To the University Community:

Founded in 1965, in a time when undergraduate students had little say in their educations, the Student Committee on Undergraduate Education sought to radically alter the academic foundations of this university. To this end, White Papers on Undergraduate Education were published every five years, espousing the most adventurous ideas to come out of the body in each cycle. Co-education, pass/fail grading, fall break and NSO all appeared in previous White Papers, championed by students who saw areas for improvement on this campus and spoke up.

It is with this illustrious history behind us that the current SCUE body presents its 2010 White Paper on Undergraduate Education. In this, the 10th edition in 45 years, we have attempted to address a wide range of undergraduate educational issues. In the following pages you will find our answers to issues as broad as advising and as narrow as syllabi online, as complex as OpenCourseWare and as simple as research accessibility analysis. You will read of our efforts past and present, but most of all of our visions for a future measured in months, years, or even decades.

Uniting all these visions is an anthology of SCUE beliefs, an enumeration of those tenets most essential to our recommendations. You will find “SCUE believes...” statements in each section that follows, signaling our most important thoughts on each issue.

Before we get to the main event, I would like to acknowledge those individuals about whom this paper would not have been possible. First, the SCUE General Body and Steering Committee whose visions and dreams appear in this paper and who dedicated countless hours to thinking and writing – this paper is by and for you. Secondly, to Rob Nelson in the Provost’s Office whose guidance and mentorship have inspired us all. Thirdly, to Administrators throughout the University who have listened to our ideas, however impractical and absurd with great patience. Fourthly, to those professors who prioritize undergraduate education above all else. Fifthly (a most important number when it comes to the White Paper), to those SCUE alumni who inspired much of the content herein.

And finally, to all of you, the readers, for delving into this daunting document and giving the enclosed ideas the consideration they deserve. Without you, this White Paper is no more than a relic of the thoughts of sixty or so undergraduates collected over five years. It will take the entire Penn community to put these ideas into action, to push for those changes that will propel the University forward into the next decade and beyond. I believe in the ability of a few pages to inspire concrete change and I hope that this White Paper does just that. This is a call to action; it’s up to you to answer it.

Alexandra Berger, 2009 SCUE Chair

2010 SCUE White Paper

On Undergraduate Education
2009-2010

In The Classroom
Curriculum

General Education Requirements

Problem: In practice, curriculum falls short of its potential for encouraging exploration and balancing breadth with depth.

Solution: Promote course and grading formats that address shortcomings while improving requirement review process.

Status Quo

Among Penn’s decentralized, school-dependent curriculums, the College is most complexly organized. Because of the College’s size and centrality in undergraduate education, SCUE believes it is crucial to address its weaknesses. The topic of curriculum can be approached from two angles: First, on a larger and more theoretical level, what are the goals of the curriculum? Secondly, does the curriculum fulfill these stated goals?

In its aim of providing a well-rounded liberal arts education, the College curriculum must balance breadth with depth as it encourages exploration and commonality of experience. Through this lens, SCUE agrees with the motivations and purposes of the College curriculum. However, we believe there are disconnects between what the curriculum is designed to achieve in theory and what achieves in practice.

While majors allow students to explore a subject in depth, General Education Requirements (GERs) intend to provide students with a wide base of knowledge outside their specific academic focus. Yet the seven sector requirements in particular often burden rather than guide educational growth. Fulfilling GERs should emerge naturally from and serve as complements to a student’s course of study. Instead, they make the curriculum too narrow and restrictive, limiting intellectual pursuits and ability to explore. Moreover, discrepancies in how GERs are administered mean the curriculum functions differently for different students.

From a pedagogical perspective, the opportunity to engage in different types of learning models and topics is crucial. Practically, however, limited course options constrict the ways students can design their schedule and, by extension, the extent of unique pedagogical models they can access at Penn. To achieve their curricular ends in a productive way, GERs must be administered in a more purposeful, flexible manner. This involves addressing both the availability of courses that fulfill sector aims and the process by which courses come to count for requirements.

SCUE acknowledges a range of challenging questions in considering solutions. How do we encourage professors and departments to create and champion innovative courses that meet requirement missions? How do we motivate students to take courses outside their comfort zones without overloading them with requirements? How do we encourage exploration without compromising academic rigor?

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ical school professors. Among those offered in the past are “Killer Viruses,” “Lateralization of Sensation and Emotion: Do we really have two brains?” and “Sleep: What is it, why do we need it, and how can we get more?”. Covering focused topics in the life sciences, these courses allow enrolled students to experience a small, scientific learning environment. They provide a unique alternative to the large introductory lecture course. According to Dr. Glenn Gaulton, Penn Medical School’s Executive Vice Dean and Chief Scientific Officer, medical school professors are often eager to teach undergraduates in small seminar settings. These professors can provide diverse perspectives in the biomedical field, perspectives to which undergraduates are not currently exposed. Expanding these seminar offerings, especially to include non-freshmen, will thus not only provide diverse learning environments but will also allow interested students to explore the medical field.

Another way to promote science seminar creation is to increase collaboration with the many interdisciplinary centers on campus. These centers provide the opportunity to create focused courses on specific topics. They would not only allow students to explore the sciences in an in-depth way, but they would expose these students to a wide range of interdisciplinary learning topics that span interrelated fields of study. Professors associated with specific learning hubs could teach on their particular area of focus, an option that may be more attractive than teaching a generalized introductory course. [See Page IX for a discussion of incorporating undergraduates into interdisciplinary centers.]

Vision: Drive Exploration in Non-Traditional Courses

In pressing for innovative curricular opportunities, SCUE acknowledges that many such opportunities already exist but aren’t being taken advantage of by students. Highlights include Academically Based Community Service (ABCS) and Communication Within the Curriculum (CwiC) courses, which expose students to innovative topics through unique learning methods. Although administrators say they are willing to invest more resources in non-traditional learning, increased expenditure is not justified without sufficient demand. SCUE therefore seeks to understand why students are not enrolling in these classes and to present strategies for increasing interest.

Given that ABCS and CWiC are already promoted on campus, it is clear that lack of publicity is not the entire reason behind underwhelming student participation. SCUE observes lack of curricular relevance as a major barrier to student enrollment. Because these options often do not count toward sectors, students facing a daunting list of requirements to fill lack incentives to fit these types of classes into their busy schedules. This reflects the challenge of encouraging exploration without adding additional curricular requirements, particularly when the aim is ideal but not necessarily crucial to overall curricular aims.

ABCS courses represent the type of exploration an effective liberal arts education should encourage. SCUE advocates more students taking advantage of these experiences, but agrees with administrators that they should not be explicitly mandated through a community service requirement. This raises concerns of disgruntled and unmotivated participation, which would undermine the benefits of civic engagement and risk rupturing Penn’s strong relationships with the community. Moreover, SCUE is reluctant to tack on additional requirements given students’ already heavy loads. Thus, a strategic way to incentivize students to take ABCS courses is to count them toward relevant sector requirements. [See page XII for how to weave ABCS courses into the existing curriculum.]

Vision: Lower Barriers to Exploration by Reducing Grade Pressures

The perception of GERs as burdensome creates a culture of students taking easy courses, rather than exploring topics they find interesting, challenging and fulfilling. Students are not truly encouraged to step outside their comfort zones, viewing College requirements as something to get through rather than as an opportunity to expand their horizons.

Minimizing competitive pressure and focus on grades, especially in Penn’s competitive environment, would motivate students to seek out intellectual challenges. A logical mechanism for doing this is to allow students to take a limited number of requirement courses with pass-fail grading. Given that the stated purpose of sector requirements is to expose students to broad knowledge and ways of thinking, this is not at odds with the simultaneous expropriation of economic interest.

SCUE recognizes that reduced grade pressure may compel students to commit less effort to course participation and mastery of material. However, we believe this possibility must be viewed within the context of the current system. Many students already treat courses they take to fulfill sectors as pass-fail, deliberately choosing courses considered easy by Penn Course Review rankings or peer opinions. Moreover, mechanisms for accountability and frequent evaluation of pass-fail trends will ensure the system is not producing unintended negative consequences.

Vision: Improve Sector Approval and Review Process

SCUE believes that the College must increase the dynamism of its GER curriculum, ensuring that students who take classes that align with sector missions are in fact earning credit for them. The application and approval process for sector application undermines the utility of the curriculum to function effectively.

As part of a mandated review process, College administrators evaluate two of the first four sectors and two of the last three sectors yearly to determine the status of courses that count toward each requirement. Professors can also apply to have their courses fulfill sectors. However, biennial reviews are not in line with the dynamic nature of course creation and evolution. The process doesn’t occur frequently enough to ensure that requirements lists accurately reflect course offerings.

In addition, many professors are unaware that existing courses must be approved or do not recognize the benefit of having their courses fulfill requirements, and thus never go through this process. As a result, courses that clearly align with sector missions do not count toward requirements merely because they have never been brought for approval. In addition, classes listed in registration materials as fulfilling certain sectors are sometimes retroactively denied their designation.

The appeal process for having a course fulfill a sector is also unfair and unpredictable. A minority of students are able to get non-approved courses to count for requirements a posteriori by lenient advisors, giving them disproportionately more flexibility. The system, however, needs to proactively work well for all students, rather than a handful squeezing through while the majority fall through its cracks. SCUE would like to see more frequent reviews of each sector to ensure changes in course content and faculty do not change their adherence to requirement missions and that all potentially eligible courses are being considered for sectors.

Recognizing the financial and time constraints of more frequent reviews, SCUE also in the short term advocates making the course-approval and credit-approval processes more transparent, standardized, and understood. Until more fundamental changes to the curriculum are achieved, improving the approval process is crucial to ensuring a fair, less burdensome system. It should be easier for students to appeal to have courses count for requirements, and successful appeals should be made universal precedent. This effort should be coupled by better publicizing of the approval process to faculty. Together, these solutions will ensure existing courses that meet sector goals are translated into student ability to efficiently fulfill their requirements.

The student voice is often missing from curriculum discussions, reflecting broader lack of transparency about how classes come to count for sectors and how the approval process works. Though it is perhaps understandable that the relatively brief undergraduate life cycle is not a priority for administrators when they are evaluating curriculum issues, the centrality of course requirements to shaping the undergraduate experience signal a crucial role for increased involvement.

Conclusion

Though SCUE agrees with the purposes behind the College’s general education requirements, in practice they fail to meet their stated missions. Through creating diverse seminars, encouraging non-traditional learning methods, promoting exploration through pass-fail grading and improving the sector review and appeal processes, Penn can better ensure that students have wide breadth of experience.

Innovative Approaches

Problem: Standardized curriculum constrains individualized and non-traditional learning experiences.

Solution: Advance opportunities and support for alternative tracks and credit models.

