us to seek out experts with skills that complement our own. This is the rule among scholars. Similarly for Carleton students, feedback can come from others whether faculty, roommates or support staff.
4. *The ability to work effectively in teams has always been an important student-learning outcome.* We must continue to evaluate new ways in which technology and facilities can be designed to support that goal. Students might also benefit from resources that help them develop necessary teamwork skills to be effective in groups.
5. *Student work positions hold great promise for doing considerably more with existing resources.* In general, we believe student workers can be employed more effectively in formal and informal support roles. (The Writing Center is a good example of formal student support.) Properly conceived, students in formal support positions could be exposed to professional development

- opportunities across domains, e.g. writing and graphic design, that deliberately build a set of skills that is useful to the college in providing peer-to-peer support services, and to students in building career skills
6. *Not all students engage the campus in the same ways.* Work with the Committee on *Equity and Diversity Initiative (CEDI)* to understand how individual students background and experiences influence their engagement with support services.
 7. *Department- and institution-level planning must be connected.* Questions relating to curricular and research support should be incorporated into decennial review conversations in academic departments.⁴
 8. *As an institution, we must be mindful of capacity issues.* “Capacity” can refer to the time required of students to complete assignments, of faculty members to teach with and grade assignments, and of staff members to provide resources and support assignments.

The Committee hopes that this list of key issues and principles will be useful to both long-term and near-term planning exercises. The following section identifies existing sources of curricular and research support at Carleton.

Current Sources of Curricular and Research Support

During the 2009-2010 academic year and concurrent with this study, members of the Carleton community have been working to categorize and concisely articulate the forms of curricular and research support available to students and faculty at Carleton. These materials are presented through a series of [curricular support web pages](#). The following lists of current resources from those web pages are augmented with responses to the Committee’s survey of departments and offices. This is the most complete listing to date of resources and expertise associated with curricular and research at Carleton College.

⁴ A sample exercise tailored to the Chemistry department is included in Appendix F.

Student Resources

The resources listed for students are organized around categories used in the Carls Ask Questions⁵ outreach program: speeches and presentations, computer support, research, digital media, academic assistance, and writing. Each section lists campus drop-in centers and individuals or groups available for consultations. The following is a higher-level listing of drop-in centers and consultations available to Carleton students as of the 2009-2010 academic year.

Drop-In Centers

Bookstore	Makes available for purchase course materials and supplies.
Language Center	Offers wide variety of resources to aid students in learning languages. Provides access to video cameras and CAN8 language recording software for class-work. Employs student workers at the Language Center (notably, language associates) who are native speakers of languages taught at Carleton.
Math Skills Center	Supports students in any mathematics or math-related course in which they are experiencing difficulty. Offers help with the mathematical concepts or with the mathematical tools needed to succeed in the course.
Presentation, Events, and Production Support (PEPS)	Provides facilities, hardware, and software for students to work on class projects that involve multimedia elements, including video, audio, and graphic design. Has a full-service video, audio, and graphic design studio.
Research/IT Desk	Provides support through reference librarians with questions ranging from searching the catalog to working with bibliographic tools, such as EndNote. Reference librarians also help students develop research strategies, locate, and understand relevant information resources. Additionally staffed with SCIC (see below) workers to help students with technology questions.
Student Computing and Information Center	Assists students in learning about the computing environment at Carleton.

⁵ Please see Appendix D for the Carls Ask Questions map.

(SCIC)	Provides access to hundreds of computer applications, flat-bed scanners, slide scanners, and card readers.
The Writing Center	Supports students on any academic writing project and at any stage in the writing process, from brainstorming to polishing a final draft.

Consultations

Academic Civic Engagement (ACE)	<p>The ACE office has information for students about transportation, previous comps projects that involved research in the region, summer internships, and profiles of students who have participated in ACE projects.</p> <p>There is a strong partnership and referral network between ACE and Acting in the Community Together (ACT).</p>
Academic Technologies	Academic technologists are available for consultations that relate to computing and spoken languages, the arts, social science data and statistical tools.
Academic Tutoring	Students provide one-to-one tutoring in specific subject areas through the Academic Support Center.
Academic Skills	A part-time academic skills coach works with students who request help with time management and study- and test-preparation skills in the Academic Support Center.
Arts - Exhibitions	<p>Director of Exhibitions and Curator of College Art Collection mentors students in museum careers, offers curatorial seminars to provide hands-on experience with museum practices and theory.</p> <p>Curator of Library Art & Exhibitions works students to plan exhibitions and displays in the library that complement the college curriculum.</p>
Arts - Programming	Director of the Arts helps students locate internship opportunities and strategies for finding unpublicized opportunities.
Career Center	Staff consult with individual students in securing internships and groups of students looking to experience industries through the Scholars Program.

Religious Diversity Topics	Chaplain provides content-specific help relating to topics such as religious diversity nationally or in Carleton community.
Cowling Arboretum Research Site	The director of the Cowling Arboretum helps students interested in conducting research projects in the Arboretum.
Disability Services	The coordinator of Disability Services provides academic accommodations and other support services that include assistive technology and alternative testing rooms.
Gender and Sexuality Topics	Gender and Sexuality Center provides content-specific help on papers and a lending library. Students have also worked with the GSA on comps projects that integrate co-curricular elements.
Off Campus Studies	Staff help students research, apply for, prepare to participate in, and adjust to returning from off campus programs. Some off campus programs are credit bearing.
Public Speaking	Students working in the SpeakEasy provide feedback to other students preparing for individual or group presentations. Topics covered include communication skills, effective uses of presentation aids, organization, voice, clarity, and persuasive impact.
Research Strategies and Resources	Reference librarians help students develop research strategies, locate, and understand relevant information resources.
Residential Life	Hall directors provide personal support and encouragement to students in general and seniors working on comps.
School and Life Issues	Class deans consult individually with students in general but in particular with students who are struggling and may be on academic review. Class deans provide referral to resources and expertise broadly, including curricular and research support.
Wellness Center	Wellness Center staff present information to classes on health-related topics, provide research information for students working on health-related papers, and includes consulting psychiatrists who work with students taking medications for conditions such as attention deficit disorder (ADHD).

Writing and Revising Strategies	Students can make appointments with writing assistants for help with papers. Students who identify themselves as non-native speakers of English may work one-to-one with a trained writing consultant who will be available to provide writing support for one to three hours per week.
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This listing of drop-in centers and types of consultations available to students is intended to convey the breadth of resources currently available to all Carleton students. Not included in this list is the rich network of support professionals and students in leadership roles who refer Carleton students to these resources.

Community-Specific and Mentored-Cohort Programs

Additionally programs and offices designed to assist students in particular populations. Curricular and research support is either made available directly or through referrals and orientation programs developed through such programs as the [Mellon Mays Undergraduate Fellowship](#), [Focusing on Cultivating Scientists](#) (FOCUS), [Gender and Sexuality Center](#), [Office of Intercultural and International Life](#), [POSSE](#), and [TRIO/Student Support Services](#). Organizations in this list also work on campus climate issues in the larger community.

Faculty and Staff Resources

Whether faculty members are exploring new scholarly interests for possible inclusion in courses or evaluating the efficacy of existing assignments, a wealth of resources and expertise is available. Staff members frequently work with faculty on curricular development projects and as courses are underway. These resources are typically presented by the stages that faculty may go through in the process of creating, teaching with, and evaluating curricular materials.⁶ A common set of resources is associated with workshops and presentations, consultations and funding, assignment

⁶ Please see Appendix E: Faculty and Staff Resources Associated with Stages of Creating Assignments.

collections and models, software and information resources, copyright and human subjects resources, ways to coordinate efforts and reserve resources.

Workshops and Presentations

Workshops and presentations provide opportunities to learn about effective pedagogies, resources, and expertise.

December Workshops	The Perlman Center for Learning and Teaching maintains a schedule of Winter ⁷ workshops that offer professional development opportunities for faculty and staff members.
Presentations Throughout the Year	The College's events calendar ⁸ list events that take place during the academic year.
Initiative-Specific Workshops and Presentations	A more focused way of locating workshops and presentations is to go to the web sites of specific initiatives: Academic Civic Engagement (ACE), Carleton Interdisciplinary Science and Math Initiative (CISMI), Humanities Center, Quantitative Inquiry Reasoning and Knowledge (QuIRK), Spatial Analysis, and Visualizing the Liberal Arts (Viz).

Consultations and Funding

Consultations are available to faculty members considering learning goals; estimating time requirements; identifying sources of support for students working on assignments; and securing access to data, tools, or expertise, including guest lectures or focused instruction sessions.

Academic Civic Engagement (ACE)	This initiative focuses on community-based learning, community-based research, and service learning, and maintains a collection of potential community projects and opportunities and a collection of data sources about Northfield.
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⁷ http://apps.carleton.edu/campus/ltc/calendar/winter_workshops/

⁸ <http://apps.carleton.edu/calendar/>

Academic Support Center	An umbrella organization that includes Academic Skills Coaching (e.g. time management, study skills, and test-preparation skills), Academic Tutoring, the Math Skills Center, the Prefect Program, the Speakeasy, and the Writing Center.
Academic Technologists	Staff consult about technology choices and questions associated with developing courses and working with students. This group is part of Information Technology Services.
Archives and Special Collections	Staff provide support for faculty developing assignments for students around primary source materials. Work in these areas is associated with the Gould Library.
Arts - Programming	The director for the Arts helps community members to conceptualize and coordinate arts activities on campus. The Director is part of the Dean of the College Office.
Arts - Exhibitions	The Director of Exhibitions and Curator of College Art Collection works with faculty members in developing museum exhibitions and more broadly connecting the exhibition program with the curriculum. The Curator of Library Art and Exhibitions works with faculty and library staff to plan exhibitions and displays in the library that complement the college curriculum.
Campus Climate Issues	The Gender and Sexuality Center, Office of Intercultural and International Life, and TRIO/Student Support Services provide resources and expertise.
Carleton Writing Program	The Director engages with faculty in long-standing conversation about writing across the disciplines and the efficacy of writing assignments.
Carleton Interdisciplinary Science and Math Initiative (CISMI)	Web site associated with this initiative provides a wealth of information about interdisciplinary and integrated-systems research that involves the interplay of biology, physical sciences, and mathematics.
Curriculum Development Fund	Additional consultation and funding are provided through the Dean of the College's Office.
Director of Curricular and Research Support	Helps identify resources or expertise on campus for a particular project.

The Humanities Center	Cultivates interdisciplinary collaboration and research that interrogate the relationship between humanistic study and artistic, ethical, and political issues in the contemporary world. The Center's site also contains information about creating student research assistantships.
Institutional Research and Assessment Office	Points community members to Carleton-specific and more general resources about assessment. The College's Faculty Assessment Coordinator is available as a resource for those interested in evaluating the efficacy of assignments.
Off Campus Studies Office	Provides resources and support for faculty members preparing for or leading off campus programs.
Perlman Learning and Teaching Center	The coordinator of the Perlman Learning and Teaching Center is a senior Carleton faculty member well versed in teaching theories and strategies in addition being able to help to identify problems and suggest solutions for classroom practice
Reference Librarians	Consult with faculty about information resources available for subject areas, developing research assignments around those resources, and information literacy best practices.
Quantitative Inquiry, Reasoning, and Knowledge Initiative (QuIRK)	Web site associated with this initiative provides grant opportunities for course revision/creation, pedagogical research relating to quantitative literacy, as well as a program that provides summer research assistants for faculty pursuing new quantitative directions in either teaching or research.
Dean of Students Office	Class deans assist faculty members who have concerns about the welfare of individual students, particularly those on academic review.
Visualizing the Liberal Arts (Viz) Initiative	Supports projects that entail creating, interpreting, and employing visual images, media and models that could benefit from curricular grants from the Viz initiative. Viz has professional development funds for staff members who participate in the coordinated support initiative at Carleton.
Wellness Center	Staff provide presentations in class, particularly when faculty are interested in having class sessions on health-related topics

Assignment Collections and Models

The number of assignment collections that are associated with interdisciplinary curricular initiatives continues to grow at the College. They include:

- Carleton's Science Education Resource Center (SERC) [Pedagogy in Action](#), which is a collection of over 800 assignments contributed by faculty members from Carleton and elsewhere.⁹
- Quantitatively rich [courses and assignments](#)
- [Project assignment models](#) for academic civic engagement

Software and Information Resources

While developing background expertise in a new area, faculty often need to get a sense of the tools and information resources that are available or could be licensed on their behalf. Academic technologists and reference librarians are resources for faculty with questions in this area.

Copyright and Institutional Review Board

- The Copyright Committee offers consultations about copyright questions and locating funding for securing rights to copyrighted materials. Additionally, educational materials are available through the [Committee's web site](#).
- The Institutional Review Board (IRB) provides advice relating to human subjects research. The [IRB web site](#) includes a brief quiz that will help faculty members determine if and IRB application might be necessary for a given project.

⁹ Increasingly SERC has been working with the interdisciplinary initiatives at Carleton and the assignment collection increasingly reflects disciplinary diversity. Assignments are categorized by subject areas as well as by pedagogy.

Ways to Coordinate Efforts and Reserve Resources

There are a few mechanisms to make it easier for faculty members to coordinate efforts, and schedule facilities or equipment. They include:

- Production meetings, which are used for courses or projects that are particularly resource-intensive in nature, especially for work involving people from multiple departments or offices on campus. The Director of Curricular and Research Support is the contact person for these meetings.
- Scheduling Services' web site, which has information about making reservations on campus as well as pointers for arranging for catering.¹⁰
- Presentation, Events, and Production Support's (PEPS) web site, which has information about classrooms and meeting rooms on campus. PEPS also has a collection of equipment that is available for checkout.¹¹

The Committee hopes that this listing of resources and expertise on campus will be useful in future planning. It has identified critical themes that the College might use to guide these future exercises.

Critical Themes

Student Acculturation

Research into Carleton students' engagement with campus as they work on assignments has clarified differences in the ways students seek curricular and research support. This research has given rise to a series of discussions that include differences in the ways that students engage the campus based on class year and the complementarity of campus-wide and departmentally focused sources of support. The CARS Committee discussed the importance of continuing this research, concisely articulating available resources, and shifting cultural norms that appear to inhibit students early in their careers

¹⁰ <http://apps.carleton.edu/campus/scheduling/>

¹¹ <http://apps.carleton.edu/campus/peps/>

from engaging with faculty and support professionals at rates similar to juniors and seniors.

The College should continue to study the process of student acculturation to Carleton and later to majors particularly as it engages with curricular and research support. Additional research might include conducting focus groups with students and complementary survey-based research on the ways students engage the campus as they work on assignments. Current survey results indicate marked increases in the rates Carleton students report seeking assistance with assignments based on class year.¹² These data should be merged with existing institutional data to produce more nuanced secondary analyses regarding the rates at which students engage curricular and research support. The analyses could be based on criteria such as socio-economic status, ethnicity, or other characteristics indicated by the College's Community, Equity and Diversity Initiative (CEDI).

Research to date prompted members of the community to develop the Carls Ask Questions Map. The College should consider developing additional maps that might include student-support-for-students or formal sources of institutional support beyond curricular and research support. Within the context of curricular and research support, examples of future maps include where groups study and how students can reserve spaces for group work or study. It is particularly important to be specific about the resources and expertise on campus with first and second-year students.

The CARS Committee discussed four approaches that might be helpful in shifting our institutional culture so that students will be more likely to engage sources of curricular and research support. First, the advisory committee discussed the fact that the single most important factor in student use of support services is faculty encouragement -- in the context of class assignments -- to use specific services in fulfillment of course requirements.

Second, the Advisory Committee discussed the potential role of Student Departmental Advisors (SDAs). In the focus groups,¹³ SDAs emphasized that students need

¹² Please see first two graphs of Appendix H for descriptive comparison of these rates between two administrations of the Student Engagement with Curricular Support survey.

¹³ Please see Appendix G for materials associated with the focus groups. Comments on pages 93-96 provide a particularly compelling descriptions of the roles SDAs might play on

to ask for help and cited the efficacy of Carls Ask Question outreach. The SDAs also clearly articulated roles that they themselves might play in encouraging students to reach out to faculty members. It would be potentially very helpful to survey academic departments about their use of SDAs and invite departments, perhaps in a Learning and Teaching Center luncheon, to discuss more effective and appropriate uses of students in these volunteer roles.

The third approach to introducing a shift in Carleton's culture would be to follow up on the "Carls Ask Questions" outreach. This message appears to have been effective in increasing the rates at which students report seeking assistance, and it should be augmented to encourage students to think of questions during the day when people with broader areas of expertise are available rather than waiting to formulate a question at 10:00 p.m. "You don't need to do your homework during the day, but if you have a question or a lingering doubt, during the day would be the time to do it." Similar to the "Carls Ask Questions" outreach, this message would have the greatest potential impact on first- and second-year students who report seeking help later in the day than juniors and seniors.

Finally, some faculty members of the CARS Committee consider faculty office hours to be an under-utilized resource. The College should consider creating a "corral" in the library where faculty members might hold office hours for students enrolled in their classes and Carleton students in general. Gould Library is already the most popular academic building for studying. Holding office hours in the library might help reduce the intimidation some students feel about such interactions.

Facilities

The Committee identified as important a series of issues that relate to college facilities beginning with general observations or themes and then ending with issues relating to specific structures on campus. Until now, considerations of study spaces focused primarily on community-wide spaces such as the Center for Mathematics and Computing (CMC), Gould Library, and Scoville in comparison with departmental spaces.

campus. The Committee opted to conduct focus groups late in the study and there was not time sufficient to secure IRB approval. Materials associated with the focus groups are for internal uses only.

While the complementary relationship between these kinds of spaces and the potential for creative synergies and co-locations were reaffirmed in the present study, it is also clear that language and culture houses play important roles in providing study spaces. We are ready for a campus-wide space planning exercise that maps the ideal configuration of curricular and research services on campus and recommends a coherent plan for location and co-location of existing services.

Assessing the use of campus spaces is an important first step in understanding the demands associated with particular assignment types or technologies located in those spaces. Spaces intended for specific types of work can encourage students to provide informal support to one another, or they can house formal sources of support, e.g. from faculty, staff, or students workers. The College must consider the kinds of work students are engaged in and then create an appropriate range of spaces. Examples include spaces suited to group work and faculty consultations in community-wide spaces in the library. Student workspaces should be flexible and integrate furniture that is easily re-configurable.

