Curricular Review Committee

Final Report (April 20, 2015 version)

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Preface

The bulk of the Curricular Review Committee’s work took place during the 2012-13 academic year, before President Hanlon took office. During AY2013-2014, major parts of the committee’s recommendations, in particular those pertaining to distributive requirements and the weekly class schedule, were reviewed in detail by the Committee on Instruction, the Committee on Policy, and the Committee of Chairs. We appreciate the excellent feedback these colleagues provided and have incorporated many of the suggestions into this final report.

President Hanlon’s tenure began in June of 2013. Since that time we have taken the opportunity to inform him of the committee’s work and recommendations and to become familiar with his own priorities for elevating Dartmouth’s academic enterprise. We are confident that this report’s findings are compatible with and reinforce the President’s vision.

We would like to thank all faculty members who offered input and suggestions during this process, and we offer a special thanks to Tom Hier of Biddison Hier, Ltd. for his expertise, guidance and patience in helping us rethink and propose modifications to Dartmouth’s class schedule.
Summary of Major Recommendations

1) *Strengthen Dartmouth’s intellectual environment,* by reinforcing the rigor of a Dartmouth undergraduate education and assuring that undergraduate social and residential life complement Dartmouth’s academic mission.

2) *Improve academic advising,* particularly in the sophomore year, to assure that students value both the breadth and depth of their liberal arts education.

3) *Simplify distributive requirements,* to encourage students to take greater ownership over the breadth component of their liberal arts education.

4) *Emphasize the importance of undergraduate research across all majors,* thereby encouraging students to take full advantage of Dartmouth’s commitment to a scholar-teacher model.

5) *Revise the weekly class schedule* in recognition of a more dispersed campus and to open new learning opportunities for faculty members and students.

6) *Embrace technological opportunities* that reinforce Dartmouth’s core mission and its commitment to close student-faculty interaction.
A) The Current Curricular Review in Historical Context

Dartmouth’s undergraduate curriculum continually evolves to meet the aspirations of its faculty and the intellectual needs of its students. Perhaps the most significant transformation took place in the late nineteenth century, as the College made a gradual transition from a classical curriculum prescribed for all students to an elective curriculum focused around the selection of an academic area of concentration. The early twentieth century saw the introduction of distributive requirements. With those two critical pieces – the major and distributives – in place, the faculty has undertaken comprehensive curricular reviews roughly every two decades since World War II. The prior comprehensive review took place in 1991 and its changes went into effect in 1994-95.

The 1991 committee recommended, and the Arts and Sciences faculty approved, a change in distributives requiring that each undergraduate pass ten courses in eight specific categories. The faculty also approved a World Culture requirement, calling upon each student to complete successfully one course in each of three geographic areas – North America, Europe, and “non-Western.” Departments and programs were required to add a culminating experience to their majors – one intended to be academically challenging and appropriate to the discipline of the particular department or program.

The Dartmouth curriculum may change significantly as a result of comprehensive reviews, but also from faculty decisions made in the time between such reviews. The notable changes to the undergraduate curriculum since 1991 include:

i. A greater emphasis on writing, particularly in the first year, including the introduction of a two-term writing sequence and an end to the policy of exempting a portion of the first-year class from Writing 5.

ii. The removal in 2005 of an interdisciplinary distributive requirement that had been introduced as part of the 1991 curricular review. The Arts and Sciences faculty affirmed the importance of interdisciplinary study but decided it could not meet the stated requirement and offer a sufficient number of courses taught by two or more faculty members from different disciplinary perspectives.

iii. A change from Europe, North America, and non-Western in the World Culture distributive categories to Western Cultures, non-Western Cultures, and Culture and Identity.

iv. A change in the labeling of one distributive category from Philosophy, History, and Religion, to Systems and Traditions of Thought, Meaning and Value.

v. The introduction of minors by most departments and programs, and restrictions on the ability of students to construct modified majors.

vi. The creation of new departments and programs including Asian and Middle Eastern Languages and Literatures; Jewish Studies; Theater; and Latino, Latin American, and Caribbean Studies. Computer Science, formerly part of Mathematics and Computer Science, formed its own department.

The charge of the current Curricular Review Committee was to undertake an overall assessment of the undergraduate curriculum in the context of Dartmouth’s liberal arts education. As was the
case in 1991, the committee focused attention on particular aspects of the curriculum and of the overall student-faculty educational experience.

**B) Liberal Arts Education at Dartmouth**

The Committee re-affirmed Dartmouth’s commitment to provide an exceptional liberal arts education within an academic context that offers both students and faculty members the benefits of a research university. To establish a foundation for the review, committee members discussed Dartmouth’s distinctive place in the academic community, overall learning objectives for Dartmouth undergraduates, and the core principles that inform Dartmouth’s version of a liberal arts education.