Status Quo:

Although Penn often supports students’ individual academic goals, the most motivated students may be more constrained by the curriculum structure than helped by it. The standard curriculum presents formidable challenges for students seeking to shape their own curricula in a considerate opposition. The University has installed a number of checks and balances—such as coursework and multiple approval points—in order to prevent students from detracting from the academic rigor of their education. However, such stringent requirements may stifle the intellectual freedom of students who wish to be innovative in their educational approaches.

Recommendations

To counteract that atmosphere of limitations and restrictions, the University should champion ways for highly motivated students to explore,
supplement, and challenge their notions of an education. SCUE recognizes such options would not be ideal for all Penn students; rather, we believe a select subset of students would benefit greatly from experiencing a unique four-year experience. At the same time, innovating on the individual course level, with classes that carry different credit weights and commitments, would enable a much wider base of students to increase the flexibility and expand their horizons of their education.

**Vision: Create Individualized Curriculum Tracks**

Penn can promote educational innovation by removing standard degree requirements for students with the visions, skills and motivation to design their own curriculums. One approach is reducing the general education requirements, leaving more room for student-driven exploration. A more flexible, personalized structure would enable exploration of knowledge in a manner not possible under the standard curriculum. The College’s Pilot curriculum showed promise in this sphere by creating fewer but broader requirement categories; SCUE suggests its successful elements be reworked into future curriculums.

Another approach to an individualized curriculum is dismantling restrictions of traditional departments and allowing students to specialize in theme clusters rather than discrete majors and minors. The current system of double-major and interdisciplinary-major studies is at times very rigid and discouraging of intellectual pursuit. Segregated departments standardize students’ experiences, preventing them from studying broad, multi-dimensional approaches to problems. [See page VII for a discussion of the importance of interdisciplinary learning.]

While this grows the growing number of interdisciplinary minors, majors and programs Penn offers, we also emphasize the need for having mechanisms in place for students whose academic interests do not align with what already exists. Many existing programs, such as Philosophy, Politics and Economics, grew out of student initiative, but the time-consuming and unpredictable process of creating new majors means students aren’t able to reap benefits in the present. It is impossible for the university to predict and create programs every interest that students could carry to campus. With mechanisms for individualized study in place, students are given the responsibility as well as the support for identifying and carrying out their visions. Through individualized curriculum tracks, Penn can institutionalize and streamline its support for academic innovation.

The nature of such programs means participating students need to be self-motivated and extremely engaged; a rigorous review process would assess personal qualities as well as plans. Determining course of study, from what classes are used to what the cumulative product would be, should be facilitated by a specialized advisor. This point person would help uphold the academic rigor and overarching unity of the individualized curriculum, as well as ensure that the student does not fall through the cracks without traditional major structures to provide a guidepost.

**Vision: Revitalize Ben Franklin Scholars Program**

Based on its history of collaboration with CURF, SCUE identifies the Ben Franklin Scholars Program (BFS) as an opportunity to translate resources and administration not currently achieving what they could into an innovative complement to the standard curriculum. [See page VII for an outline work with CURF.]

Our vision for the BFS program mandates that its students “experience the excitement of exploring new intellectual territory.” In its current state, the BFS program augments, but does not define, the academic experiences of its Scholars. We hope that a revamped BFS program can change that.

Students are invited to become part of the BFS program upon their admission to Penn under Regular Decision, based on undisclosed aspects of their Penn application. They are also welcome to apply to the program during their first two years of study with an application based on the completion of previous coursework, GPA, essays, and faculty recommendations. BFS has long been considered an Honors Program by much of the Penn community. However, the largely decentralized and ambiguous nature of the program is burdensome to many students involved and the administrators who manage it.

The “honors” designation for BFS begins to shift focus from the scholarly opportunities of the program. Therefore, SCUE believes that the program should be revitalized to focus on particular scholarly opportunities that could be unique to BFS. In reforming the BFS program, the following priorities should be maintained: unified course components, interdisciplinary focus, discovery process, rigorous admissions, and strong advising.

In terms of unified pedagogy, BFS courses must include both a writing component and discussion component. Each of these pieces must be specifically geared to assist students with developing key research and analytical skills that they may elect to pursue later in their college careers. In addition, SCUE hopes BFS will define a new content-based curriculum, unique to each member of the program. We envision this curriculum to be interdisciplinary in nature, enabling students to chart academic courses involving elements of multiple Penn schools. In this respect, each student in the BFS program might have his or her major requirements waived in order to pursue a well-defined, interdisciplinary course of study not currently offered at Penn.

SCUE believes that BFS should not be offered upon admission to the University; rather, interested students should apply once they have matriculated. In order to help students discover their interest in the program, freshmen should be strongly encouraged to take a BFS course in their first semester and should be told about the program upon admission. Students would then take a class during their freshman year to discover if they like the program and apply to BFS between their second and fourth semesters if they feel motivated to do so.

Because this vision of the program grants significant academic freedom to each Scholar, the admissions process must be sufficiently rigorous to ensure each Scholar’s course of study is properly defined. For this reason, we believe that the main criterion for admission should be a comprehensive proposal prepared by each prospective Scholar, defining a unique course of study. Scholars with successful proposals should then be subject to a rigorous interview, forcing them to defend their proposed course of study. In this way, BFS would be a program that students discover and take time to understand.

In addition to the program, Scholars will need significant advising to ensure their unique courses of study are fulfilled. Because the unique BFS curriculum requirements will be active participation in BFS seminars, similar to the current system, each Scholar will need constant advising to refine his unique course of study. As the BFS program currently has a strong advising system in place, this requirement fits well within the existing program.

**Vision: Champion Alternative Credit Models**

The current convention at Penn is the one-credit unit course. These courses range from two hours of class time per week to as many as eight hours of class time per week. At this present time, there is some variation in course credit units and some classes are worth .5-, 1.5-, or 2-credit units per semester. The most robust example of .5-credit courses exists in the Marketing Department in Wharton. Existing 1.5-credit unit courses consist of a science lecture course combined with a co-requisite laboratory course. The majority of these courses are taught through the College departments of Biology, Chemistry, and Physics; within these departments, a variety of models are utilized.

SCUE recognizes the challenges of implementing new course models, including complications in the credit-counting process and a monopolizing of departmental time and funding. However, SCUE believes the benefits of making available half-credit (.5-credit) and one-and-a-half-credit (1.5-credit) courses strongly outweigh the costs. These courses could provide unique learning environments for Penn students. .5 credit and 1.5-credit courses would diversify the course offerings available and make courses increasingly proportional to class workload. These classes would be more focused, allowing students to learn about specific topics. Additionally, they could serve as an introduction to research.

**Half-Semester Seminars**

Based on the model that currently exists in the Marketing Department, SCUE proposes the creation of other courses worth .5 credits that meet for half of a semester. Students would be able to explore specialized topics either outside or within their majors. Because of the lowered .5-credit burden, students would be encouraged to explore unfamiliar and challenging topics without a large potential deficit to their GPAs. Additionally, students who intend to specialize in that area would reap the benefits of exploring a particular topic in depth. Although the broad lecture course provides a means for surveying a wide swath of material, .5-credit courses would allow for the exploration of specific, giving breadth to the breadth of material. This close study provides an exceptional way in which undergraduate students can experience graduate-level type study opportunities.

On the faculty level, professors would gain more flexibility and range in their schedules. For example, if a professor needs to travel for research, courses would look for half a semester and then leave for two extra months for on-site research. In addition, professors would be able to interact with students with an interest in exploring their topics of research more specifically. In contrast to the survey lecture, which often forces professors to teach on subjects that are not in their direct purview, .5-credit lecture courses will allow professors to teach on their particular areas of expertise and interest. Departments and programs could also encourage
their graduate students to teach courses worth .5 credits, incentivizing these students with stipends or valuable teaching experience.

In order to ensure that these classes contain sufficient academic rigor, the work required must be equivalent to that required in half of a typical one-credit course. This could include, as is utilized in the Marketing Department, a paper and exam or two papers, depending on the subject matter. The oversight of maintaining academic rigor would be given to the host department or program. These courses should be seamlessly integrated into the departmental or program major and minors, generating higher level of student interest that allows for their sustainability and continued success.

Mini-Research Seminars

A second model for the .5-credit course is a research-based class meeting once a week for an entire semester. Such a course, similar to the year-long thesis course required for some majors, would allow undergraduates to explore the research process on a smaller scale before engaging in a major research project. Mini-Research Seminars would include a once-a-week lecture, meant to provide background material on the topics about which enrolled students would be writing, as well as guide the research and writing processes.

This course model is ideal for sophomores and juniors with an interest in research. The setting can provide an excellent introduction to writing a specialized research paper or studying a topic with a particular set of skills. Such a course would help enrolled undergraduates build an academic relationship with a professor in their field of interest, who might become their mentor or help them seek out other mentors in related fields. Research projects completed in the context of the course could lay the foundations for the senior theses or senior design projects, allowing students to achieve more depth.

SCUE imagines such courses being run through departments and programs, but envisions possible partnerships with CURF and associated research programs. As the Mini-Research Seminar provides the possibility for interdisciplinary study, courses within this program could be co-taught by professors from different fields.

1.5-Credit Courses

Currently, the only models for 1.5-credit courses exist in the sciences. Translating a similar structure to fit each department, 1.5-credit courses would be made up of an introductory lecture combined with an additional half-credit, specialized recitation. Thus, students enrolled in a broad survey course would have the option of additionally enrolling in a supplementary, specialized recitation section simultaneously. This would work well in the largest and most popular lecture courses, such as Psychology 001 and Economics 001.

Often, professors must be extremely selective in the material covered in broad survey courses. It is impossible for teachers of these courses to go into a large amount of depth on each topic. An additional .5-credit unit recitation would allow students who are interested in topics covered in the course to learn about one in great depth. These recitations would be offered on the basis of the course material, allowing students to gain increased expertise on some aspect of the material. Professors of courses with an additional .5-credit recitation component will benefit from a group of students with an increased understanding of particular nuances in the subject material. Because the additional burden of these recitations will not fall on the professor, he will have a group of more informed students without the detriment of an increased workload.

Major introductory courses are ideal arenas for the 1.5-credit course option because they usually require the employment of many TAs and thus have graduate students already available to and interested in teaching. In addition, these introductory lectures are extremely broad and would provide ample opportunity for a diverse group of students interested in a variety of related topics.

1.5-credit courses would require TAs to offer an additional once-a-week recitation on a subtopic of the course. Students would choose to enroll in these “mini-courses” during the Add/Drop period on PennInTouch, just as they do with the remainder of their course selections. Enrollment in these additional .5-credit recitations would be managed similarly to the honors recitations in large lecture classes and would not be a required co-requisite that would be encouraged by the professor teaching the course.

Additional recitations could be research-based and students would spend the semester working towards a final paper. Supplementary material would be covered by the TA who would design a syllabus for the course and assign extra reading materials and assignments. Each department and program would be responsible for ensuring additional .5 credit units are academically rigorous offerings.