While there is merit in better defining specific workspaces on campus such as those devoted to people associated with a particular major, we must mitigate risks of balkanization. We must recognize the complementarity of campus-wide spaces with those that have more specific purposes. The importance of exposing students to diverse perspectives is supported in the literature (Kuh et al., 2006). One way to create specialized spaces is with software or computer peripherals. Businesses like Kinko's are models for conceptualizing the range of materials, equipment, and expertise needed for certain kinds of projects. This principle should inform our design of spaces. Further suggestions are presented in the "Equipment and Software" section of this document.

The design and machine density of public computing labs was a recurring theme. Many labs were designed in an era in which providing the maximum number of workstations was a major goal. As student computer ownership has increased, design goals should center on facilitating group work among groups of student and reducing the "sterile" décor through the use of color and comfortable furniture. Specific recommendations and observations were made for both the CMC and the Library.

CMC

- The CMC is perceived as the place where students go when they have procrastinated and need to pull all-nighters. In one focus group, the CMC was referred to as the “Las Vegas of Carleton” because when students are working there late at night, it is impossible to know the time of day.
- It would be helpful to modify lab spaces so they are conducive to group work. Reducing the computer count might make the CMC a better place to work for students.
- The College should consider providing larger displays in the public computing labs and ensure laptops can connect to them as well.
- It might be possible to have nodes within the CMC for certain types of work such as graphics work with a scanner and group work with a whiteboard.

Arts Union

- The Idea Lab is designed as a new space on campus that offers coordinated support for assignments that incorporate visual materials.
- The College needs to articulate how the Idea Lab fits into the larger profile of curricular and research support sites on campus.

Library

- The College should consider the value of creating an experimental “corral” where faculty could hold office hours in a space where students tend to study and interact. Faculty members could provide office hours for students enrolled in their courses as well as more general guidance.
- The Gould Library will be experimenting with the notion of a genius bar. They are purchasing furniture in the hopes of creating a space for anyone with expertise willing to share it. This will be a public space suitable for drop-in traffic. Teaching assistants might hold hours there. This might or might not be suited to the above open office hours for faculty members.

- Explore the potential of further co-locating a set of complementary academic support services in the Gould Library. As noted above, this site would need to be part of a larger profile of curricular and research support sites on campus.
- In keeping with the Kinko's model, the Library should consider making available or loaning an expanded suite of high and low tech tools and materials students use to conduct their research and complete assignments.

Expertise

The Committee discussed the complementarity of support centers across campus, the importance of further coordinating expertise on campus, encouraging students to seek assistance more broadly and earlier in their Carleton careers, and aligning more precisely sources of support with student needs and schedules.

The sections of this report that examine facilities, equipment, and software recommend clearly defining the types of work that would take place in particular locations. If the College pursues this, the College should make available people with complementary expertise. The Idea Lab in the Arts Union is intended to function in this way by bringing together individuals with expertise in presentation, design, image collections, and audio-visual technologies. It would be helpful to think about other locations on campus in the context of the range of curricular and research support.

Just as we should pay attention to the places where people gather, we must continue to develop and expand the level of coordination of support on campus. Crucial to this coordination are 1) identifying and eliminating duplications of effort and 2) formalizing the coordination of support, particularly as we blur the operational distinctions among departments and support units. Kuh et al. (2006) recommends providing "multiple, interconnected learning support networks, early warning systems, and safety nets."

Identifying ways to encourage students to seek assistance more broadly and earlier in their Carleton careers was a concern of the Committee. One way of encouraging students to engage could be through freshman advising. This could involve creating longer, sustained advising relationships in which a faculty member and a staff member work in partnership in providing support for students as navigate their first two years at Carleton.

Another way of encouraging students to connect with faculty earlier in their careers¹⁴ would entail students making better use of office hours or working with student peer leaders, such as student departmental assistants (SDAs).

Faculty members on the Committee reported concerns about spending too much time helping students with surface errors in papers, such as spelling, punctuation, grammar, and word choice ("lower-order concerns," or LOC). Students can learn to identify their errors and learn ways of addressing them during appointments with Writing Center consultants, though confusion exists among some faculty and students about the scope of Writing Center services as they relate to assistance with LOC. While most students visiting the Center ask for assistance with higher-order concerns (HOC), such as thesis and organization, LOC are also of interest to some native and non-native writers in English. The Writing Center's goal in providing support with both HOC and LOC is to help students develop the skills to work independently and produce higher quality writing. The Committee's conversation about such assistance illustrates a way to fine-tune use (or advertising) of existing resources rather than creating entirely new ones.

Equipment and Software

The focus groups provided a particularly rich series of insights into the ways students use computing equipment and software. They identified issues ranging from the ratio of computers to students on campus, to how software is distributed (particularly in public computing labs and classrooms) to computing labs in academic departments, and to ways of encouraging Carleton students to make greater use of personally owned laptops.

In the aggregate, the number of computers available to students in public labs seems appropriate. If computer counts are reduced in specific locations, e.g., in the public labs of the CMC, they should be reallocated. See "Facilities Issues" for further discussion. The College's software deployment tools currently distribute software that typically remains on a given computer for a term or year. The group was supportive of ITS' research into tools that may allow users to select software available to them "on the fly" and specific to

¹⁴ Please see Appendix H for graphs from the Student Engagement with Curricular Support survey results.

computers in a room, at specific workstations, or through virtualization. Specialized software is important.

It might be useful to conduct focus groups or otherwise assess software appropriate for particular locations. Care should be taken in this endeavor, as specifying the locations where specific software packages are available might be seen as either manipulative or as a creative way of fostering community. Software availability may help define the purposes of student work spaces. For example, Adobe's Creative Suite and high-end scanners or large-format printers could define an "artistic" space.

Where departmental computer labs exist and when new ones are created, the College should consider making them available for two departments, particularly in cases in which scholarly domains are complementary, to encourage the development of informal networks of support among students doing related work, in addition to increasing the efficiency in Carleton's use of computing equipment and software. Departments with computing labs may want to consider making them available to students during extended evening hours.

Finally, in order to encourage students to increasingly use their own laptops on campus, it is important to adjust our working environment to allow for:

- Printing from laptops and simultaneously institute printing quotas
- Increasing the availability of power outlets in study spaces
- Broadening the use of personally owned laptops, particularly for printing, which may reduce the problem of people using lab computers and not logging out.

Taken as a whole, these issues might help the College make increasingly effective use of existing computer hardware, foster formal and informal networks of curricular and research support, and reduce the costs associated with software licensing.

Action Items

Carleton College simultaneously faces a budgetary challenge and a particularly dynamic point in the development of its curriculum. This section presents specific action items that came out of the Committee's discussions. These near-term recommendations relate to ways of using existing resources to greater effect, and identifying new or increasingly important needs and resources that are not as critical as the once were.

Existing Resources We Might Use to Greater Effect

Continue to Refine the Coordinated Support Model

Determine the appropriate balance and location of the resources campus-wide. The College should develop an institution-level plan to ensure needs are being met and that existing expertise, resources and facilities are contributing to their greatest effect.

Continue to develop and formalize mechanisms that allow academic support professionals to work across organizational units. This process should include efforts to identify and eliminate duplications of effort. Additionally, we should continue to refine the concise descriptions of resources available to students, which may include variants of the Carls Ask Questions map, e.g. sources of support among students.

Broaden the expert referral network among student departmental advisors, residential assistants, and other peer leaders. Particular gains may be made by focusing on sophomores in leadership roles to make them aware of resources and expertise for their own purposes but also to create potential connections with first-year students.

Continue discussions about the complementary roles that student workers, peer leaders, academic support professionals, and faculty play. Clarifying roles is important for us to continue to improve expert referrals on campus but also to help individuals in these roles clearly understand their boundaries.

Help Make Faculty Members Even More Approachable to First- and Second-Year Students

Make better use of faculty office hours. Consider creating or using existing space in the Gould Library for faculty members to hold office hours. See the Student Acculturation

summary for further details. Holding office hours in a predominantly student-focused space might help increase the number of student-faculty interactions particularly among first- and second-year students. Additionally, multiple faculty members, holding office hours in a common location, might encourage faculty members to meet across disciplines. Such a situation should be an opt-in process for both students and faculty members.

Use Existing Facilities and Resources to Greater Effect

Undertake a campus-wide space planning exercise to map the ideal configuration of curricular and research services on campus and recommend a coherent plan for location and co-location of existing services. The aim would be to develop synergies among existing services that would improve services and save money.

Remodel public computing labs in CMC so they are more conducive to group work, comfortable work environments, and accommodating to students who wish to use laptops. See recommendations in Facilities and Equipment and Software section for further details. The term “cozy” came up repeatedly as the characteristic students sought in workspaces, and the Gould Library is the exemplar. The College might also consider low-cost additions to computer labs, such as whiteboards or chalkboard, to make them more appealing.

The laptop ownership rate among students is significant but usage on campus appears to be low. Provide a facility for students to print from personally owned laptops while establishing quotas for student printing. Improve wireless access on campus.

Encourage departments with computer labs to keep them open during the evenings, if they don't already, when students are most likely to work. This might entail modest ongoing investments in student worker hours or card access control systems but could yield greater access to a supportive workspace for majors.

Adopt such strategies as finely targeting where software applications are made available or “virtualization” of computing environments. In particular, virtualization might provide better support for high-performance computing needs and access to curricular software. These strategies may help contain costs.

Find ways of making greater use of classrooms in the evenings. Members of the Committee perceive an increase in the amount of group-based work assigned to students. At the same time, students report working in classrooms in the evenings at particularly low

rates. Classroom spaces might be more accessible if we created a self-reservation process and ensured that supplies, such as chalk and whiteboard markers, are regularly stocked. Increased utilization of these spaces in the evenings might entail coordinating with Facilities to account for climate control issues.

Consider developing a mechanism, such as a network-based tool, through which students can announce their availability and expertise to other students. This could be an important complement to uses of redesigned spaces in the Library modeled on “genius bar” at Apple stores.

Consider the Roles That Students Can Play in Shifting Institution Culture

Think about when to rely on student workers in all support areas. Student workers can play important roles as informed peers with reference and instruction librarians. Other libraries, such as the Grinnell College Libraries, have students in roles associated with answering reference questions. DePauw University and Indiana University have student employment programs that are intentional in developing a set of student skills useful to the institution and providing certification that is useful to students in career building. Carleton should investigate this option further.

Discuss effective uses of Students Departmental Advisors (SDA), as they may be an underutilized resource in many departments. The discussion might best be part of a Learning and Teaching Center event. It is important to recognize that SDAs are volunteer positions and that students in these positions typically have already fully committed their work contracts. Still, students in these leadership roles might play an important role in encouraging more junior students to interact with faculty members in their department.

Incorporate residential assistants (RAs) more effectively in communicating with students about curricular and research support. RAs are largely untapped in identifying resources and curricular and research support for students. RAs are in powerful positions to influence our institutional culture among first- and second-year students. The weekly meetings that RAs hold with their floors could be a helpful venue.

Increasingly Make Course Materials Available for Review

Consider adopting technologies, such as NSF-sponsored ProfCast, as a means of distributing course lectures. Committee members noted that research to support the claim

that first-generation college students, as well as other Carleton students, might benefit from listening to lectures or portions of lectures after a class period has ended. ProfCast is an NSF sponsored technology to transcribe and create chapters at changes in slides of a lecture. Such a tool might create opportunities to learn lecture materials without having to ask questions that some students might find embarrassing.

New or Increasingly Important Curricular and Research Support Needs

New Curricular Emphases

Visual material will be increasingly important due to the Viz initiative and the Arts Union. Consider expanding staff support for students working on classroom presentations and discussion leading.

Increased Presence of Video-Capture Facility in Classrooms

Expand infrastructure to support classroom capture without staff involvement. There is a need for increased levels of equipment and training for the video capture of classroom interactions, especially from both the front and back of classrooms. PEPS staff members are receiving increasing numbers of requests to record classes. Faculty members want to watch their teaching and student responses in order to understand their interactions with students and refine their teaching. Olin 141 is an example of a classroom that is currently outfitted in this manner. Video capture should be available in at least one classroom in every academic building on campus.

Existing Resources That Are Not as Critical as They Once Were

Review Availability of Select Software and Reduce Licensing Costs

Consider reducing software licenses counts in the public computing labs. Consider lowering the counts by making software available in more limited locations that might help to better define spaces where students can find one another while working on similar types of assignments or projects.

Refocus Institutional Investments in File Storage

Refocus institutional investments in file storage. Consider eliminating home directories for students. Doing so would focus institutional resources on more specialized storage needs, such as high-speed storage for video noted above or large datasets

Switch from Legacy Telephony to Voice Over Internet Protocol (VOIP)

Switch from legacy telephony to VoIP. The College should eliminate existing telephone service in the residence halls and implement VOIP.

Continue to Examine Hours of the Day When Facilities are Staffed

Examine use of staff hours early in the day (8am-noon) when student surveys indicate less student need. Critical work may be taking place during these lower-demand times of day. Nonetheless, there may be additional efficiencies to be gained from more closely aligning the availability of resources with student work patterns. Student workers might play critical roles in extending support hours into the evenings.

Reference

Kuh, George D., J. Kinzie, J. Buckley, B. Bridges, and J. Hayek, *What Matters to Student Success: A Review of the Literature. Commissioned Report for the National Symposium on Postsecondary Student Success: Spearheading a Dialog on Student Success*, National Postsecondary Education Cooperative, 2006.

Appendices

Appendix A: Principles and Mechanisms of a Coordinated Support Model

Mellon Planning Grant Steering Committee:

Recommendations for Principles and Mechanisms of a Coordinated Support Model Spring 2008

Carleton College is at the initial stages of an initiative designed to transform the teaching and support of visual literacy across the liberal-arts curriculum. *Creative collaborations between faculty and staff members in the development of assignments are the points at which the curriculum meets the support structure of the College.* The College recognizes that the associated information resources, tools, and sources of support required are both significant and critical to the success of this curricular initiative. While existing sources of support in this domain are significant, it is important for the College to think holistically about the curricular aspirations of the faculty, the support needs of students and faculty, and the ways in which existing sources of support can be coordinated more effectively.

The Andrew W. Mellon Foundation funded two retreats and associated research studies that served as the basis for Carleton's planning of a coordinated support model. The following is a synthesis of ideas developed in discussions among members of the steering committee associated with the grant. Members of the steering committee are: Matt Bailey (Gould Library), Scott Bierman (Dean of the College) Joel Cooper (Information Technology Services), Sam Demas (Gould Library), Kathy Evertz (Academic Support Center), Heidi Eyestone (Art and Art History), Fernan Jaramillo (Biology), Victoria Morse (History), Bev Nagel (Dean's Office), Andrea Nixon (Dean's Office), Linda Rossi (Art and Art History), Christopher Tassava (Corporate and Foundation Relations) Lew Weinberg (Information Technology Services).

PRINCIPLES

Visual Literacy Has Many Forms

A series of curricular conversations exploring the nature of visual culture, visuality, and visual literacy have been ongoing at the College. It is clear that no single definition is appropriate for the myriad of approaches across the disciplines. One area of emphasis in this multi-year initiative will be to look at the development efforts funded through this initiative and facilitate conversations that continue to examine notions of visual literacy at Carleton.

Recognize the Nuanced Relationship Between Concepts Expressed Visually and Tools that Facilitate Expression and Understanding

Elements of the academic toolset that enable students and faculty members to express ideas visually or see the world differently are diverse in nature. For example, students new to photography may use cameras to learn to view or frame the world differently. In this

instance, training a student to see the world differently may be intertwined with learning to use a tool. The characteristics of any given assignment will determine the context in which students are introduced to a given tool or resource. Similarly, careful consideration needs to be given to the information resources or tools selected for a given assignment.

Identifying Existing Sources of Support, Looking for Efficiencies, and Clarifying Avenues of Support

In order to clarify the appropriate sources of support for a given assignment, the College must first identify the existing sources of support on campus. This basic information will enable members of the academic support community to engage in discussions about the best methods of coordinating support efforts and possibly identifying areas in which the College can provide support services more efficiently. Once sources of support are clearly identified, members of the Carleton community can have a much clearer understanding of the institutional support available.

Clarity, Structure, and the Intentional Use of Ambiguity in Assignments

During the first three years of the new coordinated support model, careful attention will be paid to the nature of assignments created. Important questions that will be addressed through that exercise include: In which circumstances do faculty members and students find it important to clearly articulate each step in the process of completing a project? At what point are educational objectives best served through the intentional use of ambiguity as a way of prompting creative work from students? If one faculty member has clearly articulated one type of assignment, might it be helpful to other faculty colleagues to share the assignment as an exemplar?

Clarify the Roles of People Providing Support Relative to Specific Assignments

Particularly in cases in which assignments are intentionally designed to make use of ambiguity, it is important to clarify the support roles. For example, help centers staffed by entry-level student workers may be important sources of support in cases where people need help completing clearly defined tasks. In other situations, the task at hand requires multifaceted support or is intentionally ambiguous. Such cases may require course-specific training sessions or coordinated support sessions. In either case, it is important at the outset of the assignment or course design process to identify appropriate sources of support. It is also important to develop a sense of the kinds of questions that should be referred to faculty members, for example, understanding the differences between questions of writing, research, or concepts.

Clarify the Roles of Faculty Members Designing Assignments and/or Courses

It is important to recognize that the course offerings available at Carleton are the responsibility of the faculty. It is ultimately up to individual faculty members associated with a course to determine the content and sequence of material covered, the criteria by which student work will be evaluated, and nature of the learning activities through which students will engage course materials. At its core, the coordinated support model is designed to enhance student learning as defined by faculty members and to enhance the faculty/student interactions.

Communication, Communication, Communication

Communication is at the core of the coordinated support model. Communication can take many forms. Three examples relate to collections of information: 1) a list of sources of support available based on assignment type, tools, and the areas of expertise of academic professionals on campus; 2) a repository of assignments so that people providing support to students will be able to contextualize their support and so that other faculty members may get a sense of the curricular options available to them; and 3) where appropriate, provide models of exemplary student work. It is important to recognize that creating online resources is not sufficient. These resources must be complemented and amplified by Carleton's existing support networks. It is important to have clear lines of communication between faculty members and the people supporting curricular activities as assignments are created and carried out.