**B.1. Dartmouth’s distinctive model**

Dartmouth is a research university with a liberal arts college at its core. It enrolls 4400 undergraduates, over twice the enrollment of more typical liberal arts colleges. It has over 400 tenured and tenure-track faculty members and over 200 adjunct faculty members in 39 departments and programs spanning the arts and humanities, the sciences, the social sciences, and interdisciplinary programs. Within Arts and Sciences Dartmouth offers Ph.D. programs selectively, in the physical and natural sciences along with psychological and brain sciences. Dartmouth’s long-standing professional schools of medicine, business, and engineering provide additional resources and collaborative research and teaching opportunities to Arts and Sciences faculty members as well as undergraduates. Post-doctoral fellowship programs are increasingly prominent at Dartmouth and President Hanlon’s Society of Fellows, launched in 2014, signifies Dartmouth’s commitment to developing academic talent at the career stage between students (graduate and undergraduate) and the permanent faculty.

The Dartmouth faculty takes great pride in embracing fully both sides of the “teacher-scholar” ideal. There is an expectation that all faculty members, including the most accomplished and recognized scholars, devote energy and attention to the intellectual needs of undergraduates. This commitment also holds off-campus, where Dartmouth maintains a tradition of sending its own faculty members to offer courses and administer programs.

From the vantage point of an undergraduate, Dartmouth’s combination of research university resources and a culture of dedication to teaching and mentoring provides an ideal learning environment. Dartmouth students have routine access to scholar-teachers who are pursuing nationally and internationally prominent research programs. As Dartmouth faculty members are more committed to teaching and mentoring than their counterparts at most research universities, Dartmouth students enjoy the academic opportunities found at larger research-oriented institutions along with the personal engagement with faculty members that characterizes the best small colleges.
B.2. Learning objectives for Dartmouth undergraduates

Committee members, representing different divisions, disciplines, and intellectual traditions, converged on the following learning objectives for all Dartmouth undergraduates regardless of their chosen field or fields of study:

i. The development of critical thinking skills, that is, the ability to analyze, gather information, match arguments and evidence, and re-evaluate findings in the face of new or contrary information.

ii. The cultivation of creative instincts in order to uncover new intellectual problems and opportunities and to imagine new approaches to long-standing problems.

iii. The appreciation of intellectual diversity by viewing issues and problems from multiple perspectives, addressing them by using multiple methods and modes of inquiry, and recognizing why some individuals hold views radically different from one’s own.

iv. The ability to work effectively both independently and collaboratively as part of a team.

v. The embrace of active learning, i.e., the recognition that exceptional undergraduates are not simply passive consumers of existing knowledge but can be meaningful participants with faculty mentors in the creation of new knowledge.

vi. The cultivation of knowledge that is both broad and deep, without overemphasizing one at the expense of the other.

vii. The flexibility to learn on and off campus, and to learn “experientially” out of the classroom as well as in the classroom.

viii. The development of a sense of ethics, personal responsibility, and civic engagement.

B3. Principles that inform Dartmouth’s liberal arts education

Committee members recognized that Dartmouth provides a potent academic environment for liberal arts education, based on a set of expectations for students, faculty, and student-faculty interaction:

i. Students, with the guidance of faculty advisors and mentors, are expected to take ownership of their educational program. Each student has the opportunity to customize his or her educational experience within a broad array of distributive and other requirements. Dartmouth’s schedule offers students the flexibility to study with Dartmouth faculty members off-campus as well as on-campus, and to integrate curricular choices with co-curricular and extra-curricular opportunities.
ii. Rather than learn passively, students are encouraged to take intellectual initiative and experience directly the process of knowledge creation. There are ample opportunities to build upon the foundation of coursework and undertake independent research (e.g., culminating projects, honors theses, one-on-one research tutorials, laboratory work) under the guidance of, and at times in collaboration with, faculty members.

iii. Faculty members are expected to provide as rigorous an education as possible, challenging students intellectually and holding high standards for their performance.

iv. The faculty is expected to improve curricular programs and initiate new ones in response to intellectual opportunities and student interest, and to assure that pedagogical techniques maximize student potential for learning.

v. Dartmouth professors are expected to do more than meet the baseline expectation of teaching their classes. They are responsible for developing scholarly profiles so that their teaching is informed by their own passion for knowledge creation. They should serve as mentors to undergraduates, helping them grow from being consumers to producers of knowledge during their four year experience.

C) Major Themes and Recommendations

C1. Commit to strengthen Dartmouth’s intellectual environment

Committee members felt strongly that the character of Dartmouth’s intellectual environment was more important than any particular curricular initiative in determining the extent to which the College reached its full academic potential. The committee discussed two concerns in particular. First, while recognizing its overall high level of quality, committee members perceived an opportunity to make the Dartmouth educational experience more rigorous. Second, they expressed concern over the extent to which Dartmouth’s campus life worked at cross-purposes, rather than in tandem with, Dartmouth’s academic mission.