Conclusion

Penn’s standard curriculum at times restricts student exploration and flexibility. By escalating institutional support for innovative curricular options, Penn can foster the intellectual growth of its diverse student body. Individualized programs and alternative credit models will increase students’ exposure to Penn’s resources outside of traditional boundaries.

Pedagogy

Teaching Quality

Problem: Prioritizing research over teaching dilutes learning undergraduate experience.

Solution: Emphasize and improve training and feedback.

Status Quo

As an institution of higher education, Penn’s top priority should be the provision of the highest quality teaching and learning experiences for its students. The Penn Library System and The Center for Teaching and Learning (CTL) are among the many hubs on campus that work to develop the skills of Teaching Assistants (TAs) and faculty, as well as provide them with the means to innovate both within and beyond the classroom. We applaud the Penn Library System’s recent efforts to reach out to faculty with technology workshops on making blogs and using Second Life to complement the classroom experience. Says Carton Rogers, head of the Penn Library System, “The sessions are wildly popular and faculty say what they are learning and translating back to their classrooms is having enormous impact on engagement of students in seminars and lectures.”

The Center for Teaching and Learning has collaborated with SCUE to implement the well received Action, Communication and Evaluation (ACE) Initiative that aims to improve undergraduate and graduate TA and faculty quality. This program was inspired by workshops into CTL’s annual three-day TA Training Program, where undergraduates provide insight into teaching, discussion and review styles that they find most helpful in a variety of disciplines. SCUE also worked closely with CTL and its advisory board to develop a mid-semester evaluation form for TAs to give to their students. Feedback from these evaluations helps to identify areas in which to focus improvement throughout the remainder of the semester. These forms are on the CTL website and are widely used by CTL TA training participants.

These initiatives noted, there is still a perception among students that the teaching quality across all types of learning at Penn needs to be enhanced and standardized. We recognize there are many areas in which improvements could be made and to this end, offer some potential solutions.

Recommendations

Penn’s top priority should be the provision of the highest quality teaching and learning experiences for its undergraduates. Penn prides itself as a place where students can pursue knowledge without boundaries through scholarship and research. SCUE recognizes the undoubted importance of research beyond the classroom and remains committed to its improvement and expansion on campus. The classroom experience, however, stands as this university’s most powerful instrument for a student’s cultivation of knowledge and preparation for life after graduation. We applaud the success of the administration in assembling Penn’s renowned faculty across the four schools, whose extensive professional experiences and cutting-edge research are rivaled by few. In our efforts towards the quality of teaching on campus, SCUE presents the following analysis on the state of the classroom and proposals of improvement therein.

Vision: Improve and Standardize TA Training

To enhance the recitation as a time meant for discussion and review, SCUE proposes the evolution of the ACE program to improve the TA training process. To begin, the initial three-day School of Arts & Sciences TA training program at CTL should be mandatory throughout the University. Currently, it is mandatory only for departments in the College that do not have their own training program.

Standardized training across all four schools ensures that every TA has received the same minimum level of preparation. In addition to explaining the basics of being a TA, this generalized training could explore different methods of innovative teaching, and should continue to incorporate the student-led sessions SCUE began in 2007. Such an effort signals to undergraduates that it is investing in a quality experience within the classroom.

SCUE believes that as the benefits of improved TA training manifest in the classroom, the enhanced experience will increase the recitation’s legitimacy as a valuable part of undergraduate education. Penn’s TA training will also help TAs and undergraduates develop an understanding of what they can expect from a recitation experience, in terms of quality of teach-
ing and level of student engagement, no matter the discipline. [See page VIII for more suggestions on improving the quality and perception of recitations at Penn.]

In addition to generalized training, SCUE believes that TAs should be required to participate in department-specific training, as different disciplines demand unique communication techniques. Leading a discussion in a humanities class, for example, requires a different set of skills than explaining the concepts behind problem sets in the hard sciences. Although some of these distinctions are already covered in CTL’s general training sessions, having departmental training will help TAs further specialize their skills to their specific subject manner. Initiative on behalf of departments to run this training will further illustrate their investment in TAs and will demonstrate the significance departments place on the recitation as an important and worthwhile learning experience. Involving undergraduates as well as TAs in their second year and beyond during departmental training will help build community, respect, understanding and awareness of expectations and best practices among different levels of students within departments.

In the final component of the improved training process, TAs would conduct “mock recitations” and be evaluated by a panel of students, followed by a panel of departmental instructors, experienced TAs and CTL Fellows. By teaching a panel of students, the TA would gain practice in a more authentic classroom setting and would confront genuine questions that students usually ask on the fly. The students from the audience would then judge the effectiveness of how the TA explained new and old material, as well as the clarity with which he or she answered questions. Through evaluation by instructors and experienced TAs, the TA would obtain feedback on how to most effectively present and clarify material in the subject area, as well as how to complement the professor’s delivery of content.

SCUE recognizes that this proposed training process requires a substantially increased time commitment on the part of CTL, faculty and TAs. We strongly believe, however, that such dedication to the recitation is necessary to standardize educational expectations beyond the lecture. A more rigorous training regime and a continual exposure to student feedback suggest to TAs that the University is committed to their development as professionals and teachers. The increased rigor of this training process will enhance the quality of education throughout the University as students get more out of their recitations and subsequently learn more from material presented in lecture.

Vision: Increase Feedback

SCUE advocates 360° feedback between students and TAs and students and professors through an increased use of mid-semester feedback forms. All first-year TAs must participate in some form of continued training. Feedback from these forms can be used to indicate a particular TA’s strengths and weaknesses, and could help to determine where this additional instruction should occur based on student response. With regard to professors, a logical first step is increasing awareness of the availability of online feedback forms. We suggest the Penn Library Systems Technology Department hold workshops to explain the creation and use of these forms, which can be customized for specific concerns on which professors want feedback.

The use of these forms by TAs and professors will allow both parties to gauge students’ concerns before it is too late in the semester to address them. Use of mid-semester evaluations will also enable professors to respond to feedback they receive. A professor, for example, might offer suggestions to students about how to complement the classroom experience with office hours, the TA or other University resources. In addition, professors can use this opportunity to clarify course expectations that were outlined at the start of the year, as well as any that have changed throughout the semester.

Because mid-semester evaluations occur when students are still engaged with the class and the professor, they offer a vehicle for feedback at a time when students are concerned with the quality of their learning experience. This opportunity for communication and growth will likely be lost after the semester concludes, when students cannot sense the effects of the feedback they give and have a smaller stake in its outcomes.

Conclusion

SCUE calls for an enhanced commitment by the administration to better faculty and TA teaching quality. Though we recognize the importance of research to the university, Penn must balance professors’ scholarly pursuits with a commitment to effectively teach undergraduates. To this end, SCUE recommends the expansion and standardization of TA training, as well as the continued development of a feedback network between faculty, TAs and their students.

Problem-Solving Learning

Problem: PSL as innovative learning tool suffers from lack of creation and awareness.

Solutions: Create a consortium to centralize and market PSL-related resources.

Vision: Create a PSL Consortium

SCUE calls upon the Provost’s Office to create a Problem-Solving Learning Consortium, whose participants can then drive this pedagogy forward. This consortium will stand as Penn’s first and only forum for critical debate, discussion, and course creation that catalyzes innovation in the classroom, namely the model of teaching that merges study of a discipline with an understanding of its local or global relevance. For our generation—charged with the task of developing solutions for issues like Social Security, global warming, and healthcare—it is essential for students to learn how to confront highly complex and multi-disciplinary problems.

Though not administratively recognized as such, many of Penn’s decentralized institutions have already integrated problem-solving learning into their programs and curricula. Thus, problem-solving learning has organically become part of the undergraduate experience, which may have been unnoticed by the typical student. In order to develop this educational model further, however, problem-solving learning must be recognized by Penn’s administration and embraced as an integral aspect of Penn’s ideology and culture.

Recommendations

Supposing one of the goals of the Penn experience is educating students to improve the world, we believe the most effective way to align the university around this goal is to orient components of the undergraduate experience towards problem-solving. Educational and psychological research, along with Penn student and faculty experiences, demonstrate that confronting highly complex problems leads to the highest levels of cognitive development and student learning.

Toward this end, SCUE has for years endorsed PSL as an innovative technique of pedagogy, and believes problem solving can be Penn’s comparative advantage. While SCUE commends the progress achieved through its work thus far, we seek a renewed commitment from Penn’s PSL stakeholders at all levels of the University to oversee the accomplishment of these and further PSL initiatives. A unified effort must be made from administrators and existing supporters to make PSL a cohesive entity at Penn.

While SCUE advocates PSL in the classroom, we recognize that traditional learning styles are also an invaluable part of undergraduate education. Without a strong basis of knowledge, which is often acquired in traditional courses, PSL would not be as meaningful of a learning experience. SCUE believes PSL should be used as a way to enhance rather than replace traditional models.

Vision: Create a PSL Consortium

SCUE calls upon the Provost’s Office to create a Problem-Solving Learning Consortium, whose participants can then drive this pedagogy forward. This consortium will stand as Penn’s first and only forum for critical debate, discussion, and course creation that catalyzes innovation in the classroom, namely the model of teaching that merges study of a discipline with an understanding of its local or global relevance. For our generation—charged with the task of developing solutions for issues like Social Security, global warming, and healthcare—it is essential for students to learn how to confront highly complex and multi-disciplinary problems.

This formalized coalition will serve as a resource center for professors interested in taking their classroom experiences to the next level, as well as for students interested in engaging in new educational challenges. It will centralize PSL efforts and make it easy for students and professors to identify courses and co-curricular activities that support this type of learning experience. The consortium will foster a home for growth and development of these pedagogies, and will be the driving agent for continuing adaptation of the concept to emerging classes and programs.

This effort should be led by the Provost’s Office because it occupies the unique position to motivate such an effort, which would involve the coordination of various learning centers, including the Fox Leadership Program, The Netter Center for Community Partnerships, and the Center for Undergraduate Research and Fellowships, as well as professors and students collaborating on particular educational issues. We thus urge the Provost’s Office to continue building upon SCUE’s long-standing commitment by convening a consortium of the institutions who have expressed great interest in further debate.

A general call to action is that the Provost’s Office about PSL will certainly increase awareness and interest. By creating a consortium, the Provost indicates that PSL is an important item on Penn’s agenda, and an important goal of the University. This can help both provide accolades for current PSL professors—such as recognizing teaching excellence through a centralized website or a letter to students, faculty, and other stakeholders—as well as motivation for others to join the charge. It will be up to the consortium itself to continue to reach out to individual departments and
professors to help promote new courses that have a PSL component. The consortium could also provide a forum for professors to talk about the pedagogy and academic interest in the field in order to spread the word about PSL.

Another function of the consortium would be to provide professors with resources to develop PSL classes. Beyond monetary support, the consortium could hold advising sessions and informal conversations on best practices for incorporating PSL into the curriculum. It could disseminate material to departments on how best to begin evolving the classroom culture, as well as serve as a training ground for PSL-specific TAs.