Understanding the Time Required of Students, Academic Professionals, and Faculty as the College Increasingly Makes Curricular Use of Visual Materials and Modes of Expression

As faculty and members of the academic support community work together in creating and/or supporting curricular uses of visual materials, it is important to consider the ways in which these kinds of assignments affect student workloads. If student workloads are increasing, is this part of a general trend? What is the best method of estimating the time required to complete assignments involving visual materials? Similarly in what ways are the workloads of faculty and staff members affected?

Provide Expert Reference About the Diverse Sources of Curricular Support on Campus

It is important for the College to articulate the value and forms of available curricular support. Members of the community of academic professionals on campus will play a particularly important role as liaisons to academic departments and programs of study. This liaison role will entail providing expert reference to faculty members about the types of support available on campus. Liaisons will rely upon the list of sources of support noted above.

Improving Support Options for Students During Hours of the Day When Students Typically Work

Support organizations at the College are typically available during the standard business hours of the College. Student workdays typically span into the evenings. Careful attention must be paid to broadening the College's support structure to better align with student work schedules. Two likely avenues are expanding the network of student-led formal and informal sources of support and, in cases where staff members prefer working later hours of the day, expanding the times in which full-time staff are available for curricular support.

Providing Development Opportunities for Faculty, Academic Professionals, Educational Associates, and Students Alike

The coordinated support model is centered on supporting expanded curricular uses of the visual by improving the formal and informal support networks at the College. Professional development opportunities through which members of the Carleton community may develop and refine requisite areas of expertise are critical. As noted below, funds should be

available to support the professional development of faculty and staff members. Special consideration should also be given to providing development opportunities for educational associates to further refine their training as young professionals. This program also includes an enhancement of training available to students already participating in employment programs at the College.

Develop a Series of Distinctions Useful for Identifying Appropriate Sources of Support

Just as there will be careful attention given to the collection of assignments developed over time, participants in the coordinated support model will also engage in discussions of how best to distinguish between questions suited to student-run support networks, formalized help centers, educational associates, academic professionals, and faculty members. The goal of this ongoing discussion is to help clarify expectations, roles, and to facilitate creative working partnerships.

MECHANISMS

Professional Development and Training for Faculty Members and Academic Professionals

This program will ensure that the professional development opportunities made available through the College are connected to the curricular development led by the Carleton faculty. Coordinated support efforts may include faculty, staff, and students. The work of a curricular support team will be guided by the pedagogical goals of the faculty member(s) creating curricular materials. Advice and support may take the form of advice in the selection of information resources and tools, explorations of possible assignment types, ways of staging assignments, arranging support sessions for students enrolled in specific courses, advertising general support opportunities available to students. Professional development and training opportunities will be identified based on their relevance to curricular development efforts.

Provide a Mechanism Through Which Faculty Members Receive Coordinated Support as They Create and Use Assignments

A major element of this program, particularly in the early stages, will be experimenting with models of coordinated support for a variety of types of curricular development projects. The Dean of the College Office will support exploration at this level by running internal grant and professional development programs. Lessons learned through project development will be incorporated into the larger coordinated support model. One central element of this coordinated support model is a liaison model in which academic support professionals provide expert referral to sources of support available on campus. Liaisons would consult with academic departments, programs of study or individual faculty members about the resources necessary to support a given course or assignment.

Develop a Cadre of Students Who Provide Support and Training to Students

Develop a program through which students working at the College will have coordinated training opportunities, identify support needs among students, and the means to carry out associated programs. Supervisors of student workers may nominate students to participate in this program. Participation in this program would entail supplemental

training in the relevant information resources, tools, and methods of support specific to curricular uses of visual materials.

Faculty and Staff Workshops

Provide workshops members focused on creating, completing, and/or supporting assignments that make use of visual materials for faculty and staff. Workshops built around support teams will have one of two structures. The first structure is designed to support individual faculty members as they work on assignments or entire courses that make use of visual materials. The second structure is designed for academic departments or programs of study to look programmatically at the ways in which support for curricular uses of visual materials may be introduced throughout a sequence of courses. Over time, the workshops should function to help members of the Carleton community identify taxonomies which will help us identify which support models map to specific types of curricular development efforts.

Student Workshops

As noted above, a cadre of students likely drawn from a range of support organizations on campus, will survey fellow students in order to identify specific needs, appropriate formats, and appropriate times to hold workshops or other forms of training to students on campus. Emphasis will be placed on providing support and training opportunities in the afternoon and evening hours when Carleton students are most likely to work on their assignments. Where appropriate, workshops will emphasize the type of work students need to complete rather than focusing on specific information resources and tools.

Provide Training Opportunities for Students Workers in Existing Employment Programs

The College will develop a series of training opportunities for students working on campus. Whether student worker roles may range from teaching assistants, prefects, research assistants or others employed to directly support curricular uses of visual materials, the College will develop a training program designed to provide a systematic program to learn about information resources, tools, and effective ways of supporting work with visual materials.

Advisory Committee and Coordinating Committee

Two committees will guide the implementation and continued operation of this coordinated support model, one at the advisory level and one at a coordinating level. The advisory committee will advise and discuss issues relating to scaling the coordinated support model in sustainable ways, identifying patterns that emerge in terms of assignment types, gauging the time commitments required of students as they work on assignments that include visual materials, forms of visual literacy, and models of support for curricular uses of visual materials. The coordinating committee will meet more regularly to discuss proposed projects currently underway. The purpose of the latter group will be to coordinate efforts and address issues that arise. Both committees will work closely with the Director of Curricular and Research Support who will coordinate curricular support efforts that span multiple organizations.

Appendix B: Study Charge

Curricular and Research Support at Carleton College:

A Study of Facilities, Resources and Expertise

Charge:

Identify the locations, resources, and sources of expertise on campus that contribute to curricular and research support at the College. The purpose of this report is to assess what Carleton is currently doing, provide the basis for future planning processes and identify key issues for future discussion. The report is intended to help the Carleton community accommodate new or growing needs with existing resources.

Methods:

This charge necessitates the identification of curricular and support needs, resources, and best practices through:

- Compilation of needs as identified through planning and assessment activities at the departmental, program of study, and office levels
- Identification of “best practices” in providing curricular and research support available in research and professional literatures
- Survey of existing facilities, resources, and expertise on campus
- Identify key questions that should drive our institutional planning processes.

Taken together, these exercises will help the College identify best practices in professional and research literatures relevant in meeting Carleton-specific needs. Such an exercise is intended to further efforts that identify existing pressure points, redundant efforts, and ways of freeing people up from tasks that are no longer critical so that resources and expertise can be focused on current needs. This exercise will be rooted in the College’s Statement of Mission, Vision, and Value, institutional student learning outcomes (SLOs) as well as the College’s new curriculum.

Contacts:

This study will be completed by Advisory Committee for Curricular and Research Support and delivered by June 30, 2010 to the Dean of the College and Dean of Students.

Appendix C: Future Action Items from Accreditation Self-Study Report: 2008-2009

Items for Future Action as Articulated in Carleton College's Accreditation Self-Study Report: 2008-2009

Criterion One: The organization operates with integrity to ensure the fulfillment of its mission through structures and processes that involve the board, administration, faculty, staff, and students.

Core Component 1a:

The organization's mission documents are clear and articulate publicly the organization's commitments.

Summary of 1a

While the College has recently adopted a new mission statement, the statement reflects continuity with the traditions, goals, and values of the College, as expressed in past documents and in ongoing practice.

Items for Future Action for 1a

- Board, faculty, and administrative action regarding implementation of the mission statement will be defined in sub-sections, below.
- Overall, the College anticipates that implementation of its mission statement will be congruent with the HLC themes of "orientation to the future, focus on learning, connectedness (internally and externally), and distinctiveness."

Core component 1b:

In its mission documents, the organization recognizes the diversity of its learners, other constituencies and the greater society it serves.

Summary of 1b

The College values the diversity of its students and the greater society that the College serves. Consensus on the statement of diversity is a necessary complement to the College mission of graduating students who have fulfilled the College's mission, including preparation for participation in a global, diverse world. Toward that end, DIG commissioned a survey on the campus climate, with results made available in the fall of 2008.

Items for Future Action for 1b

- Continue the work of DIG by embedding the principles of the diversity statement across the College.
- Work with consultant on the results of the assessment of campus climate for diversity.

Core component 1c:

Understanding and support for the mission pervade the institution.

Summary of 1c

While the mission statement is a new document, it is consistent with the history and values of the College. All constituents of the College recognize the new statement as an evolutionary document, not a departure from tradition.

Items for Future Action for 1c

- Discussion by the faculty of proposed curriculum in context of new mission and diversity statements.
- Alignment by the board of spending priorities in context of mission and diversity statements, especially as these relate to the HLC four themes, referenced above.

Core Component 1d:

The organization's governance and administrative structures promote effective leadership and support collaborative processes that enable the organization to fulfill its mission.

Summary of 1d

Carleton's governance and administrative structures promote effective leadership and support collaborative processes that enable the organization to fulfill its mission. These processes take place in a collegial, cooperative environment that is valued by all constituencies of the College. While the Board of Trustees holds responsibility for the governance of the College, tradition and astute leadership have ensured that the board recognizes the important contributions that all constituencies of the College make to the practice of effective governance.

Items for Future Action for 1d

- The Board of Trustees, and each of its committees, began in early 2008 to align their work with the new mission statement, emphasizing initial study of the mission, agendas for board and committee improvement, and development of action plans.
- The faculty is in the process of developing recommendations for a new curriculum that will align with the new mission statement.
- New leadership in human resources plans to address some staff concerns about a perceived divide between the faculty and staff.
- With the involvement of the board, PAC, the dean of the College, the vice president for student development and dean of students, and the administrative staff, the College will continue to develop opportunities for students to contribute to the ongoing development of the mission and governance of the College, including active recruitment and support of student leaders.

Core Component 1e:

The organization upholds and protects its integrity.

Summary of 1e

The College endeavors to deal honestly with all of its constituencies, practicing in its relations with internal and external stakeholders the values the institution expresses in its mission statement.

Items for Future Action for 1e

- The College will further develop environmental policies consistent with its mission.
- The College will continue to pay attention to communication with the city of Northfield and area residents regarding arts facilities and student residences development.

Evaluation of Criterion One

As will be evident in the chapters that follow, Carleton's mission and its integrity in accomplishing that mission inform the operations and priorities of the College. As it plans for the future, the College is aware of the contexts of social and economic change, the importance of internal and external partnerships, and, most of all, the distinctiveness and integrity of Carleton's work.

Future Plans

Through reflective practice, the College will continue to be devoted to academic excellence, distinguished by the creative interplay of teaching, learning, and scholarship, and dedicated to our diverse residential community and extensive international engagements.

Criterion Two:

The organization's allocation of resources and its processes for evaluation and planning demonstrate its capacity to fulfill its mission, improve the quality of its education, and respond to future challenges and opportunities.

Core Component 2a:

The organization realistically prepares for a future shaped by multiple social and economic trends.

Summary of 2a:

Carleton's planning efforts are developed in an overall context, but are also encouraged to be opportunistic and innovative. Broad campus discussion is an inherent part of ongoing planning and ultimate authority for decisions is appropriately vested in the faculty, the College Council, the Administrative Council and the Board of Trustees. The planning objectives are clearly focused on academic quality and the constant improvement of Carleton as a learning environment for all of its students. Recent initiatives are well grounded in context and insight that enables them to build upon existing strengths while responding to changing opportunities and circumstances. The five-year budget forecast is utilized to evaluate longer run capital commitments and to anticipate the impact of the campaign on cash flows and capital funding requirements.

Items for future action for 2a:

- With the construction of a first residence hall project of 230 beds, the College moves

toward the goal of constructing 381 new beds. Further planning and analysis will be required to identify the most appropriate next step toward accomplishing the goals of the Residential Task Force.

- The coming year will see adoption and implementation of proposed curricular reforms.
- A new subcommittee of the College Council, the Campus Design Advisory Committee, will consider near and longer term campus design and facilities usage issues.
- Institutionalizing support for international students is a high priority in the current comprehensive campaign, as the current model is expensive and funded with soft money
- Strong leadership from faculty, the deans of students and of the college, and the Office of Intercultural Life (OIL) will work toward accomplishing Carleton's diversity goals.
- Carleton will continue and strengthen efforts to improve the graduation rates and campus engagement of all students.

Core Component 2b:

The organization's resource base supports its educational programs and its plans for maintaining and strengthening their quality in the future.

Summary of 2b:

In an overall sense, Carleton plans to live within its means and to expand available resources in an appropriately aggressive manner. The budget and all of the planning processes focus on achieving academic excellence. We are constantly seeking ways in which that commitment can be renewed or strengthened. The budget process is designed to solicit input about short term and longer term strategic directions. Priorities are established for the overall College and they are reflected in the annual operating budget, in the capital budget, and in the longer term capital campaign.

Items for future action for 2b:

- Recent trustee requests for better metrics and more frequent reporting against financial goals such as cash raised in the campaign are appropriate and constructive additions to an annual budget development and reporting cycle.
- The competition for student recruitment may be influenced by future actions taken by the Ivy League institutions and others of similar wealth regarding further reductions in student loans. Carleton will continue to carefully assess its options and competitive position. As appropriate, the College will respond by initiating programs that enable the students offered admission to the College to not only afford to come, but to do so confident that their choice is in their own best interest.
- The largest financial challenge facing the College is the cost of the Arts Union project and the gift cash flow required to support it. Continued programmatic and curricular planning have served to clarify and heighten the sense of urgency in its completion.

Core Component 2c:

The organization's ongoing evaluation and assessment processes provide reliable evidence of institutional effectiveness that clearly informs strategies for continuous improvement.

Summary of 2c:

Carleton uses direct and indirect measures to collect data on institutional health, including student experience, faculty quality, curricular balance, and condition of the physical plant and other environmental features. The results inform reflective practice at all levels.

Items for Future Action for 2c:

- Maintain longitudinal measures, continue to update comparative data with peer institutions, and continue to invent and refine assessments that speak to immediate and long-term concerns.
- Update internal data storage and retrieval systems to allow more access to data and summaries within the College community.

Core Component 2d:

All levels of planning align with the organization's mission, thereby enhancing its capacity to fulfill that mission.

Summary of 2d:

Comprehensive planning issues such as the arts initiative require multi-year committee work and wide campus discussion. They also require a process for consolidating this work into an action plan and for then directing or raising resources to accomplish it. When the time is taken to do this in a structured manner, the Carleton community is adept and experienced at collaborative decision making and is generally in agreement about the educational goals of the College and how they might be accomplished.

Items for Future Action for 2d:

- The goals of the Breaking Barriers Campaign reflect the priorities and mission of the College. The cash flow and overall success of the campaign will be a major factor in determining the rate and extent to which Carleton can move forward with these initiatives.
- Interpreting the planning and campus discussion work with insight and articulate descriptions to donors and the wider Carleton community of alumni will be essential to the campaign's success.
- The College will need to keep a tuned "ear" to ongoing development of new issues and opportunities which require or enable it to rethink and possible redirect its efforts to provide an ever improving undergraduate experience and learning environment.

Evaluation of Criterion Two

Carleton's resource allocation priorities and processes are focused on strengthening academic excellence and the learning community composed of students and faculty and staff members. Regular and exceptional committees and reporting allow the entire College to remain focused on the mission of the College and foster an environment of collaboration

and trust. Utilizing an array of surveys and comparative measures, the faculty and administration are constantly assessing the appropriateness of our budgetary and resource development priorities with the goal of improving excellent student learning opportunities at Carleton. The trustees have recently requested a more rigorous evaluation of the long term financial forecasts in light of the significant plans for major capital projects to be funded from the campaign. These requests have initiated a more frequent, informed, and reflective dialogue concerning progress toward the goals of the campaign and the impact of cash receipts on the timing of major projects.

Future Plans

The College continues to refine its budget process and long-term financial planning through reflective practice. The current comprehensive campaign is a major undertaking to identify new resources in support of the primary College mission. The College anticipates an ongoing and lively discussion about the issues and opportunities facing the College and the appropriate ways to balance risks as we move forward in an uncertain and newly competitive environment.

Criterion Three:

The organization provides evidence of student learning and teaching effectiveness that demonstrates it is fulfilling its educational mission.

Core component 3a:

The organization's goals for student learning outcomes are clearly stated for each educational program and make effective assessment possible.

Summary of 3a

The last ten years at Carleton have given rise to a culture of reflective practice rooted in assessment. Regular assessment of our nine learning goals has generated curricular change and, perhaps more importantly, has led to a focus on making student learning more visible to faculty members, students, and external constituencies. With faculty-led initiatives and departments implementing assessment-informed professional development and curricular reform, we expect the next ten years to realize the promises of the past ten. As an institution we recognize that our new mission statement contains broad learning goals that will need to be assessed as part of our effort at continuing to improve the education we deliver. The nine goals we have spent the last ten years exploring make us confident that we will succeed in translating our new mission statement into concrete goals that are worthy of the high standards we have for ourselves. As we indicated above, we are currently piloting a rubric that will allow departments to report how well their seniors accomplish one of the six broad learning goals described in our mission statement. The results will offer the College its first glimpse of institutional assessment driven by departmental research on student learning.

Items for Future Action for 3a

As we move forward, we are committed to acting on the following items:

- Require every department and program to continue to refine its initial articulation of learning outcomes and find appropriate assessment measures.

- Modify the department review process to include assessment of learning outcomes, focusing on the senior capstone experience.
- Devise new institutional learning goals that correspond to our newly adopted mission statement and that can be more efficiently assessed and align with new graduation requirements that are being developed.
- Ensure that robust feedback loops exist, so that what we learn about our student learning can be used to improve future learning.
- Consider better ways of preparing our students for oral presentation.
- Consider the role of reflective practice for students in improving student learning.

Core Component 3b:

The organization values and supports effective teaching.

Summary of 3b

Carleton has always focused its attention on effective teaching, both in the formal review process for faculty members and in the informal exchanges among colleagues. The ways we monitor our teaching practice have evolved organically over time and are now grouped under the umbrella of the Perlman Center, which provides a locus for our ongoing conversations about teaching and learning. As an institution, Carleton has invested a great deal in professional development, and the payoff is evident in the overwhelmingly positive attitudes of faculty members about the campus environment in which they work. We also believe that professional development enhances the learning experiences of our students, and we are endeavoring to demonstrate that with hard data.