Academic Rigor. The committee appreciated that most Dartmouth faculty members are dedicated teachers who put considerable time and effort into their classes and are receptive to working with students outside of class. Committee members expressed the concern, however, that over time, faculty expectations for student work effort and performance may have gradually slipped. In academic year 2000-2001, the average GPA for Dartmouth undergraduates was 3.33. Over the past fourteen years the average GPA has increased slowly but steadily, reaching 3.46 by the end of academic year 2013-2014. Yet, a majority of Dartmouth students report on course evaluations (collected systematically since 2006) that they typically spend less than 10 hours per week (and many spend less than 5 hours per week) on each of their courses. A minority – roughly between 10 and 15 percent – report spending more than 15 hours per week on any particular course (see Figure C 1).
Committee members felt that responsibility to maintain rigorous standards and workload expectations rests at multiple levels: with individual instructors, with departments and programs, and with the faculty as a whole. Many committee members also believe students tend to respond positively to higher expectations embedded in more challenging courses.

Committee members respect that individual faculty members have considerable discretion to determine workloads and performance expectations within their particular classrooms. Therefore the committee urges all teaching faculty members to reflect on the extent to which the work they demand is commensurate with the capabilities of Dartmouth students and the quality of a Dartmouth education. This pertains to weekly reading and class preparation, as well as to writing assignments, problem sets, creative arts and performance work, and laboratory work. The CRC also requests that the Committee on Instruction (COI) revisit its teaching and classroom guidelines to ensure that expectations for academic rigor are explicitly stated.

The committee asks departments and programs to reflect on academic rigor by examining their major requirements and culminating experiences. These topics are discussed further below in section C4.

The faculty as a whole should re-affirm its commitment to academic rigor and treat it as a key
positive factor that differentiates a Dartmouth education. The committee appreciates work already done in this spirit under the auspices of the COI. The COI recently tightened transfer term requirements to ensure that groups of students do not treat transfer term options as primarily social time rather than as an integrated part of their individual courses of study. The COI’s recommendation, approved by the faculty, to use Advanced Placement status for placement, rather than for credit, was designed to encourage our most prepared students to select more advanced courses rather than to lighten their course loads. The committee encourages the COI to continue its efforts to address grading practices, while recognizing that grade inflation poses a collective action problem that ideally requires a solution not only at Dartmouth but also at schools of similar academic quality.

Campus Social Life. Committee members expressed a variety of opinions regarding the extent to which faculty members should be involved in student social life beyond the classroom. All agreed, however, that campus social life has profound implications for the quality and effectiveness of Dartmouth’s academic experience. President Hanlon’s Moving Dartmouth Forward initiative reflects this belief as well.

Committee concerns were both general and particular to Dartmouth. Admissions competition for the most selective colleges and universities today creates incentives for students to be “masters of everything” including schoolwork, sports, music, student government, volunteer work, and international experiences. Our impression is that many students carry this pattern into college, with a tendency to substitute a flurry of diffuse activities for intense concentration on what should be the primary purpose, academic engagement. Committee members found a common student attitude to be that there is only so much time for classes given the array of competing commitments. Some committee members reminded the group that many Dartmouth students overcome this temptation and dedicate themselves academically in rich and rewarding ways; others lamented that fully capable and prepared students sometimes decline to undertake honor’s theses or similarly challenging academic work because they aren’t willing to commit the requisite time and effort. Roughly 20% of Dartmouth students undertake honors theses in their areas of concentration; this percentage has remained consistent over the past decade.

We suspect that the general challenge described above applies to students at our peer schools as well. At Dartmouth, the problem is compounded by a dominant social system that inhibits academic performance and commitment under the guise of a “work hard-play hard” mantra. A consequence of work hard-play hard is that academic life (Dartmouth by day) and social life (Dartmouth by night) work at cross-purposes, with many faculty members (including committee members) concerned that the latter detrimentally affects the former. For example, a tradition of house meetings that encourages the “weekend” to begin on Wednesday night leaves a segment of the student population unprepared for class and academic work Thursday and Friday. During designated winter and spring weekends, this pattern is carried to absurd extremes. Along the lines discussed above, some faculty members may be tacitly condoning this pattern by adjusting their classroom expectations to the “realities” of student social life. Committee members worried in particular about socialization effects – Dartmouth brings in extraordinarily talented and capable students, a percentage of whom get drawn into a social scene that inhibits their determination to reach their full academic potential.

The committee recognizes that the faculty does not have primary responsibility for student social life. It thus urges the central administration and Dean of the College to take initiatives to assure
that the campus social environment reinforces and complements, rather than poses obstacles to, academic objectives. At the same time, the committee acknowledges that students hold their professors in high esteem, and professors have a vested interest in the success of this effort. Therefore the committee urges faculty members to assist individually and collectively in whatever ways they find reasonable, and it is grateful to those faculty members who already have done so.