In addition, the consortium would help create and maintain a system for identifying PSL classes. Many students do not realize they are in a PSL class until the course begins, and even more students do not even know that PSL courses exist altogether. For students interested in this pedagogy, a system that identifies and labels PSL classes, similar to how courses are labeled as counting for particular requirements in each school, would be helpful during the advanced registration period. The consortium could find ways to make PSL courses easily identifiable on Penn-In-Touch and on department websites, in addition to maintaining an independent list of the PSL opportunities available at Penn. This type of direct marketing to students would help many more become involved in and familiar with PSL classes. The additional benefit of the labeling system would be to increase student demand, which would in turn help convince professors to supplement current teaching methods with the more interactive PSL approach.

**Conclusion**

The PSL pedagogy shifts students’ focus from knowledge of abstract academic disciplines to solving concrete, real-world problems by applying knowledge from varying fields. Though the university has made commendable strides in encouraging this approach, the learning method’s potential is hindered by lack of available courses and awareness. To address this, SCUE proposes the formation of a PSL consortium that will turn this effective, significant, and relevant educational methodology into a well-defined institutional priority.

**Technology**

**Problem:** Educational technologies aren’t being used to their full potential.

**Solution:** Lower barriers to utilizing technology to enhance learning within and beyond classrooms.

**Status Quo**

As a leading institution in the creation and provision of knowledge, Penn should also be a leader in using innovative technologies to deliver this knowledge to its students. As a promoter of all different types of learning experiences, SCUE recognizes the importance of maintaining the tradition of the spoken lecture for many disciplines. That said, those professors who wish to make use of technologies to enhance their classroom experience often face constraints that limit their potential. Classrooms professors are assigned may not be equipped with the necessary hardware, such as a computer and a projector. Every class, regardless of subject, can accommodate the pace of the class in order to ensure concepts are being well understood and tested. Teachers can use the responses to assess attendance, student comprehension of the material as it is being taught and can even be used as a way to tailor their teaching to observed interests and needs.

Another important ICT that SCUE believes greatly enhances the classroom experience are clickers. Using these devices in the classroom enable students to participate without pressure of performance in front of peers. Teachers can use the responses to assess attendance, student comprehension of the material as it is being taught and can even be used as a way to tailor their teaching to observed interests and needs.

**Recommendations**

Recognizing the need to improve provisioning and utilization of technological resources by faculty at Penn, SCUE offers some strategies for helping professors and students get the most out of educational resources. Penn should adapt its provision of technological resources in order to better accommodate students’ preferred strategies for learning and professors innovative methods for delivering information.

**Vision: Standardize Classroom Technology**

SCUE recommends strategic renovations and upgrades of all academic buildings so they can provide, at minimum, an established standard of baseline technology. Looking forward, Penn should make technologically sophisticated classrooms a priority for campus expansion efforts.

Currently, technology capabilities across the university varies from classroom to classroom. SCUE believes all rooms should be equipped with a minimum amount of hardware, specifically a technology cart including a computer and a projector. Every class, regardless of subject, can make use of this technology. The Pen In-Touch system, for instance, uses MIT’s Courseware recorded lectures as virtual “reference texts” for review of more material learned in previous classes at Penn as they approach study for upper level math classes. Given clear demand for ICTs, Penn students should be able to access similar levels of support at their home institution. The school should invest in going the extra mile, connecting its strides in knowledge-creation to student ability to access and grow from that knowledge throughout and beyond their undergraduate education.

**Vision: Promote Information Communication Technologies**

In a 21st century workplace, graduates will require proficiency in skills such as technological literacy, communication skills, problem solving skills, and the ability to work collaboratively. These skills can be conveyed without changing the curriculum, but by adapting the way the content is delivered and understood by making use of information communication technologies (ICTs).

ICTs are an important but currently underutilized asset for enhancing learning technologies. They include tools that facilitate the creation, communication, dissemination, storage, and management of information, such as video recordings of lectures and interactive online class components.

Both inside and outside the classroom, technology can enable new, innovative styles of teaching and learning. Faculty members interested in utilizing technological tools to enhance their teaching experience must be provided with resources to develop PSL classes. Beyond monetary support, the consortium could hold advising sessions and informal conversations on best practices for incorporating PSL into the curriculum. It could disseminate material to departments on how best to begin evolving the classroom culture, as well as serve as a training ground for PSL-specific TAs.

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**Vision: Promote Information Communication Technologies**

In a 21st century workplace, graduates will require proficiency in
lectures, particularly those that are part of the Wharton Leadership Lectures series.

Providing automatic access to these resources would lower barriers for professors to adopt technological tools and signal institutional support for innovative learning methods. Standardizing technology across the University will simplify the scheduling process. By ensuring that all rooms meet baseline technologies, the Registrar’s Office has more freedom in assigning classrooms throughout the University.

Vision: Champion Open Courseware

SCUE believes Penn should champion open courseware for both current students and the global community. Recorded and posted lectures—such as those provided through MIT’s OpenCourseWare Program and websites including Academic Earth, iTun.es, and YouTube Edu—are well worth the acknowledged expense of administering such initiatives. Penn should invest in going the extra mile, connecting its strides in knowledge-creation to student and faculty ability to access and grow from that knowledge throughout and beyond their undergraduate education.

Access to lectures online would enable students to make better use of Penn’s resources for their intellectual advancement and success. For example, those who want to learn more about a topic area in which they lack background could view other courses’ lectures as primers.

Students are already demonstrating interest in this strategy. One in four students in Penn’s Math Department, for instance, uses MIT’s Courseware recorded lectures as virtual reference texts for review of more basic material learned in previous classes at Penn as they approach study for upper-level math classes. Given clear demand for this application of ICTs, Penn students should be able to access similar levels of support at their home institution.

Faculty gain also gain tremendously from agreeing to release their lectures and advocating that their departments prioritize funds to this end. Valuable knowledge and best practices can be shared among faculty without traditional constraints, and their work can be embraced by a wider audience of students and colleagues. Additionally, recordings could be used as evaluation and teaching tools for departments. Open courseware can also keep alumni connected to the school, as well as more eager to invest in professors and their research.

Moreover, while SCUE recognizes the importance of protecting the intellectual property of professors and students, hoarding the intellectual capital bread out of Penn’s classrooms is in direct conflict with the articulated aims of expanding its global intellectual footprint. [See page VIII for a discussion of intellectual property rights.]

The many additional benefits of making Penn course material available online include attracting exemplary prospective faculty and students, heightening Penn’s global exposure, and providing a better means of exchange with peer institutions. SCUE rejects the idea that recorded lectures would cheapen the Penn education; the worldwide community would gain access to information, but would not earn diplomas or enjoy interaction with professors and students that the classroom offers.

Conclusion

High barriers to use prevent technological tools from being widely integrated in and outside of the classroom. In promoting ICTs, standardizing classroom technology and championing open courseware, Penn can enhance instruction and exchange of ideas. Investing in new technological resources will propel the university to the forefront of knowledge acquisition and provision.

Campus Life

Research

Problem: Students don’t have enough access to research.

Solution: Proactively creating and connecting students with research opportunities.

Status Quo

In 2009 alone, Penn undertook over $730 million in research. While Penn’s 3,800 faculty, 1,000 postdoctoral fellows, and 5,400 support staff and graduate students frequently receive mention for conducting this research, undergraduates are rarely included in these statistics. As a university with resources nearly unrivaled among its peers, Penn should commit itself to integrating research into undergraduate education.

Currently, apart from external funding, the University Research Foundation (URF) acts as the primary intramural resource to sponsor faculty on a variety of research projects. The URF considers applications from Penn faculty for up to $50,000 and aims to encourage undergraduate involvement in innovative research projects “while providing faculty with the assistance of highly motivated Penn undergraduates.” The Center for Undergraduate Research and Fellowships (CURF) serves as the primary liaising point between students and faculty seeking research opportunities.

Currently, undergraduate students obtain research positions through several avenues. Some are able to obtain them through work-study funding. Others are members of research-specific programs, such as the University Scholars or the Vagelos Scholars Programs. Upperclassmen are often able to perform research in their major for credit through specific departmental programs. CURF continues to build its presence by connecting undergraduates to research and fellowship opportunities both on campus and abroad.

Despite these opportunities and recent improvements, the vast majority of students, particularly undergraduates, are often forced to send emails en masse to professors, asking for unpaid research positions. Many, unfortunately, do not succeed.

Recommendations

SCUE believes research should become accessible to every willing student in every course of study at Penn. This can be accomplished through an increase in resources, funds, and guidance from a centralized, accessible source. By introducing these visions, Penn would better engage undergraduate students in the creation of knowledge and begin to remove the imposed bifurcation of teaching and research.

Vision: Create Freshman Research Seminars

Freshman Research Seminars would be a supplement to the Freshman Seminar Program, and would introduce students to research early in their Penn careers, giving them the tools and confidence to engage in original research while an undergraduate. The current purpose of Freshmen Seminars is to acclimate students to the University’s academic environment, build student relationships with faculty members, and allow students to gain the confidence and study skills necessary to lead a successful college career. This are important missions, ones which can be mirrored in an additional Freshmen Research Seminar program.

Many freshmen would like to become involved with research, but are intimidated by the process. Through Freshman Research Seminars, students will be introduced to the process of completing an original project, preparing them for more extensive research opportunities. These courses will teach students research techniques – such as presenting and analyzing data – and strategies to become involved with research projects. Seminar professors will also introduce the resources available on campus to assist students with their research and presentation, such as CURF, CWC, and the Penn Library System. After this foundation is laid, students will apply their knowledge in a capstone research project.

Individual courses would each revolve around a specific subject matter ripe for intellectual exploration. Not only will professors present material and readings to be analyzed, but students will be required to actively use course content as a stepping stone to original research. In this model, professors will also introduce the content to incorporate in their syllabi and students will leave with the skills and confidence required to engage in higher level research elsewhere.

Vision: Expand Commitment to PURM

The Provost’s Undergraduate Research Mentoring (PURM) provides selected freshman with a research mentor and summer project as well as $x thousand dollars in funding. However, PURM was very selective for summer internships in 2009, as out of 170 applicants only 35 freshmen students were chosen. PURM had a fixed budget of only 160,000 dollars and there were over 200 possible research assistantships. Hence, the resources, though present, are not being adequately spread to the interested undergraduate population.

The PURM application process leaves much to be desired. Applications include only a student’s first semester GPA and short essays describing past research experience and research interests. No recommendation letters, interviews, or comprehensive essays were included in the process. SCUE feels that a freshman in his or her first semester is still transitioning, and thus, first semester GPA is not an accurate reflection of a student’s strengths and capacity for research. Moreover, the PURM application could be biased against students coming from underprivileged communities where the opportunities to engage in research before college are non-existent.