Items for future action for 3b

As we move forward, we are committed to acting on the following items:

- Make relevant data concerning student learning more available to faculty members through the Perlman Center Web site.
- Continue to document and disseminate the effects that faculty development has on student learning.
- Continue to work with SERC to publish best practices in teaching that occur on our campus and support the scholarship of teaching and learning among the faculty and staff.

Core Component 3c:

The organization creates effective learning environments.

Summary of 3c

We see effective learning environments distributed across the range of student experiences both on and off our campus, in and out of class. Local collaborations in the community as well as travel in the U.S. and abroad provide opportunities for student learning that enhance traditional classroom experiences. We have a collection of highly engaged offices on campus to support these varied environments, and survey data indicate that Carleton is very successful in providing positive learning opportunities for students. In areas where we can identify problems, we work to develop thoughtful responses. Both of the areas that we identified above as being of concern will continue to receive our attention. We hope to be

able to show significant improvement in both areas by the time of our next accreditation self-study.

Items for Future Action for 3c

As we move forward, we are committed to acting on the following items:

- Continue efforts to improve the campus climate for non-majority students, including the development of an action plan in consultation with an external consultant.
- Monitor satisfaction with the advising of first and second-year students and make improvements as needed.
- Develop more precise measurements for the learning that happens outside the classroom. One further learning environment that we wish to explore involves the role of employment in the lives of our students. A high percentage of our students have jobs both on and off campus, and anecdotal evidence suggests that these employment situations are the site of a great deal of experiential learning for our students. This also places many of our staff members in the role of mentors, and we would like to find a way to capture and assess this learning so that we might enhance it with activities in the academic portion of students' experience.

Core Component 3d:

The organization's learning resources support student learning and effective teaching.

Summary of 3d

Carleton is attentive to the allocation of limited resources: staff, equipment and space. Our strength has been the outstanding staff whose collaboration with the faculty we seek to support the educational mission of the College. We have provided several examples of a process that honors the input from many constituencies in identifying needs and generating responses to those needs, a model to be employed in future considerations of resource use.

Items for Future Action for 3d

As we move forward, we are committed to acting on the following items:

- Monitor developments in the technology of teaching and learning and adopt as appropriate.
- Develop new Arts Union and ancillary spaces/resources in light of relevant data.
- Enhance opportunities for professional development for support staff members.
- Continue to refine the duties of the new director of curricular and research support.

Evaluation of Criterion Three

We have tried to show how change happens at Carleton; it is organic, consultative, and informed by the best data we can collect. We have learned that we want a more streamlined assessment plan that is in line with our newly adopted mission statement, especially once we discern how we are "living" that mission statement. The curriculum review process will probably yield new assessment points, although we anticipate retaining our senior capstone experience. We are confident that we can learn a great deal more from some institution-wide assessment of that learning experience. Overall, we want

to continue to build on the culture of reflective practice that exists on our campus.

Future Plans

One concrete way to strengthen our culture of reflective practice is to increase the flow of relevant data to faculty and staff members regarding learning outcomes and attitudinal dispositions. We currently engage in a great deal of data collection, but as with most institutions, the data tend to remain in the office of institutional research. We have two plans to combat that imperfect feedback loop. First, the Perlman Center's Web site has begun to feature a biweekly column by our colleagues at institutional research and assessment that presents data points that are relevant to faculty members as they think about student learning in their own courses. We also plan to feature assessment data more frequently in our regular programming at the Perlman Center.

Second, we have an ambitious goal of compiling a data vault that would contain all the results of surveys that we give to students, faculty members, and alumni. The data from the different surveys would be tagged with a common set of indicators that would allow anyone with basic knowledge of database use to create and answer research questions that draw upon all the survey data we currently collect. We would need to consider FERPA and IRB issues, but this data vault could be part of our commitment to new SoTL ventures, as part of our participation in the CASTL Leadership program. In addition to the data vault, our library staff is also actively working to create an archive of student work. This would allow further research into the scholarship of teaching and learning by our faculty, by placing actual student work in the public domain.

Finally, we are developing a new assessment plan to augment and/or replace the cyclical investigation of our nine learning goals. This new plan will be keyed to our new mission statement and will focus on direct measurement of student learning as much as possible. We know that we need to assess learning on the level of both the program and the institution, and we have already taken important steps in both directions. We are particularly excited to have learning outcome statements from each program, and we are engaged in aligning these outcomes with our institutional goals and maximizing the benefits of assessing capstone projects of our seniors. Given that we are also in the midst of voting in a new set of graduation requirements, we know that we must pay particular attention to articulating clearly the learning we expect to result from these changes. Fortunately, we have a great deal of solid information to work with already, and we enjoy the support of the faculty and staff whose wisdom, collegiality, and dedication have served Carleton so well in the past.

Criterion Four:

The organization promotes a life of learning for its faculty, administration, staff, and students by fostering and supporting inquiry, creativity, practice and social responsibility in ways consistent with its mission.

Core Component 4a:

The organization demonstrates, through the actions of its board, administrators, students, faculty, and staff, that it values a life of learning.

Summary of 4a

Carleton attracts people who take advantage of the myriad opportunities the College provides. We expect our faculty members to demonstrate what it means to be lifelong learners by being active knowledge producers as well as knowledge conveyors; we expect our administrators and staff members to stay current with developments in their fields; and we expect students to be explorers, open to the multiple paths a college education reveals to them. The dean of the college division, the dean of students division, and the human resources office all take a proactive approach to identify and act on the development needs. Along with individual learning and development, countless events occur throughout the year that bring staff and faculty members and students together to learn, to connect, and to build relationships with each other. This is what makes Carleton feel like a community rather than just an institution.

Items for Future Action for 4a

- Monitor effectiveness of course reduction, especially with respect to faculty workload.
- Encourage faculty members to report and archive their pedagogies, and to develop and implement a variety of classroom assessment strategies.
- Monitor number and kinds of requests for non-science faculty members to hire summer research assistants; seek additional funding as appropriate.
- Take up remaining issues from the 2002 exempt and non-exempt staff task force's survey results.

Core Component 4B:

The organization demonstrates that acquisition of a breadth of knowledge and skills and the exercise of intellectual inquiry are integral to its educational program.

Summary of 4b

Carleton demonstrates that acquisition of breadth of knowledge and skills and the exercise of intellectual inquiry are integral to its educational program. Carleton has had in place an assessment plan which faculty and staff members followed and learned from, and one of the things we have learned is that we need a revised assessment plan with a clearer focus on learning goals. The College has been experimenting with a variety of assessments to better understand what will be most useful to us. Next steps involve a workable plan, which provides regular assessment at the institutional and program level that yields usable results.

Items for Future Action for 4b

- Continue work of defining learning outcomes, especially with respect to their helpfulness in improving student learning.
- Ensure faculty support for the writing portfolio or change the requirement.
- Consider mechanisms to recognize interdisciplinary, integrated learning in the graduation requirement structure.
- Consider measures that will help students better understand the College's goals for them.
- Consider giving the ILP survey to a larger set of students (e.g., the entire student

body? All juniors?).

- Find the appropriate curricular place to lodge responsibility for FYILLAA outcomes.
- Continue to monitor success of underrepresented students.
- Align student life assessment with academic assessment outcomes.
- Assess the effectiveness of the new class dean structure.

Core Component 4C:

The organization assesses the usefulness of its curricula to students who will live and work in a global, diverse and technological environment.

Summary of 4c

Carleton assesses its curriculum to ensure that it is preparing students to lead useful lives in a global, diverse, and technological environment. We ensure that our faculty members are connected to the world outside the College in a variety of ways. We know that our students are prepared to live and work in a global, diverse, and information-rich world, because we have nurtured in them critical capacities: the capacity to think critically, reason analytically, and communicate effectively. We have data from students that reports on their sense of what their education has provided, we have data from our loyal and successful alumni that confirms the value of a Carleton education, and we have important confirmation from our students' performance on national, well-respected assessment instruments.

Items for Future Action for 4c

- Schedule assessments and choose assessment instruments in ways that allow for reasonable requests of respondents and ample institutional time to reflect on the results and plan appropriate responses.
- Ensure the maintenance of a welcoming environment inside and outside of the classroom that validates difference and diversity.
- Sustain and even expand the geographic diversity, both national and international, of our students and faculty and staff members.

Core Component 4d:

The organization provides support to ensure that faculty, students and staff acquire, discover, and apply knowledge responsibly.

Summary of 4d

Going forward, the College endeavors to continue to increase awareness of IRB-related concerns across all departments that work with human subjects. Similar concerns apply to the use of animal subjects, and an appropriate review board is in place. Copyright of printed materials is relatively well understood, but increasing use of non-printed materials from the Internet will require the College to think carefully about educating the community about these intellectual property issues. The EthIC program, while in its infancy, has the potential to significantly increase the awareness of ethical considerations in all facets of College life for all community members. Finally, issues relating to the responsible acquisition, discovery and application of knowledge will be an important aspect of the curriculum review and revision that is currently underway.

Items for Future Action for 4d

- Continue to increase awareness of IRB-related concerns as we also address concerns involving animal subjects.
- Ensure that regulations regarding copyright of printed materials are understood and adhered to.
- Increase awareness and understanding of copyright issues related to non-print materials.
- Consider more curricular and cocurricular ways to promote EthIC.
- Clarify where in the curriculum (multiple venues) issues relating to responsible acquisition, discovery, and application of knowledge are transmitted to students.

Evaluation of Criterion 4 and Future Plans

Carleton College's primary mission is to provide a liberal arts education of the highest order. The mission is well understood by all of Carleton's constituencies; as an institution which strives to be egalitarian and which takes pride in the quality of its students, faculty and staff members, and board, opportunities for lifelong learning are plentiful. Assessment of programs takes many forms, all of which contribute to reflective practice in the context of continuous improvement in breadth, depth, and the broad application of learning. We work and play well together, because everyone understands the College's focus and everyone buys into its mission. Testing reality lies at the heart of a Carleton education, and the standards we ask students to apply in the classroom are the same standards those of us responsible for delivering a first-rate education to our students apply to our own work. We are constantly asking ourselves, "How do we know we are equipping our students to lead meaningful, satisfying lives?" We try to approach this problem—the kind of messy, unstructured problem our students will surely confront in the real world—with the same skills we believe we are nurturing in our students: intelligence, sensitivity, humility, and a healthy dose of skepticism.

Criterion Five:

As called for by its mission, the organization identifies its constituencies and serves them in ways both value.

Core Component 5a:

The organization learns from the constituencies it serves and analyzes its capacity to serve their needs and expectations.

Summary of 5a

Carleton is a four-year residential, liberal arts college focused on the education of undergraduate students drawn from across the United States and the world. Carleton's mission statement clearly matches engagement and service goals that can be developed both for its primary constituency (its current students) and its secondary constituencies (alumni, parents, community residents, and the higher education community, among others). Carleton has a long history of service and engagement efforts, and this self-study provides an opportunity to begin to articulate specific goals and collect systematic evidence

of how well we are meeting them.

Items for Future Action for 5a

As we move forward, we are committed to working toward the following goals:

- Developing clear engagement and service goals for the whole College and its specific areas, with reference to the College's constituencies and its mission statement;
- Working towards developing means of assessing how well the engagement and service goals are being met;
- Complete an inventory of engagement and service activities; and
- As new initiatives in engagement and service are designed, developing concurrent measures of success for these programs.

Core Component 5b:

The organization has the capacity and commitment to engage with its identified constituencies and communities.

Summary of 5b

Carleton has demonstrated a commitment to engagement and service through its mission statement, its policies, and the actions of its leaders. The College is developing a vision to integrate its engagement and service efforts, so that students, community members, and other constituencies understand the depth of the College's commitment and experience its efforts in as seamless a way as possible (given the transience of the student population and the construction of the curriculum).

Increased staff will help Carleton evaluate its infrastructure for engagement and service and work to close the gap that currently prevents Carleton from fully implementing its commitment and vision. These staff members and the College will focus especially on inventorying, publicizing, coordinating and assessing the College's activities.

The actions of individual students and faculty and staff members—through volunteer programs, academic civic engagement (including servicelearning), public scholarship, and other measures—provide tangible results of the College's commitments to engagement and service. The structural model of Carleton's ACT center volunteer programs (where students have increased opportunities for training, leadership, and responsibility as they move from volunteers to program directors to student workers) has proved its value in the past 22 years.

Items for Future Action for 5b

- With boosted staffing in ACT, the new ACE coordinator, and a new standing committee of faculty and staff members, students, and community partners, we will try to work toward the following goals (anticipating that we can report progress on them by the time of the next accreditation review):
- In response to concerns raised by Nadinne Cruz about staffing in the ACT program, support the new staff members in that office as well as the new academic civic engagement director in the dean of the College office;
- Beginning a process, through the ACT center, the Career Center, and the academic

civic engagement office, to coordinate internships and other career explorations that engage students in service so that these individual experiences provide value to the larger Carleton community as well as to the individuals;

- Seeking external funding to begin the process of developing evaluation tools that measure the value of engagement and service activities to student learning goals and evaluation tools that measure the value of engagement and service activities to the external constituents of the College;
- Working toward producing annual reports of engagement and service, including public scholarship by Carleton College (institutionally and by individuals and groups) and publicizing these activities internally and externally; and
- Enhancing opportunities for structured reflection by students of curricular and cocurricular service and engagement programs.

Core Component 5c:

The organization demonstrates its responsiveness to those constituencies that depend on it for service.

Summary of 5c

Carleton has a strong record of responsiveness to internal needs, both short-term (responding to crises) and long-term (towards environmental sustainability). Carleton alumni and Carleton parents are the two constituencies (in addition to current students) that depend the most on the College. Carleton has established and strengthened formal mechanisms to connect with these two groups, including the Alumni Council, specific alumni interest groups, and the Parents Advisory Council (PAC). Reports from these organizations are presented at each Board of Trustees meeting. Ideas generated from these bodies are directed to appropriate College offices for responses. Carleton individuals maintain close ties with and respond to pressing needs in the community by working with local organizations such as the Cannon River Watershed Partnership and the Community Action Center.

Items for Future Action for 5c

As we move forward, we are committed to working towards the following goals:

- Continue to encourage and support the activities of Carleton's small groups and individuals as they respond quickly to local, national, and global issues;
- Work with the Career Center and the alumni affairs office to encourage alumni to make greater use of Career Center resources; and
- Support the rejuvenated Parents Advisory Council (PAC) in its efforts to help current students and the College.

Core Component 5d:

Internal and external constituencies value the services the organization provides.

Summary of 5d

Carleton has some mechanisms in place to determine how its programs are valued by internal and external constituencies. Internal constituencies such as alumni and parents are regularly surveyed. These surveys indicate that each of these groups is highly satisfied

with the College and its programs. Community partners surveyed by the ACT program are also strongly positive about their organizations' interactions with Carleton student volunteers.

Items for Future Action for 5d

As we move forward, we are committed to working on the following goals:

- Develop a regular schedule of conversations with community partners about the best ways to link Carleton curricular and cocurricular programs for the mutual benefit of the community, Carleton, and its students.
- Develop questions for ongoing student, alumni, and parent surveys and interviews that help measure the value of Carleton's service and engagement activities.
- Publicize the results of annual surveys and ensure that the main points help individual programs continue to improve.

Evaluation of Criterion Five

The policies and activities that we document in this section show that Carleton has an impressive record of engagement and service, both institutionally and through efforts of its individual faculty and staff members and students. Robust examples of engagement and service occur throughout the Carleton curriculum, in volunteer activities of Carleton students and staff and faculty members, and in the relationships Carleton maintains with its communities, including its alumni and parents of students. Recent years have seen marked improvements in the structures for some of these activities, for example, in the Parents Advisory Council.

Future Plans for Criterion Five

Themes that have been discussed in other chapters include needs for better documentation of what we now do, developing reasonable goals that are articulated across the campus, developing better tools for assessing our progress toward those goals, and developing ways to ensure that the assessments feed back into practice—in other words, continuing our development toward a more reflective practice—are relevant to Criterion Five. In the next ten years, we expect to begin the processes of developing a campus consensus on the goals for institutional engagement and service as well as the documentation and assessment mechanisms that go with these goals. The items for future action listed under each core component provide a blueprint for the next stage of promoting and evaluating engagement and service at Carleton. The new standing committee on engagement and service, along with the staff of the ACT office and the coordinator for academic civic engagement, will be primarily responsible for moving these plans along.