**C2. Make additional improvements to undergraduate advising**

Academic advising is a key component of the Dartmouth curricular experience, and its value came up repeatedly in committee discussions of specific curricular topics. The advising process offers an opportunity for student-faculty engagement and the building of long term relationships. It is critical in assisting students to navigate the flexible opportunities and challenges of Dartmouth’s schedule, which requires students to integrate on campus coursework, off campus curricular opportunities, and internship and other experiential learning opportunities across four terms per academic year. Advising is particularly important in the context of other priorities addressed in this report. As discussed below, the committee is recommending that students gain greater ownership over the “breadth” or distributive part of their curricular experience, and that they appreciate more fully the broad value of a liberal arts education. Advising is a key instrument in helping to meet those objectives.

The Dartmouth faculty divides advising into pre-major and major components. Pre-major advising is the responsibility of the faculty as a whole, while major advising is decentralized across 39 departments and programs. Units with numerous majors obviously have greater advising burdens than units with few majors, but departments with larger numbers of majors typically have larger faculties to share the advising responsibility as well.

While recognizing that major and pre-major advising are each important, the committee focused its attention on the latter. In the judgment of committee members, Dartmouth students typically devote disproportionate attention and priority to their major or majors – the “depth” part of liberal arts education – and place insufficient attention and priority on the “breadth” part, i.e., the exploration of courses and themes across the broad divisions of the college. The two are linked in that greater appreciation of curricular breadth and the opportunities therein might influence student choices over depth. In other words, rather than simply defaulting to perceived career logic, students with greater appreciation of the full menu of liberal arts opportunities might make different or at least more thoughtful choices when it comes time to choose a major. Ideally, pre-major advising should guide students to appreciate and experience the breadth of the liberal arts and make an informed transition to the major.

Responsibility for first-year academic advising is distributed across the entire Arts and Sciences faculty, with each faculty member in residence in a given year typically taking on five advisees. Committee members acknowledged the effectiveness of this approach may vary. Some advisors spend considerable time and effort to learn the curriculum beyond their own specializations and to remain engaged with their advisees throughout the first year. Others take on a more limited role, sometimes because students make their own way, eschewing the advising process to varying extents. The committee encourages the Dean of the Faculty, in consultation with the Office of Undergraduate Advising, to explore the strengths and weaknesses of the current system relative to
other (and likely more costly) alternatives.

Second-year advising is a more critical concern. There is currently an advising gap between the first-year system and the major advising that typically occurs in junior and senior years. Many Dartmouth students, either by choice, because their relationship with their first-year advisor fades, or because they failed to establish a connection with any faculty member, move through the second year relying on ad hoc academic guidance from peers or other non-faculty sources. Sophomore year is critical for fulfilling distributive requirements and transitioning to the major, typically declared during the spring of that year. Committee members view this gap as a missed opportunity, given the faculty’s commitment to having students appreciate the liberal arts experience in its entirety. The committee urges the Dean of Faculty to close this gap, either by extending the (albeit imperfect) first year system, or by developing some type of system in which a smaller number of faculty members – more committed, fully trained, and reasonably compensated for their extra effort – takes on a greater share of academic advising responsibility for the second year, or ideally for the first and second years.

The committee expresses its gratitude to Professor Cecilia Gaposchkin and the Office of Undergraduate Advising for the significant improvements they have made in recent years in the preparation and training of first-year advisors and in soliciting feedback from students on how to make advising relationships more effective. The committee also appreciates that Office’s ongoing efforts to coordinate more closely with the faculty’s Dean of the College colleagues so that academic advising, personal and experiential advising, and career advising efforts reinforce each other. Finally, some members suggest that Dartmouth make a commitment to thematic advising efforts beyond the existing pre-health effort, for example to serve students particularly interested in international or global education or in connecting curricular with service or experiential learning opportunities.

C3. Rethink Dartmouth’s distributive and world culture requirements

Committee members discussed at length the strengths and weaknesses of Dartmouth’s current structure of distributive requirements. The committee reviewed models at ten different colleges and universities including Brown, Stanford, Williams, Princeton, Yale, and Penn. The Committee articulated several guiding principles for distributive requirements:

Sampling Early: Students should approach undergraduate education with an open mind and experience the liberal arts to the fullest extent practical before deciding on a major.
Flexibility: Students should be able to choose multiple paths to fulfill the letter and spirit of distributive requirements.
Intentionality: Students should be encouraged to plan and conceive of their distributive courses as part of an intellectual whole, rather than as a checklist of requirements to get through in the most efficient way possible.
Reflection and Assessment: Students should be encouraged to reflect upon and articulate the coherence and connections of their distributive choices.

Models of distributive requirements may be organized along a continuum from no distributives at one end (e.g., Brown), various types of distributives in the middle, and a core curriculum at the
other end. After reviewing the alternatives, and with the above principles in mind, the committee recommends that Dartmouth maintain its commitment to some set of distributive requirements.