SCUE strongly recommends that PURM be significantly expanded and reformed. First and foremost, if 200 professors are seeking undergraduates for research (as was the case for the summer of 2009), 200 research assistantships should be available through PURM. Furthermore, the PURM
application procedure must be reformed to judge students based on their
totality to participate in research rather than solely on their academic re-
cord and past research experience. SCUE thus advocates a more holis-
tic review that de-emphasizes GPA; although grades can be an important in-
prediction ability, they should not be the deciding factor. An
in-depth interview process and requirement of letters of recommendation
would greatly supplement demonstrated grade-based success.
Vision: Revitalize the Benjamin Franklin Scholars Program

Run through CURF, The Benjamin Franklin Scholars (BFS) pro-
gress has only been considered an Honors Program by much of the Penn
community. However, through the centralized and ambiguous
nature of this program has become a burden to students involved as well as to
managing administrators. SCUE would like to think about ways to continue
focusing on the value-added scholarly opportunities that are part of
the program. Incorporating research is a key way to do this. [SEE PAGE III
FOR A DISCUSSION OF TRANSFORMING BFS INTO A MEAN-
INGFUL ALTERNATIVE CURRICULAR PROGRAM.]

Vision: Incentivize Involvement of Undergraduates in Research

One factor that hinders undergraduate research is faculty members’
reluctance to take undergraduates under their mentorship. Many investiga-
tors already have a host of graduate students adequately performing re-
search tasks and believe that mentoring undergraduates may take time and
energy away from the research program at large. To combat this concern,
SCUE suggests the formation of exploratory committees for faculty mem-
bers who work with undergraduates. In return for mentoring undergraduates, the
University could give faculty an additional summer stipend or funds for
travel to collaborating institutions.

Vision: Analyze Undergraduate Research Accessibility

SCUE proposes the formation of an exploratory committee of both fac-
ulty and students to accurately and definitively gauge undergraduate re-
search needs. A key purpose of such a committee would be to measure the
accessibility of undergraduate research, pinpointing those subjects on cam-
pus whose research needs are not currently being met. By surveying the stu-
dent body, the proposed committee will attempt to answer questions includ-
ing but not limited to the following: How well are students informed about
research? How many students want to conduct independent research but
cannot find adequate funding sources? How helpful are research experienc-
es in life beyond Penn? The creation of such a body will greatly facilitate the
process of making undergraduate research more accessible.

Vision: Strengthen Intellectual Property Protections of Student Research

In promoting increased undergraduate engagement in the creation of original scholarship, SCUE understands the importance of protecting the
outcome of those efforts. The Undergraduate Assembly’s “Intellectual
Property Rights Policy Proposal” noted that approximately 30% of the
student body is involved in some type of research. SCUE hopes that as this
percentage continues to rise, so will the percentage of students informed about
their intellectual property rights. As Penn continues to expand its
research community, it is critical to address issues regarding the intellectual property
rights of students (IP rights) will become more prominent. [See Page X
for a discussion of how IP rights factor in to open courseware.]

The precedent at universities nationwide is that students do not have
rights to their own inventions and research. Penn’s intellectual property
policies reveal that in the vast majority of cases, any invention, research
discovery, or other product of student effort will become property of the
university. The presentation of IP rights policy is inefficient and ineffec-
tive, creating barriers to student understanding.

Unawareness of rights can lead to situations where students unwilling-
ly or unfairly lose legal ownership of their intellectual property. Ambi-
guities and a language left open to interpretation could work to a student’s
disadvantage if an IP issue were to arise.

At the very least, there should be a concerted effort to better educate
students on the current policy. SCUE also believes current intellectual property
policies must be clarified and condensed. In addition to making the
policies clear and accessible, SCUE recommends further examination of
their content. In comparison with some of its peer institutions, which
differs from Penn’s treatment of IP issues where IP issues may arise, Penn’s policies
appear quite rigid and overly restrictive.

Penn’s minimal duty is to clarify its current policies for its students,
while further action should be taken to expand intellectual property rights
to include undergraduates. SCUE will work with relevant groups such as
the University Honor Council, Ivy Council, the UA, the Provost’s Off-
fice, and the Office of the Senior Vice President for General Counsel to-
wards this end.

Conclusion

Undergraduates represent a major untapped resource for the univer-
sity’s mission of knowledge-creation. Although some progress has been
made in promoting undergraduate research, much still needs to be done.
Penn should improve financial and faculty support for existing opportu-
nities, champion new ways to expose students to scholarly discovery, and
create incentives for professors to include undergraduates in their re-
search. All of this should be complemented by a comprehensive assess-
ment of research opportunities and stronger awareness of intellectual
property rights.

Interdisciplinary Learning

Problem: Penn’s commitment to interdisciplinary learning doesn’t translate to
the undergraduate level.

Solution: Cultivate opportunities inside and beyond the classroom for
integrating knowledge across fields.

Status Quo

Penn has long been a standard-bearer for interdisciplinary learning, now
one of the three central tenants of the Penn Compact. From the moment
Benjamin Franklin penned his plan for a school offering both practi-
cal and classical instruction to prepare students to tackle real-world prob-
lems, Penn has been a trailblazer. Franklin’s idea is the origin of Penn’s
“One University” policy, which allows students to enroll in classes across the
four undergraduate schools and many of its graduate programs, and
underlies many programs that join departments or schools. The policy has
become a powerful marketing strategy; it helps differentiate Penn from other
Ivy League and peer-schools, branding the university as a destina-
tion for interdisciplinary studies at the undergraduate level.

Despite this tradition of interdisciplinary excellence, however, inter-
disciplinary learning and pedagogical tools are rarely utilized to their full
potential. Penn’s commendable assets do not adequately encourage inter-
disciplinary experiences at the most fundamental level — the classroom.

On the undergraduate level, however, it is still difficult for students to
actively integrate knowledge from different fields. Students wishing to en-
gage in interdisciplinary research, whether through a senior thesis project,
or through extracurricular study, do not have adequate resources to pursue
tirely interdisciplinary projects. Currently, there is no program in place that allows stu-
dents double majoring to marry their studies into a single, comprehensive
senior project. Similarly, there is no existing pipeline connecting interest-
ed students to the high caliber interdisciplinary research originating from
the many Penn hubs.

Recommendations

In order to integrate interdisciplinary education into the classroom, SCUE believes that Penn should promote innovative educational strate-
gies that minimize barriers between departments.

Vision: Create Collaborative Courses and Interdisciplinary Recitations

One solution for lack of interdisciplinary learning at the classroom level
is creation of an interdisciplinary “recitation,” in which two distinct
courses share a common recitation that enables students to apply their
knowledge of diverse subjects to address a single problem.

The model of two distinct course lectures that cover related topics
joined by a single recitation that links material from both classes would be
extremely useful in formalizing and expanding on common links. SCUE
recognizes the importance of the lecture format and the ability of lectur-
er to convey a broad swath of information about a given subject. Never-
evertheless, we believe that, in diversifying the ways in which classes are taught, Penn can stimulate students’ intellectual curiosity and allow them to en-

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We acknowledge that an interdisciplinary thesis may fall outside of honors guidelines for various departments. However, those that meet certain criteria, as outlined by the program or students’ advisers, should merit distinction, potentially honors certification or graduation with an “interdisciplinary scholar” recognition.

Such a program would require extensive coordination of resources, but there are ways to build it out from the university’s existing infrastructure. If the program were housed in CURF, for example, students would have access to an established network of professors and researchers. Professors affiliated with CURF may have a passion for undergraduate research, and are invested in providing guidance and support for students pursuing independent projects. These individuals would be ideal mentors and advisors for students in the program.

Vision: Prioritize University and Inter-School Minors

Inter-school minors combine study in two or more interrelated fields in different schools, an ideal means for interested students to explore and combine topics outside their primary academic focuses. SCUE believes that increasing school-wide minors will bridge divides between schools and connect students to interdisciplinary opportunities.

Though a commendable range of options already exists, Penn’s Responsibility-Centered Management methodology poses a challenge to university minor creation. Decentralized funding and administrative responsibilities are often an obstacle to university minor creation. Minors are co-overseen by each of the schools in which the minor is housed, so the process of minor creation must involve engaging administrators from each home school. Instead of approval by an individual school’s curriculum committee, a potential interdisciplinary minor must be approved by all four undergraduate schools, each with its own interests and priorities. These barriers prevent many worthwhile programs from coming into existence.

To stimulate the creation of these academic opportunities, SCUE proposes a simpler process for establishing school-wide minors. Because the Office of the Provost has a broader view of investment in all of Penn’s schools, it would be an ideal governing body for these programs. Minor proposals would first be brought to the Council of Undergraduate Deans in order to garner the support of the four undergraduate deans, the Vice Provost for Education and other University officials. CUD should then be given the power to approve or deny the application for the program’s creation, instead of it having to formally brought to each individual curricular committee. The Provost would serve as the ultimate arbiter of the creation of the university minor, ensuring its academic rigor and interdisciplinary necessity.

Vision: Enable Interdisciplinary Theses

SCUE believes that students planning to double major should be given the opportunity to write an interdisciplinary thesis that bridges the research techniques and combines the resources of multiple departments.

We envision that an Interdisciplinary Thesis Capstone Program would allow inquisitive, highly-motivated students to enrich their learning experiences by giving them the ability to investigate different fields and explore the links between disciplines. It would appeal specifically to students with more than one academic concentration interested in drawing from both areas. It would also be an option for students who have previously participated in interdisciplinary research and wish to apply it toward a final project.

The Thesis Capstone Program would provide students who wish to write an interdisciplinary thesis with the same structure and support available to students writing theses within individual majors or departments. These students typically receive, in addition to guidance from a knowledgeable faculty advisor, a support system in the form of other students. Majors are often encouraged or required to take particular thesis writing courses, which further facilitates collaboration and a sense of community.

Students pursuing an interdisciplinary track, however, do not have this same opportunity for collaboration. Consequently, many students have been discouraged from undertaking an interdisciplinary thesis. An interdisciplinary thesis program would provide interested students with the same structure, support network, and community as those students who complete a thesis in one department or program.

SCUE envisions a logical process similar to that of individual department theses. Students would apply to the program in their junior year after declaring majors and minors individually, choosing an adviser for each area of study. Ideally, every student accepted into the program would be required to take an interdisciplinary thesis-writing course, which would help cultivate a sense of community and facilitate collaboration between students. However, we realize the interdisciplinary nature of the program may create challenges for a thesis course. As such, the program may begin by assigning "the lead number" to each student and organizing mandatory meetings for the students to provide peer support.
vost Award for Interdisciplinary Innovation, which provides a stipend for graduate students, this grant would fund students interested in research that couples a study of two different disciplines.