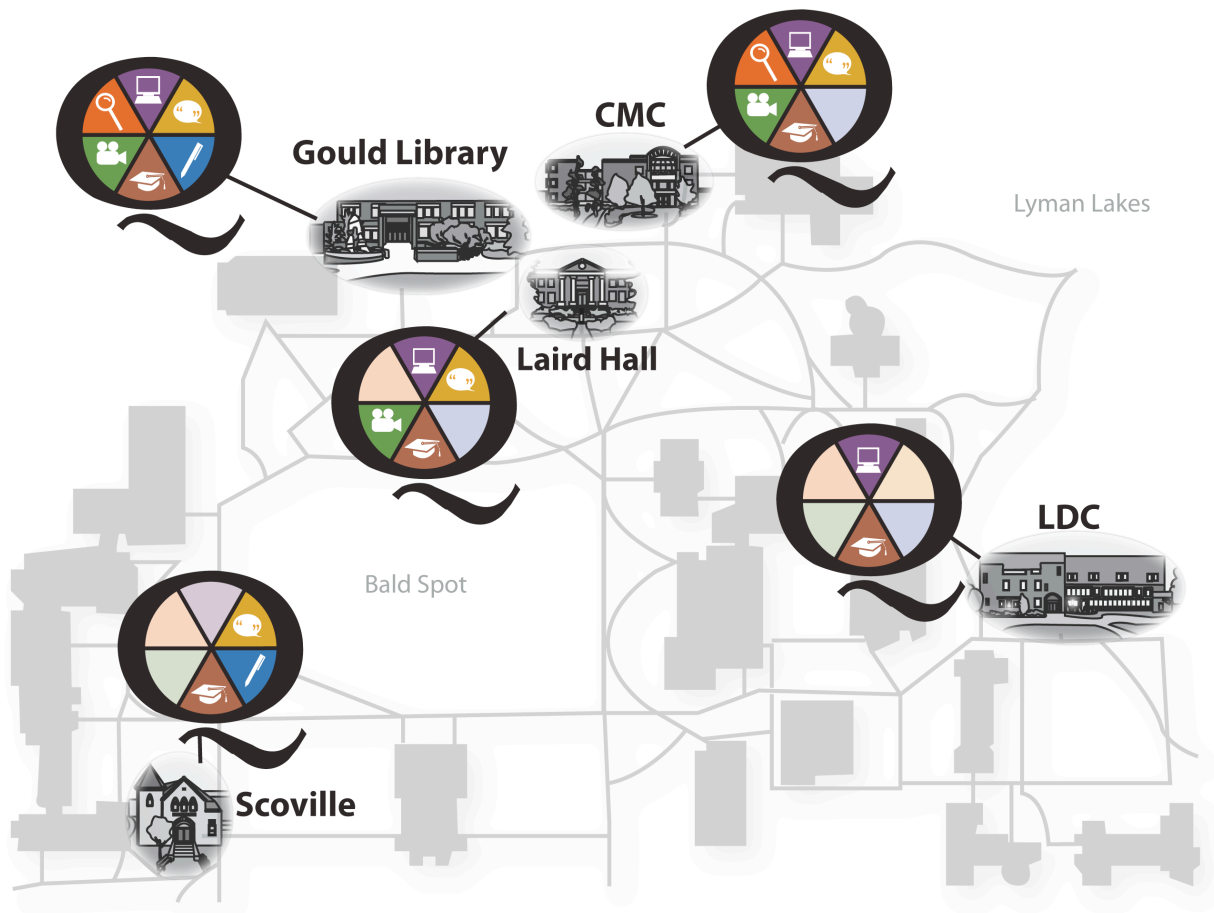
These items fall into three broad categories: developing goals; inventorying, publicizing and assessing existing programs; and coordinating programs across campus.

- Developing clear engagement and service goals for the whole College and its specific areas, with reference to the College's mission statement, the assets of Carleton and

its community partners, and the recent program review by Nadinne Cruz. We also need to provide regular, structured opportunities for both the institution, its members, and its community partners to reflect on these goals.

- Inventorying and publicizing existing programs and the College record in service and engagement. Developing measures of success (related to the overall engagement and service goals) and systematic and regular strategies to ensure that results from the assessments of engagement and service are linked into activities and programs on campus (through the Learning and Teaching Center and the Education and Curriculum Committee, for instance).
- Coordinating engagement and service programs, including those of the ACT office, academic civic engagement, the Career Center, Parents Council, alumni affairs office, and Alumni Council. Continue to encourage and support the activities of Carleton's small groups and individuals as they respond quickly to local, national, and global issues, explicitly providing students a seamless set of opportunities in engagement and service.

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CARLS ASK QUESTIONS



Gould Library

Librarian Consultations
Reference Room, 4th Floor

Media Collection
Matt Bailey, Room 465

Research/IT Desk
Reference Room, 4th Floor

Speakeasy
Room 329

Writing Center Satellite
Winter/Spring Only, Room 329



Scoville Hall

Academic Skills Coaching
Mel Stauffer, Room 206G

Academic Tutoring
Kathy Evertz, Room 203

Second Language Writing Support
Gene Bauer, Room 206C

Writing Center
Room 204



CMC

Center for Mathematics and Computing

Data and Research Technology Consultations
Paula Lackie, Room 318

Math Skills Center
Room 229

Student Computing Information Center (SCIC)
Room 107



Laird Hall

Creative Technology Consultations
Fiona MacNeill, Room 15C

Presentations, Events, and Production Services
(PEPS), Room 14



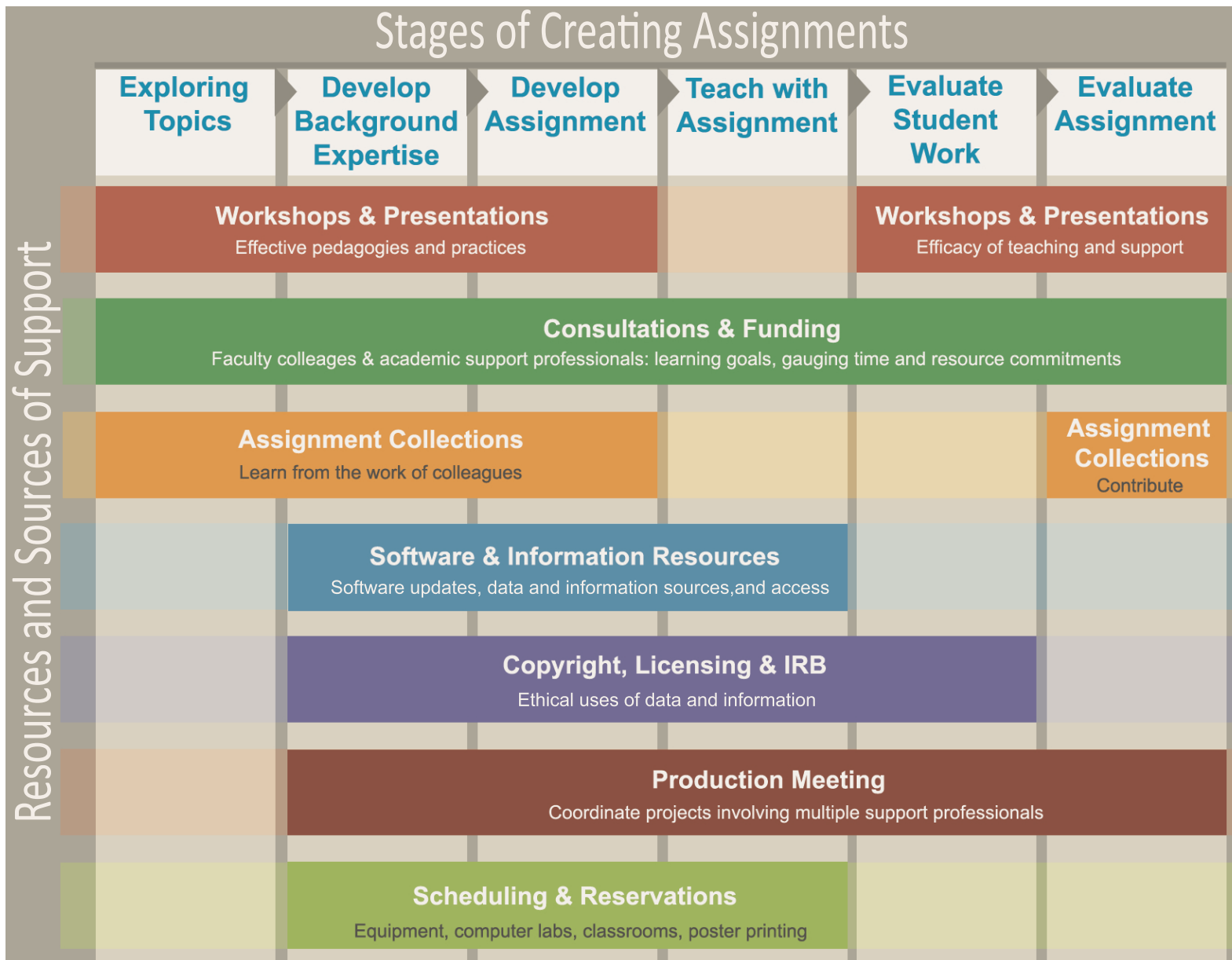
LDC

Language and Dining Center

The Language Center
Room 220

Language Technology Consultations
Carly Born, Room 305

Appendix E: Faculty and Staff Resources Associated with Stages of Creating Assignments



Appendix F: Sample Review Discussion Format

Chemistry Department Comps exercise - Skills, student learning outcomes and academic support

Mary and Cherry recently met with the chair and assessment coordinator of the chemistry department to help them articulate student learning outcomes and possible assessment measures in the major. (Chemistry typically has between 25 and 35 majors in each graduating class). The chemistry department has a model for its integrative exercise that fits well with both its main student learning outcome: "We want our graduates to solve problems like chemists" and with the novice/expert (or apprentice/master; student/professional (lifelong learner)) modeling that occurs in most of their courses. The reverse side of this page has the catalog copy for the group comps option in Chemistry (the one that a majority of students do).

This worksheet is designed to mimic the "production meeting" model being developed by Curricular Support. Please give the filled-in worksheet back to Cherry.

Small group members from CARS:

What constitutes an ideal outcome from this comps process? How will students behave? What characteristics will they have at the end? What skills does the chemistry department hopes students will develop during the comps process?

What skills do students need to have to do well in this comps model?

Where might they develop these skills (before and during the comps process)

What are the (specific) ways that academic support can assist a) teams of students b) individual students within teams and c) chemistry faculty group leaders?

What are specific ways that academic support can assist in evaluating the comps process and results?

Overview and Mission (from Chemistry department website)

A unique graduation requirement of all Carleton students is the "integrative exercise" also known on campus as "comps." The Chemistry Department treats comps as a senior capstone experience that helps students transition from academic course work to becoming independent, life-long learners. Our goals for comps are to give students an opportunity to decompartmentalize their knowledge of chemistry, to apply their academic skills to a difficult problem without obvious answers, and to build new understanding of a cutting edge research field without significant guidance from a professor.

Most of our students complete this requirement in what we call "group comps." For a group comps experience students are assembled into groups to study the research of a prominent chemist. For ten weeks (usually during winter term) the groups grapple with trying to understand the chemist's research through reading the primary literature and group discussion. Learning chemistry at this level requires the students to not only draw on everything they have already learned in course work, but to also realize where their knowledge gaps exist, then to go out and fill those gaps by obtaining and studying the necessary background information. This is all done with a minimum of guidance from a faculty advisor. The experience concludes (usually in early spring term) with the prominent chemist visiting campus and having an extended discussion of their research with the comps group. This discussion gives the students the opportunity to test their understanding of the science, propose possible research directions, hear about current unpublished findings, and to interact one-on-one with a highly respected scientist.

Previous Comps Visitors and Group Topics

2008-2009

Nate Lewis; California Institute of Technology; Nanocrystalline Titanium Dioxide Dye-Sensitized Solar Cells (group 1);

Semiconductor Photochemistry (group 2)

David Tirrell; California Institute of Technology; Macromolecular Chemistry of Artificial Proteins

Christopher Loss; The Culinary Institute of America; Food, Cooking, and Chemistry

2007-2008

Clark Landis; University of Wisconsin, Madison; Computational and Experimental Mechanistic Studies of Metal Catalyzed Asymmetric Hydroformylation

Steven Boxer; Stanford University; Biophysical Chemistry

John Hartwig; University of Illinois, Urbana-Champaign; Organometallics in Organic Synthesis

2006-2007

Kevan Shokat; University of California; Chemical Biology

Harry Gray; California Institute of Technology; Inorganic Chemistry/Biochemistry/Biophysics

R. Graham Cooks; Purdue University; Physical/Analytical/Environmental

Ronald Breaker; Yale University; Riboswitches

2005-2006

Tobin Marks; Northwestern; Organic Electronics

Dan Frisbie; University of Minnesota; Organic Electronics

Carolyn Bertozzi; University of California, Berkeley; Chemical Biology

John Bercaw; Cal Tech; Organometallic Chemistry

Appendix G: Focus Group Report

This section is intentionally left blank. Due to logistical constraints, this portion of the study was added at a late date and there was not sufficient time to secure Institutional Review Board approval. As a result, this section of the report is omitted from the version of the report used for broader distribution.

Appendix H: Student Engagement with Curricular Support Survey Instrument

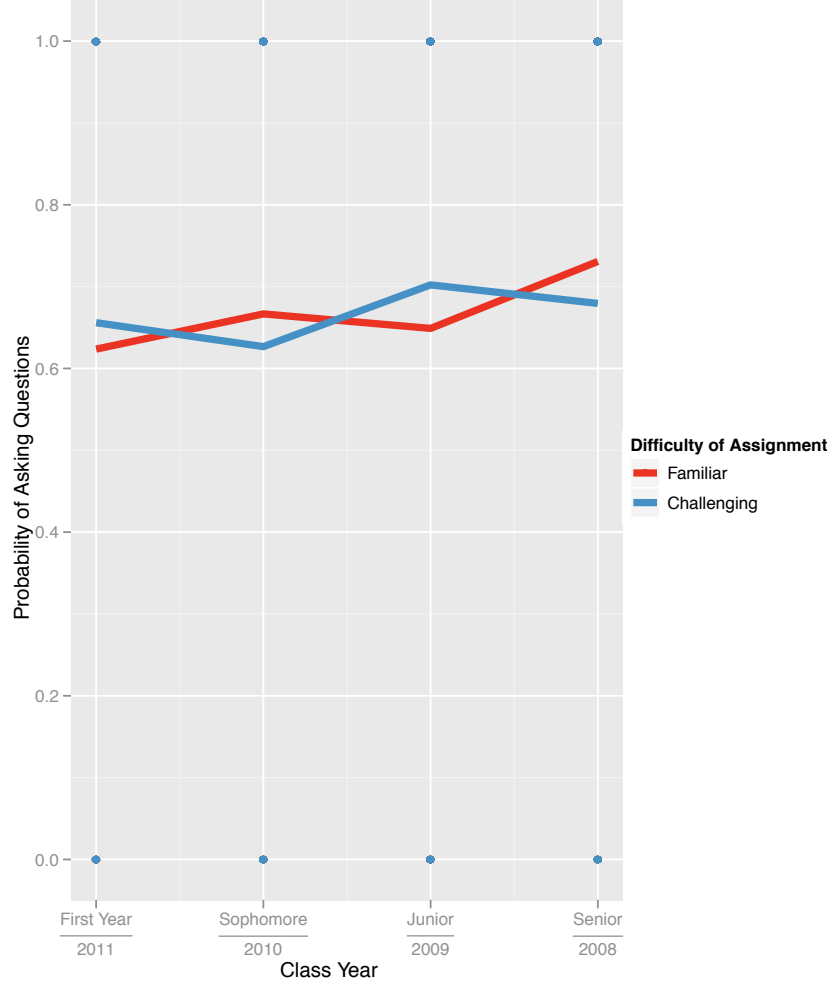
Carleton College is conducting a longitudinal study of the ways students engage the campus as they work on assignments. This is a survey that asks students to reflect on their recent experiences in completing two assignments: a familiar assignment type and a challenging one. Prompts ask students to report the locations and times of day they worked on assignments and whether they sought assistance. An analysis of the first administration of this survey, conducted in the Spring of 2008, is available in the [Curricular Uses of Visual Materials](#) study.

With one exception, the following graphs come from a preliminary analysis of the second administration of this survey conducted in the Fall of 2009 and draw from the descriptive portion of the analysis. The first two graphs are side-by-side comparisons of the rates at which Carleton students reported seeking assistance with assignments between the first administration of the survey and the second, which correlate with the College's "Carls Ask Questions" outreach program described above. The remaining graphs in this appendix depict responses by class year to prompts asking students about the nature of the assistance they sought and the faculties they used while working on their assignments.

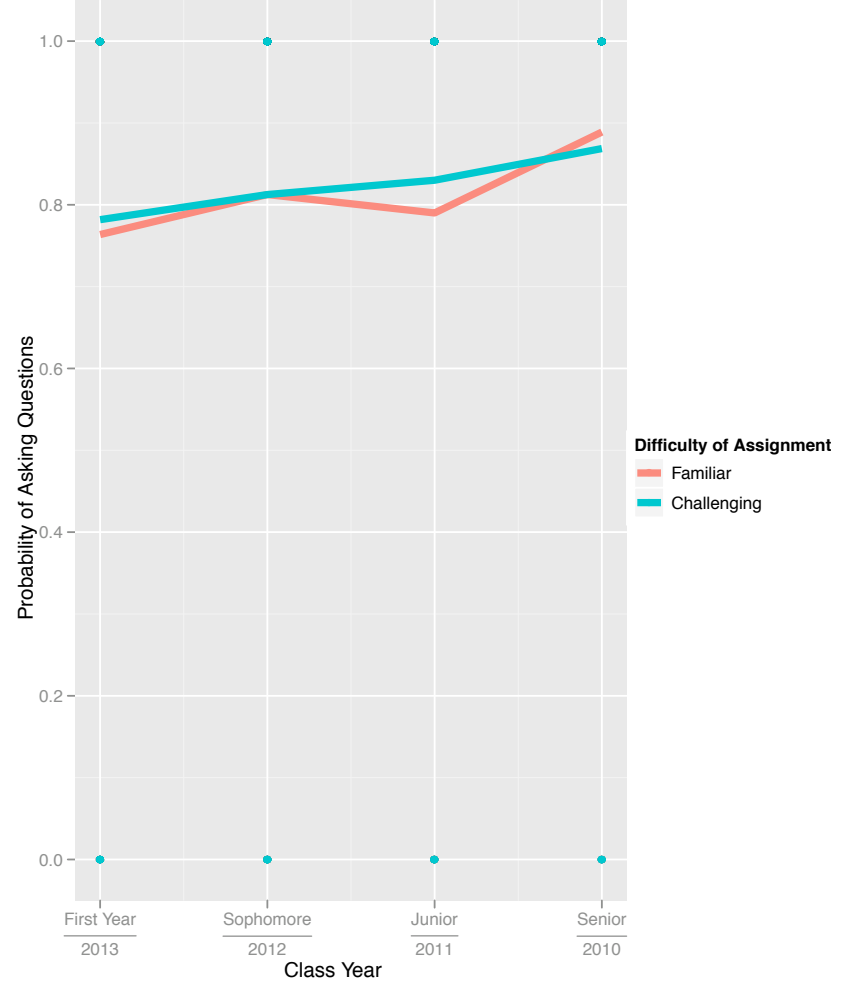
Members of the CARS Committee also reviewed the results of a preliminary inferential analysis using the Linear Mixed-Effects Models (LME4) package in the statistical tool R, a tool suited to cross-sectional analyses of binary data. Class year was the strongest predictor of whether a student reported seeking assistance ($p < 0.01$) – even stronger than the level of difficulty of the assignment.