Several committee members were sympathetic to the logic of a core curriculum, i.e., designating a small subset of courses for every undergraduate to take in order to assure a common intellectual experience. Most committee members, however, opposed a core curriculum for both intellectual and practical reasons. First, they expressed skepticism that there is in fact any “common core” of knowledge essential to every undergraduate’s education. Second, even if one accepted in principle the idea of a common core, committee members felt it would be difficult if not impossible for the faculty to reach a consensus on which small subset of course requirements should constitute that core. For some faculty members, methods and skills might be deemed essential, with debate over what combination of quantitative, qualitative, experimental, archival, and other methods should be granted priority. Other faculty members might view substantive knowledge at the core, again with room for reasonable disagreement. Some would view a course on Western civilization as essential; others might argue for a non-Western focus, driving the faculty back to the arguments that resulted in the current, three-course “world culture” requirement. Committee members expressed concerns that enrollment implications might shape faculty member (and department or program) views of which courses should be placed in a common core. The committee as a whole did not have sufficient confidence in either the principle of a core curriculum or the practicality of implementing it.

Similarly, there was small yet not decisive support for eliminating distributive requirements altogether. The case for doing away with distributives included that it would maximize flexibility for students, and that most students, by their own efforts, would end up approximating if not fully replicating Dartmouth’s current breadth requirements. The majority of committee members was not convinced and expressed concerns that undergraduates already focus too heavily on depth in areas of interest (majors and double majors) at the expense of exploring the breadth of the curriculum, particularly in areas beyond their personal comfort zones. Committee members considered, but ultimately did not support, a proposal to have each student major in one division of the curriculum and minor in another.

While endorsing a distributive model, the committee expressed reservations about Dartmouth’s current structure of requirements. Dartmouth students currently must complete 10 courses across 8 categories in addition to the 3-course World Culture requirement. The current requirements have the advantage of compelling some (albeit limited) student exposure to the sciences, social sciences, and arts and humanities, to applied science, quantitative methods, and Western and non-Western cultures. But the committee finds that this system – essentially a “complete one course in each of many categories” approach – allows an undesirable degree of intellectual passivity. It does not offer students enough flexibility to make connections across their chosen courses or foster an overall sense of how the breadth part of their education forms a coherent whole. As a consequence, fulfilling distributive requirements is widely perceived by students as a box-checking exercise. Many committee members reported that in their own advising experiences students tended to view distributives as something to “get out of the way,” so that they could turn to the more essential part of their education, their major (or double major). A student editorial in The Dartmouth (“Dreading Distributives,” October 31, 2013) made a similar point and stated that “…in practice distributive requirements burden students in their pursuit of some other goal – for instance, a degree in something they care about. Instead of being encouraged to truly engage and explore outside of their
comfort zones, many students treat distributive requirements as something to be accomplished using the path of least resistance.” The Dean of Faculty met with a group of student leaders during the fall of 2013, many of whom expressed similar sentiments and welcomed a reconsideration and simplification of the current requirements.

The committee proposes an alternative system that maintains the overall spirit of the distributive requirement but is simpler, more flexible, and gives students greater ownership and control over the breadth portion of their education. Students would still be required to complete ten distributive courses, but we propose to reduce the number of categories from the current eight to four. The categories will be more intuitive to both students and faculty members since they reflect the current administrative division of our curriculum. Here is a summary of the proposed alternative:

**C3.1: An Alternative Distributive Requirement**

Each Dartmouth undergraduate must satisfactorily complete ten courses as indicated below. The majority of these courses should be completed by the end of sophomore summer. We encourage students to sample from all distributive categories during their first two years.

A) *Humanistic and Aesthetic Inquiry (three courses)*

Undergraduate students should develop the interpretive skills and analytic capacity to understand and engage human culture in its various dimensions. Courses in this category invite students to engage and participate in the creative arts, including music, theater, creative writing, film and media production, studio art, and engineering design. They also familiarize students with the disciplinary methods, critical tools, and modes of inquiry and interpretation common across the humanities, for example in philosophy, religion, art history and literature.

Note: To fulfill this distributive requirement, each student must complete satisfactorily at least one course in critical analysis and one course in production.

B) *Natural Scientific Inquiry (three courses)*

Undergraduate students should develop the critical thinking and problem-solving skills needed to understand discoveries and challenges within the physical and natural sciences. Courses in this category enable students to explore basic and applied advances in the natural world. Students should understand scientific methods of inquiry, including quantitative and experimental methods, and learn how to conduct research and interpret results. Courses appropriate to this category may be found across the physical and natural sciences, as well as in computer science, engineering, and some areas of geography, anthropology, psychology, and environmental studies.

Note: To fulfill this distributive requirement, each student must complete satisfactorily at least one course with a sustained laboratory or field work component.