Perhaps similar to the recommendations for Provost’s Undergraduate Research Mentorship Program, a list of potential research projects could be provided, drawn from researchers at the different interdisciplinary institutes. Selected participants would then receive a grant towards the completion of their project and would be required to present their findings at a symposium following its completion. [See page VIII for more about expanding support for undergraduate research opportunities and page X for more information about interdisciplinary hubs and seminar creation.]

**Conclusion**

Penn’s commitment to interdisciplinary learning has not reached its full potential on the undergraduate level. The institution can address this shortcoming by establishing a two lecture/one recitation model, interdisciplinary thesis program and more problem-solving learning opportunities. Beyond the classroom, Penn should create a pipeline for linking undergraduates with cross-field hubs and facilitate the creation of inter-school minors.

**Informed Decision-Making**

**Advising**

**Problem:** Inconsistent advising quality and policies undermine the system’s strengths.

**Solution:** Produce better advising outcomes for students by centralizing resources and standardizing processes.

**Status Quo**

Penn’s advising system has long been praised for its efficiency in facilitating course selection. While it is often regarded as the premier model across the Ivy League, our advising system falls short of addressing the extensive student needs inherent in Penn’s decentralization.

Students in each of the four undergraduate schools undergo different processes of obtaining advisers and maintaining relationships with those advisers. Whereas College students are assigned advisers before arriving on campus, for example, Wharton students are instructed to see any of the advisers in the advising office upon arrival. The merit of this decentralized system is that advisers are skilled in their respective areas of expertise within a specific school or program.

Despite the achievements of the current advising system, it still presents several problems in execution. For one, a College student’s pre-major adviser may not have a background in the field of study in which his assigned student is interested. In this case, the adviser may not be able to address the specific educational needs of his advisee. Alternatively, Wharton students are never assigned an adviser so they lack a go-to person to answer questions and invest in their success.

The system also fails those students who are considering enrolling in courses or programs in a school outside their home school. A College student who wants to learn about a dual degree with Wharton, for example, must contact a second “specialized” adviser who may know little about cross-campus requirements between schools. In this case, the decentralization of the advising system causes confusion among students instead of helping ease their transitions.

College advisers are selected and trained on a voluntary basis, often resulting in inconsistent preparedness to fulfill their obligations. Advisers are given preliminary training and an “Advising Manual” to teach them how to use online advising resources. After the initial training, they are encouraged to attend advising workshops from year to year. Since these workshops are not strictly required, the group that attends is self-selecting and might not need the most assistance. In addition, there is no follow-up process conducted to ensure that all advisers are meeting expectations. As a result, while some students are assigned pre-major advisers who are extremely knowledgeable and engaged in the students’ educational paths, others may be assigned advisers who are less motivated and helpful.

Another advising issue lies in the system of approving requirement waivers and permits. SCUE recognizes the importance of the general education requirements in each school. However, as it stands, there is a lack of standardization across advising when it comes to approving extraneous courses to count for requirements. In special circumstances, some advisers are known to approve extraneous credits for class members who are not on the pre-approved list of courses that fulfill requirements. In certain situations, especially when the affected student can make a rational argument for the merit of a course counting for a requirement, these advisers are justified in doing so. However, the issuance of such waivers varies from adviser to adviser, conflating the system through which requirement exemptions can and should be granted.

**Vision:** Centralize Advising Resources

SCUE believes Penn should establish one building or location to house the university-wide advising department. Here, all students could access advisers from all four schools, as well as advisers for other academic options including study abroad, joint degree, dual degree, and internal transfer. Having a centralized hub such as this will open the flow of communication across the University and ease the process students must go through when making academic decisions. When a student has a question about any course, program, or requirement in any school, he would be able to visit this centralized advising hub to find an answer without being bounced around between multiple advisers housed in separate buildings. This new center would further demonstrate Penn’s “One University” commitment, helping students across the university pursue their academic endeavors.

**Conclusion**

SCUE recognizes possible improvements that the University can make to aid students in making more informed decisions. Through centralizing advising resources, improving advisor training, and standardizing the waiver and permit process, Penn can better commit itself to informed student decision making.

**Course Selection and Registration**

**Problem:** Absence of formal shopping period makes course selection haphazard and needlessly complex.

**Solution:** Create virtual course shopping options and standardized waitlist procedures.

**Status Quo**

Course selection is perhaps the time at which students most need resources that support informed decision-making. Although many undergraduates plan out their future courses far in advance, others prefer to explore a range of unique courses.

We recommend a three-pronged approach: centralizing advising, standardizing adviser training and the waiver-granting process, and enhancing the technological tools available as a way of helping students make more informed decisions.

**Recommendations**

SCUE believes that Penn should empower its students to make informed decisions about their academic endeavors.

**Visions:**

**Advising Quality and Waiver-Granting Policy**

Increasing the rigor of College adviser training would help insure that advisers are well informed and committed to the advising program. A mandatory yearly training workshop would enable advisers to stay attuned to changing requirements, highlight new courses to suggest to students each semester, and re-emphasize other resources that to share with advisees. This training would standardize the quality of College advisers by making them all knowledgeable about campus resources and the ever-changing course planning timeline.

An evaluation and incentive program could also be implemented to reward “good” advisers and encourage others to follow suit. Such a program would allow students to give anonymous feedback to their advisers. This would provide advisers with constructive criticism, something which is currently lacking from the advising system.

**Waiver and Permit Processing**

Finally, it is essential that Penn standardize the policy for requesting waivers and permits for course requirements and course registration. Either all advisers should be able to waive requirements and help students enroll in closed courses or none should be empowered to do so. Furthermore, the process of petitioning to have a course count for a requirement should be transparent and known to all students, advisers, and professors. Clarifying this policy would remove much of the uncertainty and frustration that students face when planning their course of study. In addition, if Penn were to allow students to petition for courses to count for requirements, some of the burden on professors and department heads who currently have to apply for their courses to count towards fulfilling requirements would be lifted.

**Conclusion**

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aging professors to post syllabi online before the semester begins. While these resources do help, they are not a substitute for sitting in on experience lecturing lectures live.

 Paramount to the Add/Drop period is the process through which students register for courses once spaces in them open up. Whereas some professors close their courses once they are full and create manual waitlists, others allow individuals to add and drop their course at will. Lack of standardization is a burden on students, who may miss out on courses of interest.

 **Recommendations**

 Although an extended course-shopping period would be ideal, SCUE sees the potential for a video course-shopping period should a non-virtual one be infeasible. Students should be able to take courses that they find both intellectually stimulating and enjoyable. In order to do so, it is necessary that the University provide students with the resources necessary in order for them to be able to choose the right classes for themselves.

 **Vision: Create a virtual course-shopping program**

 A course shopping period would allow students to meet a professor, listen to his or her expectations for the class, and hear a sample lecture. Many students know about the first lecture whether or not they want to remain in the class. This is verified by the fact that closed classes inevitably open after the first or second lecture has taken place. With the current system, a student who is debating between two courses that take place during the same time slot is at a major disadvantage because he/she will inevitably miss out on the opportunity to sit in on both first lectures. Also, with the existing system, students are more likely to play it safe and take popular classes instead of try new ones.

 During a course shopping period, professors would present an abridged “first lecture” to prospective students so that students could actually shop different classes before making any registration decisions. This shopping period could take place one or two days before classes begin in the Fall and Spring semesters, thereby not interrupting the regular rhythm of the start of first semester. Understandably, adding an actual course-shopping period would be difficult to implement. Obvious drawbacks also leave room for other solutions. For example, professors may find it monotonous and bothersome to give the same lecture multiple times. There is also no guarantee that students would take advantage of the opportunity to shop courses.

 It is perhaps more feasible that Penn adopt a system for virtual course shopping where professors videotape their first lecture or a mock introductory message that students can view online. These videos would allow students to virtually attend multiple first lectures whose time slots might interfere with one another. They could either be posted on a Pennkey-protected site or on iTunes U, where sixty-second lectures are currently accessible to everyone who knows where to find them. To start, every professor can post one video to represent the array of courses he teaches. Whether the sample video is the professor lecturing or an interview with the professor, these videos would allow students and professors to give them a taste for the professors’ styles and points of view. Such video clips, in conjunction with online syllabi, would give students a fuller picture of classes in which they are interested, allowing them to make more informed decisions when registering for courses.

 While this solution may be seen as daunting, it would allow even more students to take advantage of the breadth of courses that Penn has to offer, help them discover interesting electives, and allow them to choose courses based on more than just three sentence course descriptions, professor ratings, and campus-wide reputations.

 With the current “Add/Drop period,” students are discouraged from switching classes after the first couple days of the semester because they will have inevitably missed a vital lecture or assignment hand out. The lengthy process becomes even more difficult after one has missed too many initial classes. In not having a real Course Shopping period, students are prevented from exploring their curricular options and their academic growth is stunted by the risk inherent of shopping with the current system. SCUE believes that nothing can replace experiencing a class first hand. By creating a system for virtual course shopping, students would be encouraged to take courses in which they are interested, allowing them to make more informed decisions when registering for courses.

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 **Vision: Streamline Course Waitlist System**

 Harnessing the potential of technology can enable students to make more informed decisions related to their Penn educations. SCUE believes that certain technological advances could ease the inevitable burden associated with course registration by helping students overcome the perennial challenge of enrollments in closed courses.

 Last year, SCUE addressed how students pursue closed classes by investigating the potential methods for broadening the availability of course waitlist options. As discussed, although students may not be admitted to their preferred classes during preliminary registration, seats frequently become available during the Add/Drop period. Students trying to enroll in a closed class are told to check Penn In Touch periodically; if a student happens to access the page at just the right time, he or she may claim an open spot. The current method is haphazard. Students are rewarded for monitoring a website, rather than for their genuine interest in the course material. This shortcoming is especially problematic for small seminars that benefit from a cohesive group of engaged students.

 In order to address this issue, our efforts to research and implement a viable system continued to progress throughout the Fall semester. SCUE interviewed nearly a dozen senior faculty and department chairpersons. We discovered three broad categories under which all courses fall: large introductory classes, specialized lectures, and small seminars. Based on our interviews, we concluded that small seminars would benefit most from a standardized waitlist system.

 Acting on this conclusion, we delivered a letter to all faculty members asking each professor to manage his small classes with a manual waitlist system. We suggested that, once a class fills, professors request that the department coordinator close further registration on Penn InTouch and, from that point, use email to manage a list of prospective students currently unable to get into the class. If a spot were to open, the professor would manually enroll a student from the waitlist. We realize that many professors already have a functional waitlist system in place and encourage them to continue using their waitlist methods.

 While manual waitlists provide a feasible short-term option for small seminars, they do not address the waitlist needs of larger classes for which managing a manual waitlist would be overwhelming for professors. Hence, in the long term, we recommend the Courses InTouch interface provide professors with a centrally managed, transparent waitlist system, similar to that employed by Wharton’s finance department. We envision a system in which students have the option of enrolling on a waitlist for any class online, through Courses InTouch, and professors can exercise varying degrees of control over their waitlists by managing waitlists manually, coding their waitlist (for example, automatically placing upperclassmen or majors ahead of underclassmen and non-majors), or allowing their waitlist to operate on a default first-come, first-served basis.