In terms of the types of questions students reported having about assignments, class year did not appear to have much predictive value in whether or not students asked for clarification of the assignment or of course content. Class year was a predictor in whether students sought assistance with writing ($p < 0.001$), editing images or film ($p < 0.05$), learning software or instrumentation ($p < 0.01$), and in locating information ($p < 0.001$). A full analysis of the survey results should be available by the Fall of 2010.

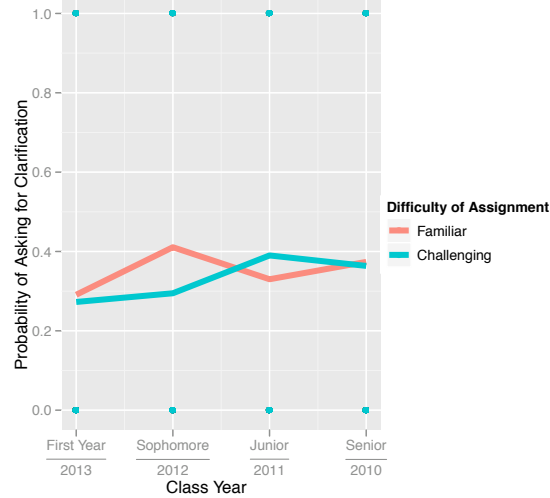
Students Reporting Having Asked Questions (Spring 2008)



Students Reporting Having Asked Questions (Fall 2009)



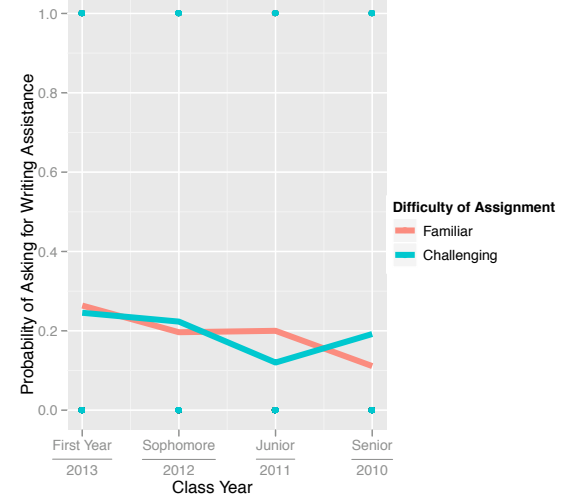
Students Seeking Clarification of Assignment



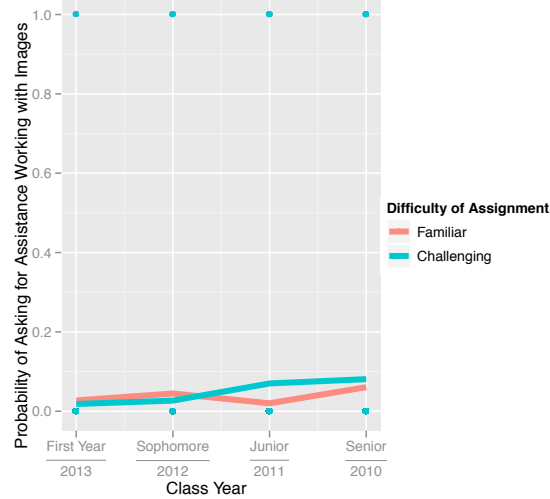
Students Seeking Clarification of Course Content



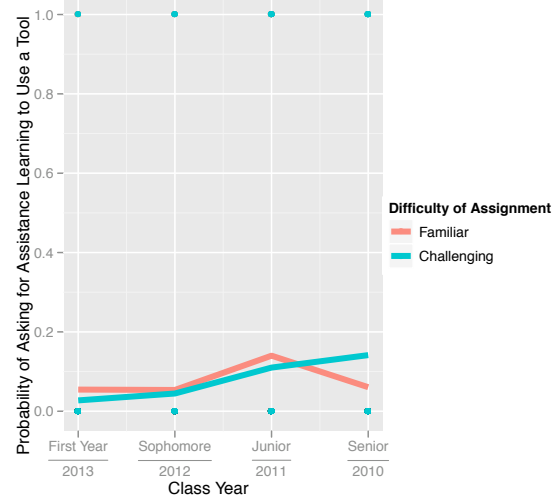
Students Seeking For Writing Assistance



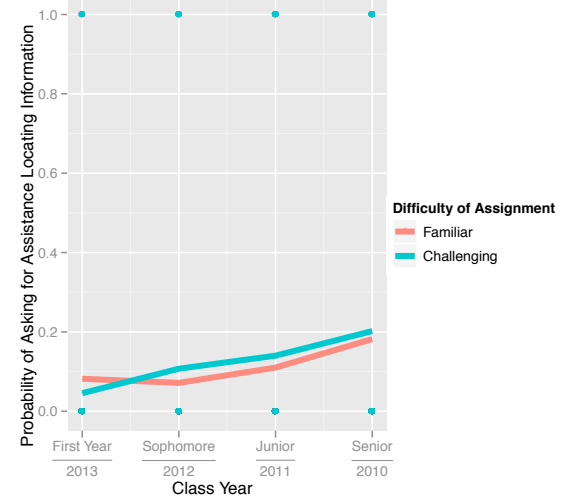
Students Seeking Assistance with Images/Film



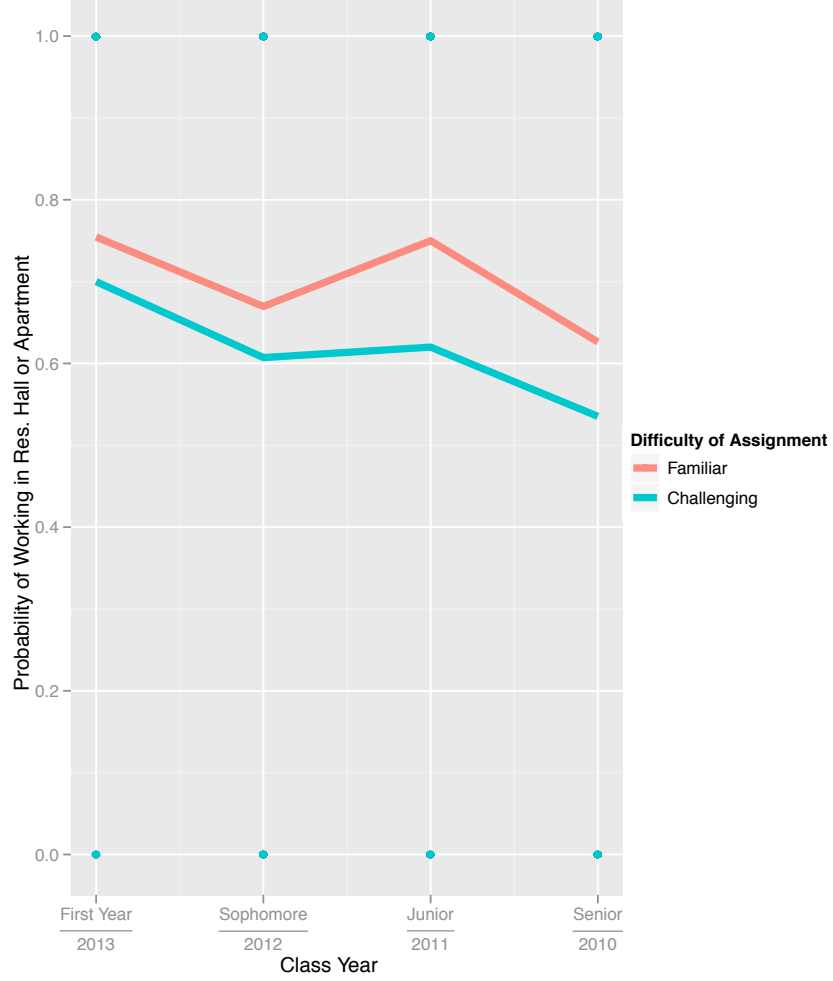
Students Seeking Assistance with Software or Instrument



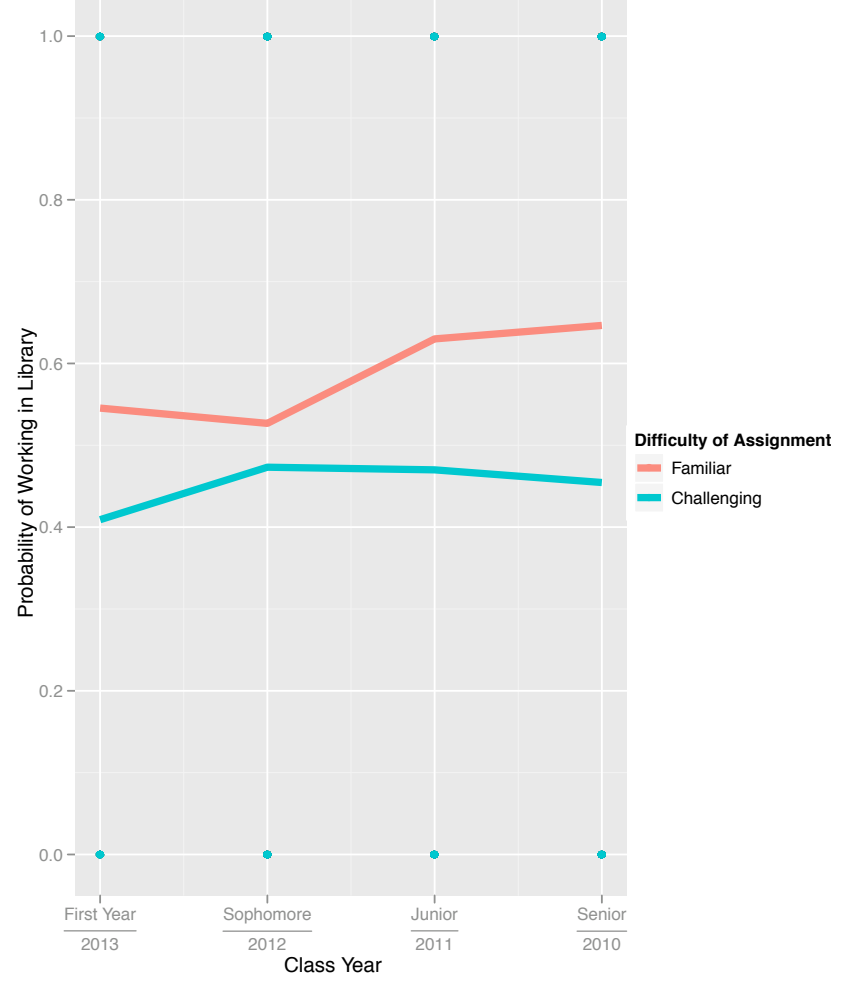
Students Seeking For Assistance Locating Information



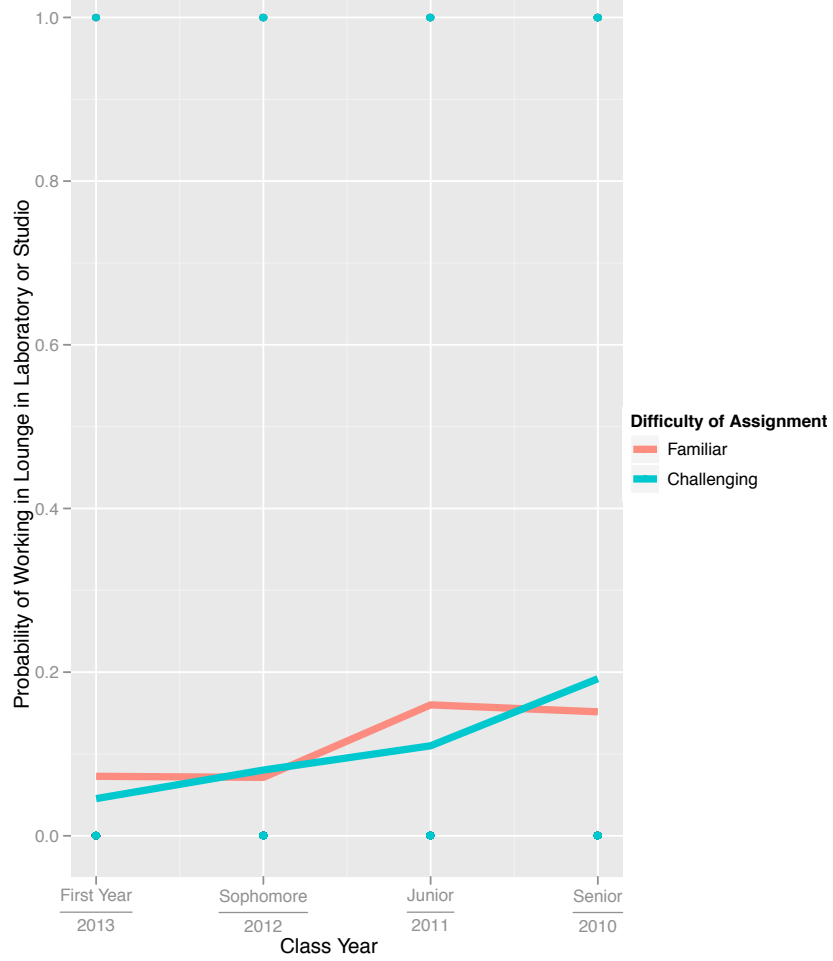
Facilities Used While Working on Assignments (Fall 2009)



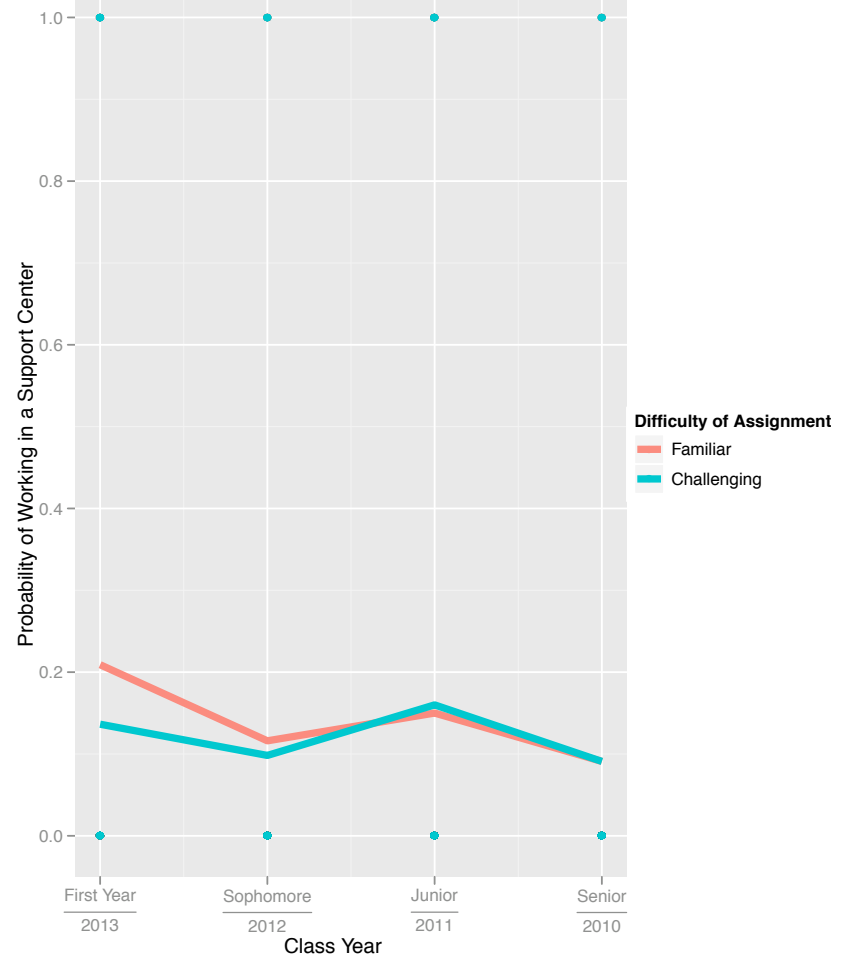
Facilities Used While Working on Assignments (Fall 2009)



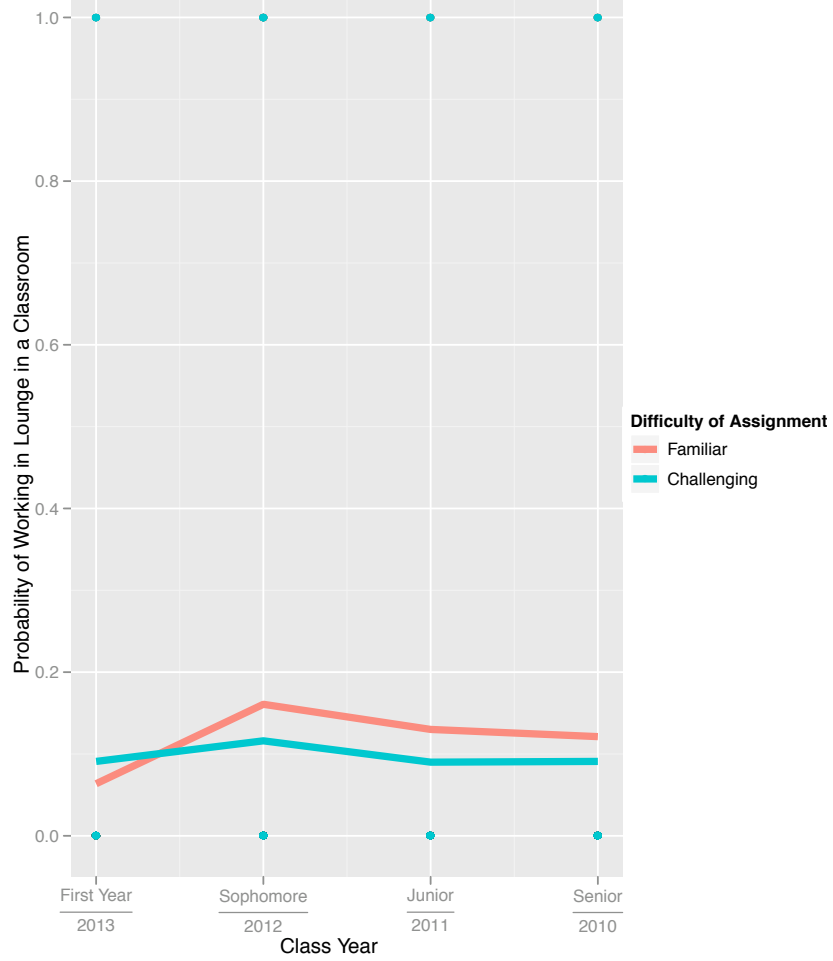
Facilities Used While Working on Assignments (Fall 2009)