C) *Social Scientific Inquiry (three courses)*

Undergraduate students should develop the capacity to understand how and why individuals organize themselves into groups, and with what consequences. Courses in this category expose
students to the theory, practice, and interpretation of social behavior and to the methods of social inquiry. Courses in economics, sociology, government, anthropology, history, geography, and social psychology typically meet these criteria. The combination of courses each student selects should demonstrate understanding of the diverse methods of social scientific inquiry including quantitative, qualitative and historical approaches.

D) Interdisciplinary Inquiry (one course)

An understanding of many of the issues and problems characteristic of the contemporary world require insights beyond the intellectual boundaries of single disciplines. Undergraduate students must develop both disciplinary expertise and the ability to engage across disciplines. Courses administered by interdisciplinary academic programs typically (though not in every case and not exclusively) engage students across disciplines in both content and method.

Concluding Thoughts

As we noted, students should find the proposed system intuitive in that it reflects current administrative divisions in the Arts and Sciences. Current divisional categories, however, do not fully capture the proposed modes of inquiry. Courses in cognitive neuroscience, for example, are administered in the social science division but will likely be designated under Natural Scientific Inquiry. Native American Studies is administered as an interdisciplinary program; although most of its offerings may qualify under Interdisciplinary Inquiry, some of its courses would likely fall under Humanistic and Aesthetic Inquiry while others might fall under Social Scientific Inquiry. Courses in Environmental Studies will sort across Social Scientific and Natural Scientific Inquiry, while those in Women and Gender Studies will sort across Humanistic and Aesthetic Inquiry and Social Scientific Inquiry. The Committee recommends that courses be allowed to carry more than one designation to promote further student flexibility in fulfilling distributive requirements. As with our current system, the Committee on Instruction will be charged to determine into which distributive category or categories each offered course falls.

Committee members debated the omission of an explicit quantitative reasoning requirement from the proposal above. Some argued for its inclusion, while the majority felt that exposure to quantitative reasoning – like exposure to “international issues” or “world culture” as discussed below – is sufficiently diffused across the sciences and social sciences in the current Dartmouth curriculum so as to no longer merit an explicit requirement. The Committee reached a similar conclusion with regard to historical modes of inquiry, which are diffused across the social sciences and humanities. In these cases committee members chose to emphasize simplicity and student flexibility over a more prescribed set of requirements that assured coverage of specific methods or approaches.

C3.2: A “Reflective Document” Requirement

Alongside the new distributive proposal, the committee recommends the adoption of a reflective document requirement. Part of the rationale for the proposed distributive system is to have students reflect more intentionally on the breadth part of their education. Each student will enjoy considerable discretion in how he or she fulfills requirements. Students will be encouraged to make connections both within and across categories of inquiry.
The reflective document is a short statement, ideally one to two pages, written by each student at the beginning of sophomore summer. It should explain how the distributive courses completed (and the remainder to be chosen) fulfill the breadth part of the student’s liberal arts education. Students should reflect on how their chosen distributive courses fit together, for example, by articulating common intellectual or conceptual themes that cut across their selected courses. The document should also include a rationale for the “depth” part of each student’s planned course of study, e.g., an intellectual explanation for the student’s choice of major. The document is intended to serve as a reflective bridge between the first half and second half of a student’s time at Dartmouth, and between the initial, exploratory phase of liberal arts education and the subsequent pursuit of disciplinary depth within a department or program.

Reflective documents should be reviewed and approved by both pre-major and departmental advisors. At the end of sophomore year, pre-major advisors, in effect, are handing off their advisees to department and program advisors. Both sets of advisors should be cognizant of how each student plans to knit together the breadth and depth components of his or her liberal arts education. The reflective document can help to serve as a basis for those ongoing conversations between student and advisor(s).

The committee recognizes that having to write a reflective statement will not guarantee careful planning on the part of all students. Some students may simply construct after the fact rationalizations for the distributive courses they happened to take. Even that exercise, however, could be useful in prompting students to make connections within and across fields of study. The committee also recognizes that it is creating an additional administrative task for faculty members who serve as pre-major and major advisors. It does so on the assumption that, as discussed in section C2, the faculty will devote greater attention to pre-major advising, and in the belief that this extra step is justified by the potential for more students to think intentionally about their liberal arts education and engage faculty members in that process.

The committee urges that the faculty reflect on its own role in helping students to take greater ownership over their liberal arts education. Developing learning objectives for each course, and including them within the syllabus, along with an explanation for that course’s distributive designation, will help students appreciate the intellectual connections and critical skills they are developing across their chosen courses. The faculty should also redouble its efforts to emphasize the importance of curricular breadth in the context of a liberal arts education. Steps might include more explicit language in the ORC and greater emphasis on curricular breadth (to match the emphasis students already place on determining their major or majors) in first-year orientation and pre-major advising.