 Although there are several potential obstacles, especially those surrounding the technical challenges of creating a functional waitlist, the benefits of a standardized, online waitlist system are manifold. Most importantly, professors will enjoy the participation of passionate, committed students in their classes and students will be freed from the stresses that come with an irregular and confusing waitlist system. SEE SIDEBAR

 **Conclusion**

 Implementing a standardized video course shopping program and centralized waitlist system would similarly better-educate students during the registration process. In creating students who are more informed about their courses, professors will enjoy the participation of passionate, committed students in their classes and students will be freed from the stresses that come with an irregular and confusing waitlist system. SEE SIDEBAR

 **Residential Community**

 **Academic Residential Life**

 **Problem:** Most residential programs represent wastes of resources and intellectual opportunities.

 **Solution:** Hold programs accountable to clear expectations and replace ineffective ones with innovative living-learning models.

 **Status Quo**

 At the 10-year anniversary of the College House system, there is no better time to step back and evaluate the status of Penn’s Residential Programs, designed to bring together students who share a culture, lifestyle or academic interest. These 30 programs are structured differently—some have special amenities, some offer academic credit, some include only freshmen—but all have the same underlying characteristics: a designated section or floor, a central faculty advisor, and a range of related activities. Program themes range from Healthy Living to Film Culture to Study of Infectious Diseases.

 SCUE is interested in assessing just those Residential Programs that are academic in focus, most of which currently fall far short of their potential as learning experiences. They drain Penn’s financial and human resources, and are a burden to both those who run them and students whose expectations for meaningful intellectual gains fall short. Challenges include lack of accountability, inconsistent ideas and goals for the programs, and scarce resources.

 Academic Residential Programs are not considered serious endeavors
by participating students. Underlying this lack of engagement is a minimally competitive application processes that rewards ulterior motives. It turns residential programs into tools for getting into favored dorms, rather than chances for significant academic experiences. Although the College Houses & Academic Services (CHAS) brochure notes that “it is not advisable to apply as a way to gain admission into a particular House as program acceptance is not guaranteed,” it is a warning without repercussions. As it is less likely that one receive his top housing choice should he enter the general, non-Residential Program lottery for College House rooms, students can only gain by applying to Residential Programs. The short essay required for admission is an effective tool to weed out students who are truly interested from those who merely want a prime living choice, resulting in an applicant pool that is not composed of active, committed students programs need to thrive.

Once admitted, accountability is minimal. As students engage themselves in class work and other extracurricular activities, they rarely view College House programs as priorities. There are few repercussions for students who are uninvolved in their residential programs. Because the success of these programs is contingent upon student involvement, these unengaged students compromise the programs’ community-building and academic goals and reinforce their illegitimacy.

The large number of College House programs is a double-edged sword. On one hand it offers options for students with many different interests. But it also programs with relatively small budgets and contributes to competition for student interest.

Another challenge in administering the programs is conflicting visions over what purpose they serve and what they should achieve. Many faculty members point out that the residential programs do not have a defined intellectual focus because they are not designed to be academically based. Professors typically note that the greatest benefit of the College House system is building community among faculty and students, making professors more accessible. Because the focus is not academic, many are hesitant to impose more significant academic expectations on residential programs. Concerns about mandating educational programming leads to reinforcement of lower demands and expectations for the programs.

SCUE agrees that not all residential programs need an academic component. There is much value in having students with similar involvements live together, as effectively exemplified by Riepe College House’s mentoring program. There is also much to be gained by having accessible faculty members calling student dorms their home. Furthermore, SCUE appreciates that there are many students who do not want an academic component in their residence.

At the same time, however, there are many students who could benefit from learning outside of traditional classroom frameworks. The lack of student engagement in current programs reflects shortcomings that can be corrected to maximize and harness student interest. To this end, SCUE offers suggestions for improving the current function of the programs, as well as fostering innovative new options that fill unmet demand.

**Vision: Improve Program Accountability, Administration and Evaluation**

First, CHAS must evaluate its programs to see what is working, dismantling what is not. If the goal of residential programs is holding study breaks and other group activities with an overarching theme, then they should be labeled community-building theme hallways. But if opportunities for academically meaningful experiences are mirrored by sufficient student interest and commitment, stakeholders can work harder to make them realities.

Successful execution of these programs depends on effective planning and leadership by student coordinators, faculty and staff. In order to improve academic rigor, CHAS must articulate clear expectations, with continued funding contingent on adherence to these goals. Currently, administrators, faculty, and students have inconsistent expectations of Residential Programs, a reflection of their many potential purposes. Standardized CHAS benchmarks would clarify what participants are expected to contribute and gain from programs. For example, specifying the number of faculty fellow discussions to be held each month would set a standard for participation in intellectual and academic interactions. Although individual learning is essential to knowledge acquisition, much can be gained from study in a team setting. However, there are limited collaborative spaces for such group learning at Penn, causing consistent high demand for those few spaces that do exist.

One way of adding more meaningful academic dimensions to residential programs is to combine them with for-credit courses. These may be pre-existing courses for which residents are offered priority registration, or they could be new creations. A for-credit designation will ensure that applicants are committed and that program coordinators prioritize academic rigor. This should correspond with improvements to the application process, specifically more comprehensive material for evaluating interested students. [See page III for a discussion of alternative credit models, which can be linked with residential programs.]

**Vision: Design Freshmen Living-Learning Communities for Immersion into Intellectual Pursuits**

SCUE believes freshmen in particular need to be given greater opportunity for smaller, academically focused residential programs, such as through an “Experimental College” model. Out of the 42 residential programs offered, seven are designated as freshman-only; only four of these are academically-focused. Penn’s class of 2013 has 2,477 members, yet there are only 297 spaces allotted in freshman-only residential programs — roughly 12% of the class.

In this “Experimental College” model, students with varied academic interests and backgrounds would be clustered together in different dorms or halls, taking some of the same requirement classes together and working collaboratively towards a culminating final research project. Basic skills, methods, and individual expertise from each discipline in which a student is involved can be utilized for the project. In order to ensure that the program maintains an intimate and dynamic environment, the number of students in the program should be limited, perhaps to the size of a floor in a larger dormitory or even to an entire building in a small college house.

Students in such a program would not simply attend weekly meetings, but would be given constant feedback from the live-in faculty masters of the program and the other highly engaged students. This model would expose intellectually curious students to academically rigorous coursework at a time when they are preparing themselves for future scholarly endeavors. It would also signal the University’s commitment to supporting undergraduate intellectual development from the beginning, rather than focusing on students who have already decided to specialize in or who are already experienced with college-level studies. [See page VII for a discussion of Freshmen Research Seminars and other ways the University can foster undergraduate intellectual development throughout all stages of the Penn career.]

**Collaborative Spaces**

**Problem:** Campus spaces for group work are in high demand but short supply.

**Solution:** Prioritize group spaces to promote collaborative learning and drive intellectual community.

**Status Quo**

SCUE believes that spaces for group work are essential to the intellectual community of a university. Collaborative learning is a tool that complements both in-class education and individual study. Whether through assigned group projects or informal exam study groups, collaborative work promotes team dynamics and prepares undergraduates for future involvement in professional and academic interactions. Although individual learning is essential to knowledge acquisition, much can be gained from study in a team setting. However, there are limited collaborative spaces for such group learning at Penn, causing consistent high demand for those few spaces that do exist.

There are presently few locations that facilitate student collaboration. Huntsman Hall’s Group Study Rooms (GSRs) represent an ideal group space; each of the 57 rooms seats about six students and is equipped with three whiteboards and comfortable seating. These rooms are used by a large number of students each day, leaving students searching for other spaces to collaborate.

**Vision: Link Residential Programs to For-Credit Courses**

In addition to improving the status quo, SCUE recommends CHAS develop new, innovative, academically-significant programming with mechanisms to encourage meaningful participation. Applying the lessons of successful academic residential programs at other institutions, Penn can build exemplary programs of its own that foster academic curiosity, engagement and faculty-student interaction.

Penn should view the College Houses as intellectual communities and living-learning arenas. The unique residential environment lends itself to analytical discussion and reciprocal learning between students and professors. This potential can be harnessed to maximize formal learning, such as through focused seminars and small-group research projects. Academic residential programs can also help students transcend scheduling constraints and encourage exploration. They have potential as alternative ways to fulfill requirements and can focus on topics or teaching styles not found in the traditional classroom, such as a liberal arts seminar or hands-on business practicum.

One way of adding more meaningful academic dimensions to residential programs is to combine them with for-credit courses. These may be pre-existing courses for which residents are offered priority registration, or they could be new creations. A for-credit designation will ensure that applicants are committed and that program coordinators prioritize academic rigor. This should correspond with improvements to the application process, specifically more comprehensive material for evaluating interested students. [See page III for a discussion of alternative credit models, which can be linked with residential programs.]

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There are presently few locations that facilitate student collaboration. Huntsman Hall’s Group Study Rooms (GSRs) represent an ideal group space; each of the 57 rooms seats about six students and is equipped with
audio conferencing, smart whiteboards, dual wide-screen monitors, computer work stations, and two laptop connections for display. However, only Wharton students can reserve the GSRs. Other students face far fewer options, such as limited space in Van Pelt’s Lippincott Library and Weigle Information Commons.

The desire for such rooms is reflected by the fact they’re often consistently booked—especially during the times they are in greatest need, such as during midterms and reading days. Other potential options include College Houses lounges and cafes, but communal spaces are often not conducive to academic work; in particular, they lack the technological capacity that make Huntsman and Weigle such high-demand locations.

**Recommendations**

**Vision: Create More Group Study Locations**

SCUE believes all four undergraduate schools can benefit from encouraging their students to collaborate, whether in a formalized, assignment-based way, or through the encouragement of group studying. Creating more group study locations will promote this type of learning. Perhaps the model that is best to replicate is that evidenced by Weigle Information Commons. Students are encouraged to engage in an informal way with their classmates, allowing for a less intense and less stressful experience. In addition, the technological capabilities—such as video recording systems, monitors, and laptops—allow for wider learning opportunities. In encouraging and serving to prioritize the creation of new collaborative spaces, limited resources are a clear challenge. However, the university’s eastward expansion project represents a tremendous opportunity to rethink how campus space is used. For example, relocating the administrative offices housed in the Franklin Building would make this valuable, central space available for student benefit. The building could be transformed into an academic hub that combines collaborative study spaces with seminar rooms. In addition, all rehabilitation and new construction projects should make student work space a priority, including group-oriented settings and technological capacity. [See page VI for a discussion of standardizing classroom technology.]