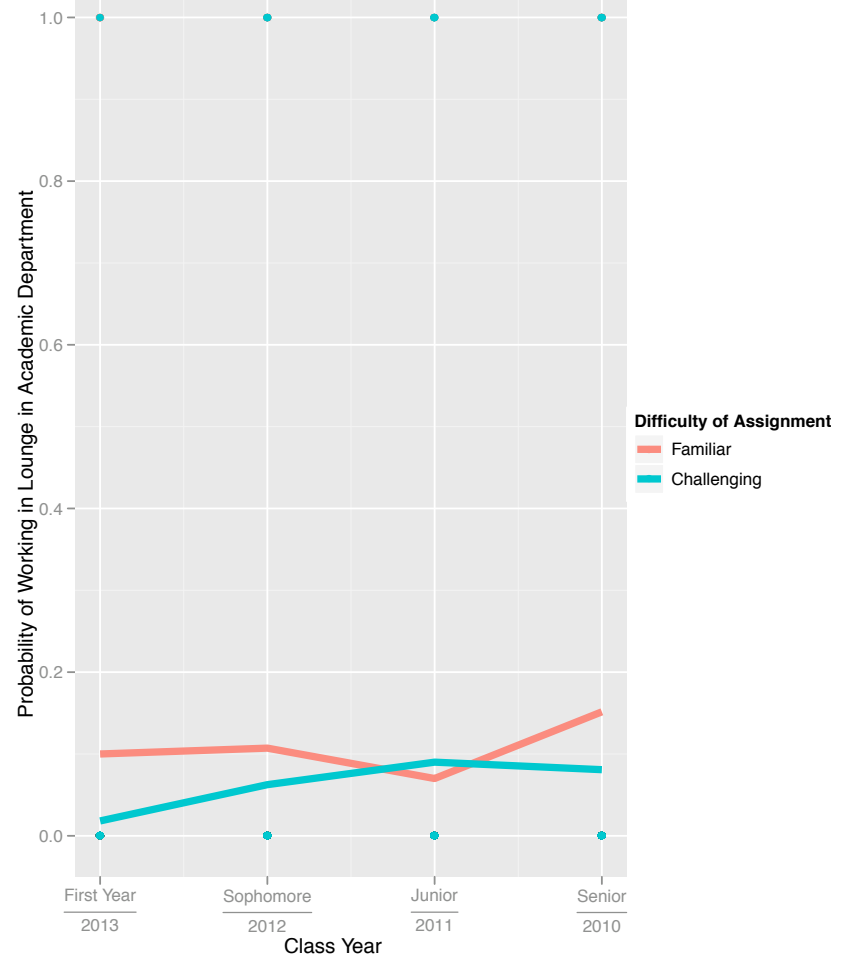
Facilities Used While Working on Assignments (Fall 2009)



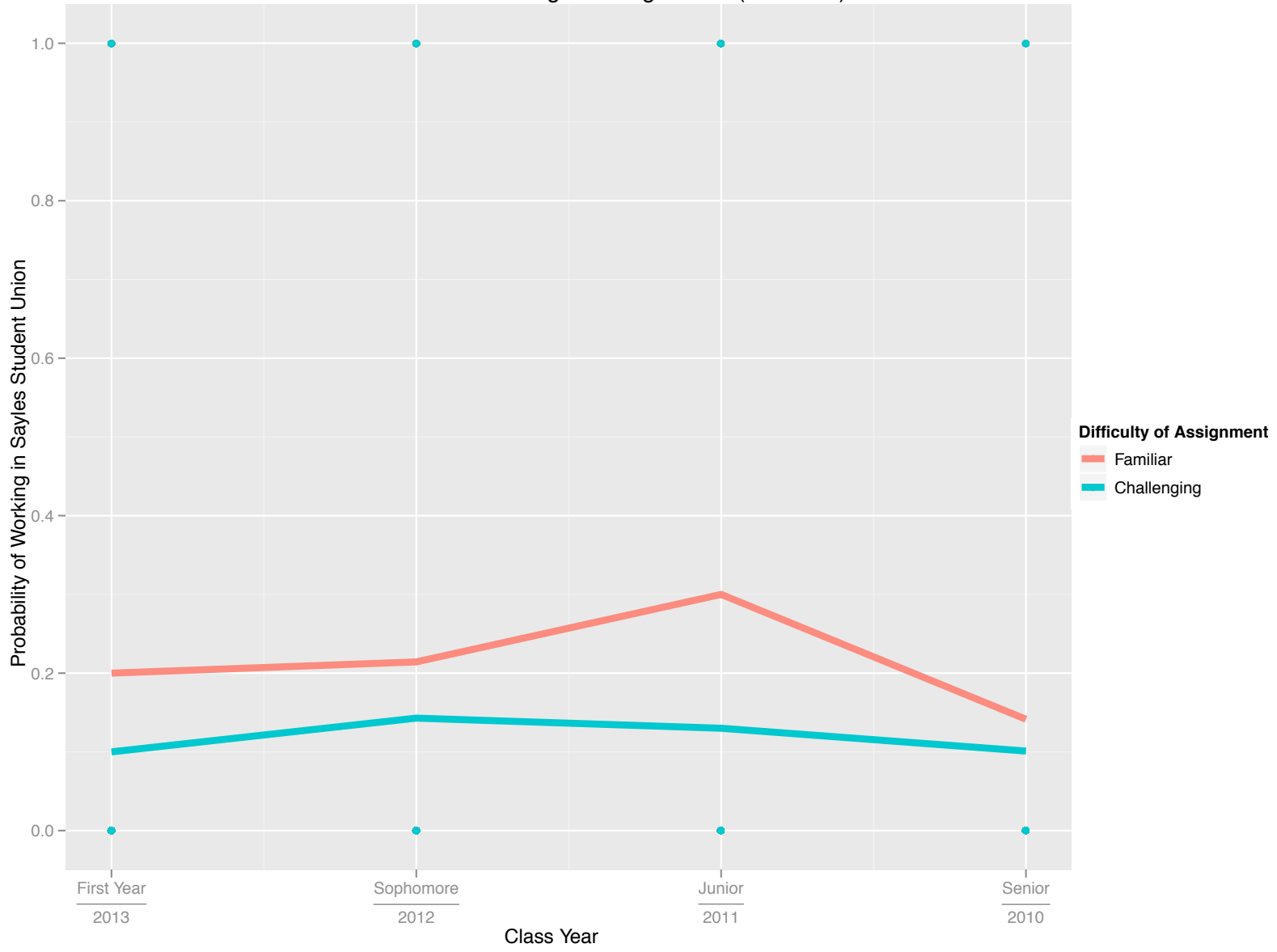
Facilities Used While Working on Assignments (Fall 2009)



Facilities Used While Working on Assignments (Fall 2009)



Facilities Used While Working on Assignments (Fall 2009)



Appendix I: Discussion Group Summaries

Summary Discussion with Chaplain, TRIO/SSS, Gender and Sexuality Center, Office of Intercultural and International Life

What are the curricular and research support issues that you observe with the students you work with?

Language Barriers – Particularly international students from national schools experience language difficulties. They test well in TOEFL but struggle in classes. This effects course and major choices as students avoid classes that include discussions and disciplines that require a lot of writing. International students are sharing these strategies with one another.

Student Don't Always Realize they Need Support – There is an assumption that other students aren't seeking assistance. The group noted that they perceived an improvement they associate with the Carls Ask Questions outreach. Generally speaking it is important to make sure that support is not mandatory.

Sample Writing Beyond Portfolios – Do students need to produce higher-level written materials such as literature reviews as part of Career Center interviews?

Little Room for Crises – Some students serve as source of stability or translators for their families. Carleton's calendar does not allow for taking a week off to deal with crises.

Student Leaders – Some student mentors are sophomores. It is important for them to learn about campus resources both for their mentees but also for their own purposes.

Climate Issues – Campus Climate Survey raised issues that students still identify with. This was discussed in terms of conservative religious and political views, sexuality, and race.

What is your response to the write-in comment to the Student Engagement with Curricular Support survey? Do students you work with feel uncomfortable at labs or academic support centers on campus?

This response is not uncommon but they shift. Our job is to help students feel comfortable on campus. For example a students may come to Scoville their first year but it is helpful knowing it is here for their remaining three years.

Students are so aware of the one part of their identify currently under stress. This becomes the lens through which they see the world.

Other Issues and Ideas

Rework introduction of OIIL, TRIO/SSS, GSC students to sources of support on campus. Introduce them to support locations on campus. Scavenger hunt in beginning of the year? In particular think about better ways of connecting students to Kathy Evertz and Gene Bauer.

It is important to carefully examine the intergroup dialog pilot and the Femme Sex courses. GSC fills a need not attended to by the Women's and Gender Studies program. Academic credit is the currency on campus. Students feel most comfortable engaging with ideas in the classroom. It can be difficult when identity development issues combine with the curriculum. Collaboration is near impossible. This interferes with coordinated support for students.

Summary from Discussion with Members of Academic Standing Committee

What are the patterns that you see in the ASC of things that prompt students to leave Carleton or struggle at Carleton?

Mental Illness – Wellness Center and class deans major sources of support

Addiction – Sometimes overlap between mental illness issues and substance abuse

Resource Disparities

1. Ensure fellowships are available to support off campus programs
2. Examine differences in renting and purchasing textbooks – study habits may differ if students don't highlight for greatest resale value
3. Delays in purchasing textbooks by as much as 2 weeks as a student waits for first paycheck. Why not advance funds particularly if they work on campus?
4. Examine family income levels and participation in fellowship programs. Are lost summer earnings (\$1,000) comparable to expected earnings (\$1,800)?
5. More effectively promote paid research opportunities and examine practice of having students volunteer for research positions.
6. Examine effects of delaying class registration for tuition payments

Under Preparedness

Learning Disabilities

1. Students coming from under-resourced backgrounds of one sort or another often don't come in knowing A) that they might have a learning disability and B) that it is okay to seek help. They haven't had years of working on compensatory strategies except insofar as they have been successful in their home environment.
2. Examine restoring funding for learning disability testing.
3. The process of securing a language exemption poses particular difficulty for students who do not come to Carleton with pre-matriculation credits.

Complications and Quantity Credits

1. Approximately 75% of Carleton students arrive with pre-matriculation credits.
2. What are the characteristics of students who do not come to Carleton with pre-matriculation credits?
3. Students who have pre-matriculation credits have buffers built up should they need to take additional reduced loads during their Carleton careers. This may be a factor in comps and earning distinction in comps.
4. In order to earn credits in the summer and accrue additional credits, students must apply ahead of time to the Academic Standing Committee. Without prior approval these credits do not count towards their degree.

Major Selection and Financial Pressures

1. Intense pressure to select majors based on potential future earning power. Pattern reportedly relates to 1st generation college student, immigrant, and international students. Examples given of computer science and pre-med program.
2. "I could really use a handbook of nonscience majors who went on to Med school." Associate dean has run into notions among students that they have to be Biology majors.
3. Interest in more events like "speed dating" with members of the parent's council. This is an opportunity to learn about career options.
4. Interest in closer connection between faculty and the Career Center: learn more about successful career paths in a given field of study.
5. Who has the conversation with students about identifying their passions and dreams? Begin conversation in New Student Week. Think of roles of advisors, Career Center, RAs and others.

Reluctance to Go to Support Centers Not Associated with Particular Class

1. Examples given were Writing Center and Math Skills Center for biology course.
2. Academic skills coaching

Concern with Institutional Capacity for Support

1. Ten hours per week of academic skills coaching
2. Class deans need additional administrative assistance
3. Class deans need to be in a position to be proactive

What is the role that students in leadership roles (IPL, SDA, and others) can appropriately play with other students who are struggling?

Referral and Boundaries - Ensure students in leadership roles have advisors to counsel them on appropriate referral and boundaries.

Improve Orientation - Office crawls may not be effective.

Other Topics

Support is for Everyone, Not Just Those Who Are Struggling

More Precise Referrals - to specific individuals

Help Students Become Better Communicators - 80% of conversations with students are about being better communicators: academic difficulties in communicating with professors, sexual misconduct, disciplinary issues relate to this.

Appendix J: Future Discussions

- 1) Explore adjustments in the College's business processes that currently appear to exacerbate issues relating to resource disparities as they relate to students gaining access to course materials or enrolling in courses.
- 2) Explore restoring funding necessary for testing Carleton students for learning disabilities.
- 3) Discuss the process and factors that go into students' decisions to select a major. Consider the roles that second language support/instruction and insights about career paths from the Career Center might be of help to faculty members as they advise students and departments as the fine-tune majors.
- 4) **Continue discussions about complementary roles that student workers, peer leaders, academic support professionals, and faculty play. Clarifying roles is important in order for us to continue to improve expert referrals on campus but also to help individuals in these roles clearly understand their boundaries.**
- 5) Redesign the way that students participating in OIIL, TRIO/SSS, and the GSC learn about sources of support on campus.
- 6) Recent projects such as the Inter-Group Dialog (IGD) and Fem Sex course are examples of projects in which identity development issues have come in contact with the curriculum. There is a perception that 1) students are most comfortable dealing with these ideas in the classroom and 2) that academic credit is the currency on campus as student think about allocating their time. Friction exists between members of the community accountable for delivering and designing the college's curriculum and others focused on student development. Members of the Carleton community should discuss merits and processes should such courses be adopted or continued. This may be an area in which the Dean of the College and Dean of Students can help lead discussions.

Appendix K: Planning Documents, Literature, Resources, and Best Practices

The following are responses to a survey of Dean of Students Division, departmental assistants, and academic support professionals.

Are there any reports or studies that you or your department/program/office have produced that relate to curricular or research needs on campus? This could be information in a departmental review, requests for funding, grant proposals, facilities renovations or funding from the Dean of the College office. If so, please provide links, attach documents to your response, or let us know where we might locate relevant documents.

Geology

- Three NSF proposals for funding, copies reside with Corporate and Foundation Relations

Chemistry

- Departmental review report available next year
- Internal proposals for research and support: the DOC and HHMI/CISMI
- Facility renovations for laboratory space for student-faculty research by incoming faculty member
- Science/Math Steering Committee making assessments of work spaces for better utilization by students

Educational Studies

- Student Teaching Handbook, Teacher Licensure Handbook, other relevant documents: <http://apps.carleton.edu/curricular/educ/>

Art and Art History

- Facility renovations for photography lab
- Arts Union planning documents
- Request for faculty studio space
Viz grants

P.E.A.R

- Monthly and annual facility use reports
- Annual general report sent to Division and department heads

Academic Technologists

- Academic technologists have been tracking the ways the spend time although categories differ across the group but the data might be useful in identifying trends on campus.
- Currently working to identify data-support needs on campus and current paradigms for data management.

- IASSIST and CODATA are professional organizations focused on the support of data uses in research.
- ICPSR is an organization that among other things focuses on the promotion of appropriate use and reuse of social science data.
- Some of ITS project wiki entries detail some of the collaborations which have taken place to make certain projects happen. Also there are WordPress and Moodle sites where technologies are assessed relative to the potential benefits.

Library

- **(Information Literacy) Gould Reference and Instruction Librarians, [6 Big \(and 38 Little\) Information Literacy Questions: Getting Students Beyond Google and JSTOR](#)**
In helping students develop their information literacy beyond a set of skills for using the library, we encourage students to ask the following questions of themselves during the research process. The following list provides a sketch of what we mean when we say that information literacy, like other critical literacies, is a habit of mind.
- **(Information Literacy) Gould Reference and Instruction Librarians, [Information Literacy Rubric](#)**
We developed this rubric over the last two year to help us understand more about how students' ability to use and communicate evidence is reflected in their sophomore writing portfolio. We feel our analysis gives us one picture of our students' framework for making decisions about information, understanding attribution and citation, and more integrating information in support of written arguments.
- [6 Big \(and 38 Little\) Information Literacy Questions: Getting Students Beyond Google and JSTOR](#)
- [Information Literacy Rubric](#)
- [Start Seeing Numbers](#), Faculty Workshop, Kristin Partlo, Ann Zawistoski, Doug Foxgrover, Paula Lackie, ACRL 2007 and 12/05 Faculty Workshop
- [Introducing Meebo Rooms](#), Iris Jastram, 2007 ALA
- [Supporting Undergrads with Data](#), Paula Lackie & Kristin Partlo, IASSIST 2008
- LTC Library Confidential: View from the Other Side of the Desk, 2/10
- Presentation available on request, data on student reference consultations
- [Bus Boycotts, Government Printing, and Mars: Using Collaborative Exhibits to Connect Collections and Curriculum](#), Heather Tompkins & Margaret Pezalla, Minnesota Library Association ARLD Day 4/10
- [Data Discovery and Access](#), Danya Leebaw & Kristin Partlo, NITLE 11/09
- More reports available here:
- https://apps.carleton.edu/campus/library/about/presentations_and_publications/

What research and literature exists in your profession that can help us identify "best practices" in providing curricular and/or research support? Is there research or literature that you would suggest to review that would help us identify "best practices" in providing curricular and/or research support as they relate to your department/program/office?