C3.3: Revising the World Culture Requirement

Currently Dartmouth undergraduates must fulfill a “world culture” requirement by completing three courses – one in Western culture, one in non-Western culture, and one in a category termed culture and identity. The Committee recommends replacing this three-course requirement with a one-course alternative. As in our current system, students would be allowed to fulfill both their (to be renamed) “world culture” credit and a distributive requirement with the same course.
Committee members made various arguments in support of replacing the world culture requirement. Some felt the concerns of culture and identity were by now sufficiently infused within the curriculum such that a mandatory three-course requirement was no longer warranted. In other words, this distributive category introduced two decades ago served its purpose and is no longer needed as a requirement. Others argued that the “western-non-Western” distinction had become anachronistic, a relic of the Cold War relic, and no longer constituted a central line of cultural demarcation. Some committee members questioned the practical utility of Dartmouth’s “culture and identity” category, pointing out that neither faculty members (including members of the Committee on Instruction, charged with implementing the requirement) nor students had a clear sense of what in particular the roughly 250 courses assigned the designation had in common and were intended to accomplish.

The consensus of the committee is that issues involving culture and identity are vitally important, but that our current requirement does not effectively serve its intended purpose. It recommends replacing the current three-course requirement with a more carefully conceived one course requirement. Courses designated to satisfy this requirement should be relatively few in number – say 40-50 rather than 250. Each of these courses should be designed to help students engage and understand a world of differences, whether they be about culture, race, ethnicity, socioeconomic status, gender, religion, or sexual orientation. Committee members emphasized that these courses should teach students how to think about complex issues, rather than what to think about them. The overall goal is for students to be intellectually flexible, open-minded, and respectful as they navigate a world that is simultaneously interconnected and diverse. The committee also recommends that students complete one of the designated courses in this category within their first two years at Dartmouth, and to consider its meaning and value, alongside the other distributive courses they choose, in the reflective documents they write at the end of sophomore year.

The committee recommends that the Dean of Faculty call on the Committee on Instruction or another appropriately representative faculty body to develop clear guidelines and criteria for determining which subset of existing courses, and proposed new courses, might meet this requirement. A clear set of guidelines, in turn, should encourage faculty members to reflect on whether their particular course offerings should be included in this distributive category, and to offer a rationale for inclusion to the COI.

To summarize, the proposed changes in the distributive and world culture categories outlined above would grant students more responsibility and discretion over how they fulfill their requirements. The committee believes fewer categories and more flexibility is better, particularly if the revised and simpler structure is accompanied by a stronger advising system and by efforts by faculty members to articulate the meaning and purpose of a liberal arts education and the role of distributive requirements in fulfilling it.

C3.4: Revising the Language Requirement

The committee asked Associate Dean Lynn Higgins to convene a series of meetings during academic year 2013-14 with colleagues from across the Arts and Sciences to review and suggest possible changes to Dartmouth’s language requirement. The subsequent conversations produced a consensus, endorsed by the committee, that the language requirement should be maintained and strengthened.
Committee members agree that study of languages other than one’s own should be part of every undergraduate’s educational experience. Using a language—and thereby learning to see the world through the eyes of a native speaker—is a cross-cultural experience that helps fulfill the core values of the liberal arts at Dartmouth. Striving to comprehend, speak, and write a language is a particular type of active and experiential learning.

With these principles in mind, and based on input from faculty focus groups, the committee recommends that Dartmouth’s language requirement read as follows:

Every student must successfully complete one non-English language course at the level of Language 3 or above at Dartmouth or transfer an equivalent college-level course taken elsewhere.

Under certain special circumstances, the requirement may be waived by petition to the Language Waiver Committee. A student who receives a language waiver must complete an alternate course as recommended by the Committee.

The proposed requirement reaffirms the current requirement while modifying it in two ways. First, students who demonstrate proficiency or fluency in a foreign language will no longer be exempted from the requirement. Every student must pass at least one college-level course at the level of Language 3 or above, depending on his or her previous study or experience. Students beginning a new language would take 3 courses, as is currently required. Students who possess proficiency at the level of Language 3 would still be required to take one course at or above that level, in order to engage the cross-cultural issues that are an intrinsic part of the study of any language at the advanced level. Students, in other words, should experience the college-level study of a language, not simply demonstrate proficiency in one. Second, the language requirement can be met by transfer credit, on the premise that some students will have gained both proficiency and the cross-cultural experience through their coursework at another institution.

**C3.5: Other Degree Requirements**

The committee spent relatively less time discussing undergraduate degree requirements beyond the general education requirements outlined above. Below is a summary of committee deliberations on other degree requirements.

The Committee reaffirms the value of Dartmouth’s current residence requirement, which holds that undergraduates must be in residence during sophomore summer and during the fall, winter, and spring terms of the first and fourth year. We recognize that President Hanlon has ideas on how to make the Dartmouth schedule operate more efficiently, and we look forward to the recommendations of the committee on optimizing the Dartmouth schedule that he established during the 2013-14 academic year.