**Conclusion**

Penn can foster collaborative learning by constructing physical spaces that facilitate it. Clear student demand in more collaborative spaces exist. By making them a priority for campus construction, Penn can enhance the undergraduate experience and cultivate a thriving intellectual community.

**Beyond Penn**

**Civic Engagement through Academic Partnerships**

**Problem:** Lack of academic rigor and relevance undermines opportunities to connect Penn’s strong civic profile to classrooms.

**Solution:** Integrate ABCS courses into curriculum while standardizing and ensuring academic quality.

**Status Quo**

Given the growing importance of theory-based learning in real world applications, SCUE perceives civic engagement as a vehicle to sensitize students to the value of education and to enable them to identify problems and implement sustainable solutions in the community. Beyond Penn, students can use the conceptual frameworks from class and the pragmatic tools acquired from civic experiences to make informed decisions, formulate and propose public policies, and establish rewarding partnerships. As best stated in President Amy Gutmann’s Penn Compact: Engaging Locally and Globally, all students and faculty should “share the fruits of our integrated knowledge wherever there is an opportunity for our students, faculty, and alumni to serve and to learn.”

At the 2009 Conference of the Coalition of Urban and Metropolitan Universities, Penn was ranked first in a “Survey of College and University Civic Partnerships”, which recognized the university’s contributions to local communities, most notably its contributions to improving West Philadelphia schools. The numerous civic resources available to Penn’s students and faculty, notably the Netter Center for Community Partnerships and Civic House, make the university an ideal place for community engagement.

The Netter Center’s Academically Based Community Service (ABCS) program stands as Penn’s predominant civic outreach into local communities. Answering the President’s call for Local Engagement, ABCS follows a model of service learning, targeting problem-oriented research. ABCS courses equip students with the proper tools and skills to make successful and lasting change in local communities, directly interfacing with public schools and community organizations. Students can delve into issues ranging from urban nutrition to clinical psychology and develop innovative strategies that synthesize the information they have learned.

SCUE applauds the efforts by Penn faculty and administrators to facilitate civic engagement on campus. The success of these programs, however, comes despite a lack of curriculum integration. A student’s enrollment in an ABCS course is most likely a result of his or her self-motivation to seek out such opportunities. While this sort of participation must not be undervalued, SCUE feels that students should additionally be made aware of civic partnerships through College curriculum options. Students not already active in community service activities may have trouble identifying these opportunities and, more importantly, their academic relevance. Without the incentive of contributing to curricular requirements, ABCS don’t represent priorities in students’ busy schedules. An underlying barrier to wider embrace of ABCS is their perception of being academically soft.

**Recommendations**

SCUE believes that Penn should motivate and enable undergraduates to engage civically through academic partnerships. In doing so, it will prepare students to serve a greater cause as global citizens.

**Vision: Integrate Civic Engagement Into Curriculum Requirements**

SCUE proposes that ABCS courses fulfill major and sector requirements, and that the breadth of this coursework expand to untagged undergraduate departments. SCUE recommends the university allow students to count one or more ABCS courses in the form of major-related elective credit. To qualify, an ABCS course would either substantively complement a course required for the major or address central issues often considered in the field. Students would inform and clarify objectives learned in class by analyzing these critical issues under a civic lens. This policy would allow students who might not have freedom in their academic plan to incorporate community engagement into their time at Penn.

Similarly, ABCS Courses should be allowed to count for Sector Requirements. Considering their multidisciplinary nature, some ABCS courses ideally fit established sector goals, especially those of Society, Arts & Letters, and Humanities & Social Sciences.

**Vision: Ensure Rigor of ABCS Courses**

In advocating for an expanded role ABCS in the curriculum, it is important to address the perception that ABCS courses are less academically rigorous than non-ABCS courses. SCUE believes ABCS must not only tie civic engagement to course credits, but should immerse students in challenging learning atmospheres that force them to think critically and hold them to suitable standards.

Although some current offerings do provide this, the broader ABCS program is hindered by lack of a process to ensure all courses meet academic expectations agreed upon by all stakeholders. SCUE proposes a formalized structure for evaluating and maintaining ABCS academic rigor. Departments should work closely and regularly with the Netter Center Development guidelines to ensure ABCS course should achieve, as well as regular evaluation and review processes for concerns that arise. This might involve reviews of syllabi and on-site observations. This process should also include the voices of ABCS professors, participants and the community members with which they work. Once academic rigor is standardized, it becomes more appropriate that these courses count for major and sector requirements. Their increased standing will help attract students who are genuinely interested in the academic components of ABCS and committed to meeting their expectations.

**Conclusion**

Penn’s long-term success as a community partner depends on lowering curricular constraints to civic engagement while ensuring academic rigor. We thus urge the university to integrate ABCS courses into the curriculum by allowing courses to fulfill major and sector requirements. Continued collaboration among the Netter Center, departments and faculty will ensure ABCS courses are fulfilling both their academic and civic purposes.

**Study Abroad & Off-Campus Opportunities**

**Problem:** High barriers and inconsistencies mean Penn’s commitment to global engagement doesn’t translate into meaningful undergraduate involvement.

**Solution:** Integrate global initiatives into campus life while increasing opportunities for academically meaningful study abroad options.

**Status Quo**

As a world-class university, Penn’s global engagement initiatives are central to the University’s academic and social missions. Penn strives to engage globally, but what should this mean in practice? Students’ ability to reap these benefits is hindered by barriers to participation and missed
opportunities. Lack of cohesion and classroom connections mean undergraduates are not meaningfully linked to Penn’s array of global programs and research centers.

**Recommendations**

SCUE believes experiences abroad are significant intellectual opportunities that should be possible for all Penn students. Models range from traditional semester-long enrollment at foreign universities to innovative, flexible options like courses with abroad components or gap years. Such experiences provide students with unique understandings of other cultures, opportunities to integrate disciplines in new settings, and gain hands-on experience that enhances global-oriented academic programs. By promoting the academic benefits of abroad options and harnessing undergraduate capital on a global scale, Penn can better fulfill its commitment to global engagement while gaining untapped resources that advance its work.

**Vision: Expand Alternative Forms Models of Studying Abroad**

To accommodate diverse student schedules and needs, Penn should expand and innovate the types of study abroad experiences offered while prioritizing their intellectual benefits and ensuring their academic quality.

Study Abroad opportunities are offered through Penn Abroad during the regular academic year. During the summer, five-week programs are run through the school of Liberal and Professional Studies. A large portion of the student body is unable to study abroad because of existing major or general education requirements, financial concerns, or extra-curricular and leadership commitments. Burdens are particularly pronounced for those pursuing double-majors and dual degrees, as well as transfer students unable to receive credit for previous coursework. Summer opportunities are a useful alternative to semester-long study abroad, but similarly inaccessible for many students seeking internships or other employment.

SCUE proposes that Penn increase the implementation of one-credit study abroad programs during winter and spring breaks, which would provide similar benefits. The infrastructure is already in place for one-credit summer abroad programs, facilitating expansion of such offerings; the same procedures could be translated into winter opportunities as well. Courses would be designed by individual departments and administered by the College of Liberal and Professional Studies. Abroad experiences could also supplement already existing courses.

SCUE also encourages departments to offer courses that combine standard lecture or seminar structures with abroad components. New courses can be designed around specific off-campus experiences, or such experiences could be incorporated into already existing classes. For example, a lecture on European history offered during the spring semester could also include an optional trip during Spring Break to explore the content in person.

Classes would allow students to engage with relevant material before departing, while projects completed during and after their return would allow low synthesis of knowledge and practical application of the experience. Mechanisms such as preparatory research, lectures before departure, and follow-up assignments would ensure such courses do not devolve into glorified field trips. Moreover, as such courses would be designed and led by Penn faculty, SCUE is confident they would necessarily adhere to the same academic standards as other departmental offerings.

**Vision: Promote Academic Research in Study Abroad**

By immersing students in the culture, history, economics, and politics of their host country, time abroad serves as a catalyst for research by prompting questions about their first-hand experiences. Unfortunately, after returning to Penn, many students no longer have access to the rich primary sources on their subject, whether surveys, interview subjects, or national archives. While some students are able to secure coveted funding to return to their region of interest these places to collect data, many cannot.

SCUE believes Penn should emphasize research during study abroad preparations, as well as cultivate ways for students to create academic opportunities. Through proactive planning, students could better incorporate research into time abroad without extra costs or missed opportunities. This will involve increased commitment, coordination and collaboration among stakeholders including CURF, Penn Abroad, individual departments and academic advisors.

Aligning with our belief that students be involved in research throughout their Penn careers, SCUE proposes that all students planning to go abroad be advised to think about potential research topics and investigate the primary sources available in their host country. Advisors at all levels should ensure students are familiar with their options and equipped with the tools for pursuing them. In addition to promoting awareness, Penn could provide incentives that encourage research abroad; for example, those who propose research designs before departure could be eligible for credit and priority access to departmental funds for expenses like travel and archival fees.

Greater institutional support for research abroad will help promote study abroad as an integral part of broader academic pursuits, ensuring does not simply become a vacation from Penn. Where resources and student initiative permits, students should leverage existing relationships between professors and their colleagues abroad to facilitate seminars or research opportunities. Close involvement of Penn faculty will provide direction for students and ensure the academic rigor of resulting projects.

**Vision: Engage Undergraduates in Penn’s Global Footprint**

The current array of global engagement initiatives falls short as a cohesive strategy. Rather than a distinctive global identity, the status quo represents disjoint and scattered projects that, while admittedly successful in and of themselves, poorly serve Penn as a whole.

At one end of the spectrum, isolated partnerships exist between faculty and their international colleagues, with undergraduates excluded from these fruitful collaborations. At the other end, President Amy Gutmann has announced prominent alliances with Tsinghua University and Shanghai Jiao Tong University, but it has not yet been evident how these relationships will enrich the undergraduate experience locally and expand undergraduate opportunities globally. If the university claims these programs were initiated to enhance the academic experience Penn fosters, they need to be created and evolved with undergraduate students in mind.

SCUE believes Penn’s central leadership should consult more broadly with schools and research centers in constructing a global vision for Penn that serves all its stakeholders, and enhances Penn’s public profile. Just as Penn partners with West Philadelphia public schools through the Netter Center for Community Partnerships, merging the best of Penn’s intellectual capital with the creativity and service-oriented drive of its students, so too should a center for international partnerships serve as the clearinghouse and enabler of a series of rich, multidisciplinary, and accessible academic partnerships in the model of Botswana. From an undergraduate perspective, Penn would be the first university to meaningfully transcend the traditional study abroad experience, integrating research, service, and study at partner universities that have deep linkage with Penn through scholarship and exchange.

**Conclusion**

Participation in Penn’s range of study abroad opportunities is often hindered by scheduling constraints, lack of awareness and encouragement, and financial considerations. Lowering these barriers will improve student ability to contribute to Penn’s global presence. In better linking undergraduates to its worldwide research and programs, the university will strengthen its commitment to global engagement.

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