Geology

- NSSE project, University of California Berkeley (in folder, "BPGeology SERU_EngagedLearningREPORT_2010")
- Undergraduate Research in the Sciences: Engaging Students in Real Science (Paperback) Sandra Laursen (Author), Anne-Barrie Hunter (Author), Elaine Seymour (Author), Heather Thiry (Author), Ginger Melton (Author)
- Boyer report "Reinventing Undergraduate Education"
- Journal of College Teaching, January 10, 2010 issue
- Research and Teaching: Offering More than "Here is the Textbook"—Teaching Assistants' Perspectives on Introductory Science Courses, by Sharon Dotger
- Journal of Geoscience Education: <http://nagt.org/nagt/jge/abstracts/jan10.html> (the NAGT is the SERC office)
- Council on Undergraduate Research <http://www.cur.org/>
- Developing and Sustaining a Research-Supportive Curriculum: A Compendium of Successful Practices, Edited by Kerry K. Karukstis, Professor of Chemistry, Harvey Mudd College and Timothy E. Elgren, Professor of Chemistry, Hamilton College (2007)
- SERC website: serc.carleton.edu, see portals "Teach the Earth" and "Pedagogy in Action"

Chemistry

- J. Chem Educ. journal for teaching resources

CAMS

- Cinema Journal

Educational Studies

- Library dedicated to best practices in education

Computer Science

- Association for Computing Machinery Special Interest Group in Computer Science Education
- ACM Transactions in Computer Science Education

Art and Art History

- Each concentration (woodworking, sculpture, printmaking, painting, drawing, photography, papermaking) have related texts and manuals that apply
- Visual Resources Association Bulletin and other publications available at <http://www.vraweb.org/>

P.E.A.R

- Athletic Management Magazine
- Athletic Business Magazine – athleticbusiness@athleticbusiness.com
- Recreation Management Magazine
- Tools of The Trade – on-line weekly news digest lists@momentummedia.com
- McGregor & Associates – on-line Risk Management Newsletter, Mcgregor@sportrisk.com
- NIRSA (National Intramural Recreation Sports Association) membership <http://www.nirsa.org//AM/Template.cfm?Section=Welcome&WebsiteKey=fb82a76e-4046-400b-8209-2e6bc6c797aa>

Student Life/Student Development

- CAS Standards (Council for the Advancement of Standards in Higher Education): <http://www.cas.edu/index.html>
- "Learning Reconsidered: A Campus-wide Focus on the Student Experience" (The National Association of Student Personnel Administrators, The National College Personnel Association): www.myacpa.org/pub/documents/LearningReconsidered.pdf
- "Learning Reconsidered 2: A Practical Guide to Implementing a Campus-Wide Focus on the Student Experience" (see above): <http://bookstore.naspa.org/learningreconsidered2.aspx>
- The Student Learning Imperative: Implications for Student Affairs (American College Personnel Association): <http://www.acpa.nche.edu/sli/sli.htm>

Learning Centers

- College Reading & Learning Association: <http://www.crla.net/about.crla2.htm>
- Tutor Training Certification through International Tutor Program Certification: <http://www.crla.net/itpc/index.htm>
- National College Learning Center Association: <http://www.nclca.org/certification.htm>
- Association for the Tutoring Profession: <http://www.myatp.org/cert.htm>

Writing Centers

- SLATE (Support for the Learning and Teaching of English) Statement: The Concept of a Writing Center (Muriel Harris, National Council of Teachers of English): <http://writingcenters.org/resources/writing-center-concept/>
- Major publications in running and theorizing writing centers are listed on the International Writing Centers Association website: <http://writingcenters.org/resources/starting-a-writing-cente/#Publications>

English Language Learners/English as a Second Language/Second Language Writers

- Teachers of English to Speakers of Other Languages (TESOL): http://www.tesol.org/s_tesol/seccss.asp?CID=86&DID=1556

Supplemental Instruction (on which the Prefect Program is based)

- The International Center for Supplemental Instructions (University of Missouri-Kansas City): <http://www.umkc.edu/cad/si/publications.shtml>

Academic Technologies

- The Horizon Report released by the New Media Consortium is a really good keystone information source.
- Within the artistic realm the ARS Electronica Futurelab resources and archive to be incredibly helpful for gauging contemporary development in the digital arts and informational design.

Library

- **(Information Literacy) Simmons, Michelle Holschuh. 2005. [Librarians as disciplinary discourse mediators: Using genre theory to move toward critical information literacy. portal: Libraries and the Academy 5 \(3\): 297-311](#)**
"This article proposes that we extend our information literacy instruction programs to include tenets of genre theory as a way to move toward a more critical stance in our pedagogy. By developing an anthropologist's sensitivity to culture, academic librarians can learn the characteristics of the academic disciplines and then help students learn these characteristics as a way for them to understand the rhetorical practices in these fields. In making tacit practices visible, librarians can facilitate students' transitions into the cultures of their chosen disciplines. In this way, we can help students see that information is constructed and contested not monolithic and apolitical."
- **(Library as Place) CLIR Reports, [Library as Place: Rethinking Roles, Rethinking Space, February 2005](#)**
"We are still far from the day when students, researchers, and teachers can access entire research collections from their desktops. Nonetheless, a wealth of high-quality material is now accessible electronically. What does this revolutionary change mean for the creation and design of library space? What is the role of a library when it no longer needs to be a warehouse of books and when users can obtain information without setting foot in its doors? ... The publication is intended to stimulate thinking about the role of the library in the digital age, about the potential—and the imperative—for libraries to meet new needs, and about how these needs will influence the design of physical space."
- **(Reference) Bopp, Richard E. and Smith, Linda C. "The Reference Interview." Chap. 3 in *Reference and Information Services: An Introduction, Third Edition*. Englewood, CO: Libraries Unlimited, 2001**
"The reference interview is essentially a conversation between a reference staff member and a user, the goal of which is to ascertain the user's information need and take appropriate action to satisfy that need through skillful use of available information resources. Although a conversation, it is not casual. It requires from the librarian a great deal of discipline....Care is required to avoid misunderstanding the user's need or prematurely assuming one has fully understood it. Similar care must be taken in developing the correct strategy for a successful search of the

available information sources to meet that need....Naturally, there are some questions that can be answered without negotiation. Many experienced librarians have found, however, that users who come to the reference desk with a seemingly simple question often have more complex information needs that they have not yet acknowledged or realized." (p.47)

- When we teach and consult with students, we focus on a few carefully chosen learning goals
- The reference interview is a professional practice we all follow (see Bopp and Smith in our "best practices" document)
- Ways that information literacy sit on top of other literacies (HT - what does this mean?)
- Joan Lippincott: [students as content creators](#)
- Most disciplines have a teaching journal, supporting learning goals
- Discussions those disciplines are going through about prioritizing undergraduate education
- Participating in faculty workshops as a best practice

What facilities, resources, and sources of expertise currently exist in your particular department/program/office that contribute to curricular and/or research support? For example, in your department do you provide special study spaces available during evening hours, are there TA sessions or study groups hosted by your department, is there particular equipment local to your department that aids in the curriculum of your department or in faculty research?

Geology

- Tim Vick contributes to support of student research (in classes and separately) by helping students order equipment, locate equipment, use equipment, think about projects
- Records of lab use by students compiled by Tim Vick (in folder, "BPGeology Copy of Lab_Usage_W2010.xls)

Chemistry

- Drop-in tutoring (Su - Th evenings) for 1XX and 2XX classes
- Laboratory assistants (TAs), graders for homework and labs, and we use Prefects.
- Brian Mars, the stockroom manager, instrumentation support specialist, and safety officer (for the whole campus)
- Laboratory equipment of many kinds is used throughout the curriculum, with extensive computing support to drive instruments and to analyze data (including in department spaces and in the Mudd 169 public computing lab)
- Limited study spaces are available to students, including the Mudd 171 conference room (shared by Chem and Geo departments), which is available to students when it isn't in use for a meeting, and the Mudd-Olin link. Note that this provides no more than 20 seats for students to be working in, in a department with many many students (especially in the lower-division courses)

Music

- The Music Resource Center (MRC) is a library and computer lab: seven Mac computers with the only copies of Sibelius, Logic, etc. software for completing Music department and CAMS courses assignments
- MRC collection of books, scores, CDs and DVDs on reserve
- Exclusive copies of composing software on Macs for music majors

CAMS

- CAMS Media Lab in Scoville open evenings supported by Paul Hager and a fifth year educational associate
- Film screenings in Scoville 102 and 106 managed by fifth year educational associate
- Senior comps students study group use classrooms in Scoville
- Department Assistant Marla Erickson
- Technology purchases for film and photography projects
- Microfilm collections containing primary documents from studio-era Hollywood: Film Daily, Cinema Pressbooks, and Production Code Files

Asian Languages

- (Native speaker) Language Associates hold weekly office hours. Language Associates also have weekly teas, movies and radio shows.
- All CHIN and JAPN students are offered/assigned student tutors for weekly tutoring sessions
- Department lounge has satellite TV viewing.
- Dept lounge has reference books: texts, dictionaries
- Both CHIN and JAPN hold weekly language table for students w/language associates and faculty.

Classics

- Classics lounge is open 24/7 for students to use (and they do: individually and in groups.)
- Department has its own library of donated books available for use on site or can be checked-out. Catalog of books is available at LibraryThing.com--Carleton Classics, password: Apollonius
- Greek and Latin tutors hold weekly office hours, or schedule individual appointments with students as needed.
- There is a weekly language table for students with faculty.

Educational Studies

- Curricular library required for licensure by the Minnesota Board of Teaching that has M-F 8-5 hours with tables and chairs for students
- Education news feed for students and alumni

Computer Science

- Mike Tie, technical director of Mathematics and Computer Science
- student prefects, student system administrators, lab assistants

Art and Art History

- Studio facilities with related equipment and supplies are available to majors and students enrolled in courses and are open daytime and evening hours, staffed by student monitors
- Gerry Krause, studio technician, supports these facilities, services equipment and maintains supplies
- Smart classrooms with digital projectors and laptop will be available to students with keys starting Fall 2010
- Visual Resources analog slide collection, digital image collection of 50,000+ digital images made available to campus in Carleton Digital Collections and ARTstor
- Slide library computer lab with Mac with Final Cut Pro and Adobe suite and PC with Adobe suite and Rhino 3D, two large format flatbed scanners, digital copy photography stand with SLR camera, slide scanner
- Heidi Eyestone, Visual Resources Curator, supporting the slide collection, digital image collection, scanning and computer lab

P.E.A.R.

- Smart technology classrooms
- Equipment for all physical education classes, recreation programs, club sports, intramural sports and varsity programs that meet safety and liability standards and codes

Division of Student Life

- GSA: co-sponsors speakers with academic departments
- Sayles-Hill: essentially a mixture of a “student union” and academic classrooms
- Student Activities does programming w/Theater and Dance
- Arts Union: has the potential to house student projects developed as part of Student Life offices, not just classes
- Student Activities: provides keys and 24-hour access to conference room (study space)
- Residential Life: numerous group study spaces in residence halls, e.g., Cassat, as well as floor study lounges
- OIIL: peer leaders/mentors—do informal tutoring and advising
- Peer leader training across offices/departments: includes information so leaders can refer students to other offices/departments
- GSA: provides content-specific help on papers (e.g., for WGST) through lending library
- ACT Center: student leaders tend to develop comps projects relating to their work with community partners
- Most Student Life offices have lounge spaces that serve as informal study areas for individuals and groups
- Dean of Students Office: the division works to create “safe leisure,” so students have fun but are ready for class
- Residential Life: staff enforce community standards, 24-hour quiet study policies enforced around Reading Days and finals

- Disabilities/Academic Accommodations: obvious connection (provides access to students)
- Model UN is a campus organization not connected directly to a class or department, but which is engaged in academic activities
- Mel Stauffer provides time-management advice to students involved in clubs and organizations
- Wellness Center: present information to classes on health-related topics; provide research information for students working on health-related papers
- Wellness Center: provides prescriptions for medications so students are well enough to go to class
- TRIO: its entire focus is to give its constituents access and support so they succeed at Carleton (lending library has been extended to some students outside of TRIO)
- Student Activities: collaborates with Library in designing study breaks
- Student Life in general: students' cognitive development is directly linked to their emotional and social development
- Student Life departments work with IRA (Jim, Cherry) to understand integration of curricular and co-curricular
- Academic Support Center: its entire focus is to give its constituents access and support so they succeed at Carleton
- Many Student Life offices (e.g., TRIO, OIIL, GSA, ESL services) deal with "campus climate" issues that impact students' performance
- All Student Life offices support students in developing critical-thinking, problem-solving, and communication skills
- Metro Arts Access Fund brings together English and Campus Activities through tickets and transportation to cultural & arts events in the Twin Cities
- Career Center: internships provide a link between academic work and "real world" learning
- Career Center: Scholars Program – practical applications of curriculum; brings students out of the bubble of academia
- GSA: comps integrated into the co-curricular (e.g., Vagina Monologues)
- Residential Life: Hall Directors coach/support seniors working on comps (provide personal support and encouragement)
- ACT funds academic civic engagement
- Student Life Office: class deans support students on projects, comps, etc.—work with students on review, etc.

Academic Technologies

- Pilot project to test the viability of virtual unix systems in the support of processor-intensive research. This is a combined effort from Rich Graves, Randy Hoffner, Paula Lackie, and Sean Azelton.
- I provide support and advise in: research design, technical & software advise, data acquisition, data and data life cycle management, data analysis, data and idea visualization, and overall presentation design.
- Support for students needing support with their individual or group data projects. Additionally, students using some data in their comps projects also come, often in pairs or in trios, for shared support.

- The ATs as a group are a good source of expertise. There are also a number of resources which, we have constructed (web pages etc.) we also plan to add to this through the use of the new confluence wiki being set up in ITS.
- Matt Bockol is another person who has a very high level of expertise which can be applied to pedagogical processes.
- PEPS is also an invaluable resource in ITS with a wide-ranging scope of expertise.
- Within ITS; Karl Madsen designs databases and has demonstrated ability and attentiveness when working to design and manage faculty data research.
- Others in the departments: Heidi Eyestone in the Slide Lib, Susan Beeby in Music, Paul Hager in CAMS, Allison Koster in THDN (all have singular expertise which can be applied in a number of different disciplines).

Library

- When we teach and consult with students, we focus on a few carefully chosen learning goals
- The reference interview is a professional practice we all follow (see Bopp and Smith in our “best practices” document)
- Ways that information literacy sits on top of other literacies
- Joan Lippincott: [students as content creators](#)
- Most disciplines have a teaching journal, supporting learning goals
- Discussions those disciplines are going through about prioritizing undergraduate education
- Participating in faculty workshops as a best practice
- Involved with and foster communities outside of Carleton that we rely on (i.e. getting help from IASSIST or MN Documents Group)
- Build networks to draw on resources and expertise outside of Carleton
- Our web pages are teaching materials
- Research/IT
- Offices
- Classrooms: giving presentations, open labs, office hours in the library
- Workshops
- Stacks
- Special collections
- Faculty offices
- Drawing board and group appointments
- Tutoring that happens in our building
- Virtual: Chat via course guides or other, we also do a lot via email

Please identify key questions that should drive our institutional planning process with respect to curricular and/or research support at Carleton.

Chemistry

- How best to support group work, socially, pedagogically, and in terms of work space both inside and outside the classroom.

- How best to support students from diverse educational, ethnic/racial, gender, socioeconomic backgrounds in their pursuit of the discipline
- How best to provide modern, relevant, and safe laboratory instruction and research opportunities
- How to support/encourage detailed quantitative work in the discipline (well beyond the level of "QREs")
- See #2 -- How best to emphasize the notion that our scholarship is our students research as well, and to support the extensive time commitment that this entails (i.e. we might accomplish our research goals more quickly if we didn't include students, but we almost always do include students, making it somewhat inappropriate to separate the teaching and research endeavors in chemistry)

CAMS

- Can we create more small-group study and screening spaces for students (sort of a "public living-room" model).
- Should the college or departments establish a grant fund for supporting student comps projects (media-making can be expensive).
- The Arts Union is going to offer more studio and project spaces for students that we don't currently have.

P.E.A.R.

- Align mission of the department with the mission of the college in the institutional planning process and be included with the planning process especially on big decisions like changing the four credit PE requirement
- Understand the role history and tradition play but adjust and rethink how things are done to achieve the best results
- Should the college decide to increase the student enrollment, P.E.A.R. would need to address issues as we are currently at or near our maximum for course offerings and spaces and equipment to efficiently operate.

Art and Art History

- Accomodate more visiting artists
- Address space issues for taking 100 level courses
- Address safety and preservation issues

Student Life Division

- OIIL (specifically, International Student Services: international students are shut out of summer experiences because of government funding and regulations
- Little funding seems to be available for students to present at conferences
- Carleton calendar: it's a problem for students who want to participate in internships, because the "rest of the world starts on June 1"

Academic Technologies

- What are the limiting factors for faculty to succeed in teaching through their research?

- How are we going to prioritize materials and services needed for supporting diverse research needs? Where is the line?
- Who is responsible for securing the information assets of the individual faculty projects?
- What forms of support are lacking?
- Which forms of support are working?
- In what ways have we prepared for supporting the new curricular design areas? (especially quirk-related support)
- Is Carleton prepared to support the new NSF mandate that every applicant supply a data-management plan with their application?
<http://news.sciencemag.org/scienceinsider/2010/05/nsf-to-ask-every-grant-applicant.html>
- How can we maximize the productivity of our current support structures and build relationships between support professionals with similar purviews who may not be aware of others (e.g. a visual media group could be a product of the Viz grant, as there is a huge number of professionals and faculty across campus who are doing fantastic work and research in this area, how can we capitalize on that and maximize shared resources and expertise? Perhaps a symposium to get the ball rolling, I would like to see everything from archaeology, geology, topology, theatre design; all these fascinating ways of using imagery and design to understand our world).
- Capacity: how can we address this issue? As interest and need for technical resources and expertise increases, how can we maintain an appropriate balance?
- Are there more physical ways, beyond the study itself, that we can bring awareness of support resources to the larger college population? How can we engage the campus in not only the assessment of what exists, the re-discovery of what exists, but also the exploration of what could exist. I suppose that this points to wider institutional foresight.

Library

- Balancing the tension of time spent being available to students, time spent planning proactively, planning services.
- One of our values is to meet long-term needs but also to help when the short-term needs arises; to be available and approachable, plus to be a part of these outside communities of practice
- Our work isn't necessarily a predictable workflow
- Support is interpersonal interaction and emotional, demanding work. Issues get more complex around this.
- Part of this is that we work nights and weekends. Part of our time is direct support of students.
- Ideal coordinated support model: flexible and quick, provide a range of support, formal and informal (like adlib theater, still on the stage but no script), organic and responsive to needs versus formal
- Coordinated support model: room for range of experiences we want to encourage
- Ongoing tension supporting faculty planning needs versus supporting students

- Class is the one shot for us, so preparation and encounter with students is of different nature
- Highly customized instruction sessions based on assignments and students
- All of this is to support “student learning” → if goal is to have support very structured, that may be a different goal than student learning.
- As support is coordinated, review student learning goals; value in having experienced faculty member as adviser to coordinated support group.
- Faculty/students are starting with different assumptions. Addressing those assumptions is fruitful.