After considerable debate, the committee recommends that Dartmouth’s course count – the total number of courses undergraduates must complete satisfactorily in order to graduate – remain at 35. Some members argued, in the interest of creating an even more rigorous academic experience, that the course count should be increased to 36 – 12 terms at 3 courses per term. Others countered that 35 offered students the flexibility to take at least one 2-course term, which was particularly
valuable to students working on senior theses or other time-intensive courses such as lab classes in the physical sciences. The committee also recognized that the recent decision of the faculty to offer only placement, rather than course credit as well as placement, for exceptional scores on high school Advanced Placement exams has restricted somewhat student flexibility in meeting graduation requirements.

The committee reaffirms Dartmouth’s writing requirement (Writing 5 or its equivalent plus a writing-intensive First Year Seminar). The Committee applauds recent efforts to make sufficient sections of Writing 5 available to accommodate all first-year students, and expresses support for the efforts of a cross-divisional group of faculty fellows, in collaboration with the Institute for Writing and Rhetoric, to assure that students continue to focus on writing beyond the first year and across the curriculum. The committee notes that many of the core learning objectives for a liberal arts education, as described in section B.2/B.3, are enabled and supported by work on writing and speaking.

Committee members had spirited discussions and divergent perspectives on the necessity and desirability of Dartmouth’s physical education requirement (including the mandatory swim test). A majority found the requirement and in particular the swim test to be independent of and not particularly relevant to the Dartmouth curriculum. Some members endorsed the spirit of “sound mind- sound body” (perhaps as a more constructive alternative to “work hard-play hard”) and found physical education requirements a desirable co-curricular complement to a liberal arts education. The committee decided not to recommend a change in this requirement, but does recommend that more be done to ensure students complete the physical education requirement by the end of junior year, rather than during senior year when academic activities such as honors theses and culminating experiences are paramount.

C4. Emphasize the importance of and strengthen opportunities for undergraduate research across all majors

The committee’s emphasis on undergraduate research took place in the context of a discussion of the “depth” part of the Dartmouth curriculum, i.e., majors and minors. A key conclusion was that undergraduate research, both in terms of opportunities presented to students and research accomplished by students, is a key positive feature that distinguishes a Dartmouth education. Committee members believe even greater emphasis should be placed on this distinguishing feature for two reasons. First, Dartmouth is fortunate to attract extraordinarily talented undergraduates who have the intellectual capacity to move relatively quickly from passive learning to active participation in the knowledge creation process. Second, undergraduate research is a natural consequence of Dartmouth’s scholar-teacher model in which talented undergraduates have ready access to and work in close collaboration with mentors who are engaged in, and in the best cases are leaders of, knowledge creation in their respective fields.

The best opportunities for undergraduate research should emerge from within each student’s major. Effective research requires some degree of disciplinary depth along with knowledge of methods and modes of inquiry. Students in their first and second years should certainly engage, typically as an apprentice of one sort or another, in a research enterprise. By the third and fourth years, as they acquire sufficient depth, they should be encouraged to participate more actively in
knowledge creation.

The committee strongly urges that undergraduate research be emphasized across all majors in every division, department, and program. Faculty members should consistently remind students that research takes many different forms including, but also beyond, the stereotypical white lab coat setting.

The Culminating Experience. The culminating experience, mandated after the last curricular review for every department and program major, remains a key mechanism for facilitating undergraduate research. In its extended discussion of the culminating experience the committee reaffirmed its utility and value, though it also raised concerns over the extent to which this requirement is applied rigorously and uniformly across departments and programs. These reservations notwithstanding, committee members proved reluctant to impose any type of “one size fits all” standard on the culminating experience, and argued instead that departments and programs are best positioned to determine how to fulfill the objectives of this requirement in their respective disciplines. An effective culminating experience may take vastly different forms including literary analysis, archival work, an artistic exhibition, and a scientific or social scientific experiment.

Rather than recommend a single standard, the committee articulated three principles that should inform the culminating experienced across each major:

1. The culminating experience should be structured to encourage and enable students to engage in knowledge creation in the form of an original research project. (We note that while a large majority endorsed this position, two members expressed concerns about the ability of undergraduates to carry out truly original research in certain fields.)

2. The culminating experience should differ from, and be understood by faculty and students as having expectations that are different than a regular upper-level course offered in any department or program. The culminating experience should not be a single class or series of classes that do not involve a significant student research experience. As discussed below, the committee recommends adjusting the weekly class schedule to accommodate a different time block that at least some faculty members might find useful as a means to distinguish culminating experience courses from regular offerings.

3. Departments and programs must have adequate resources, within reason, to implement an effective culminating experience. Some committee members recalled the introduction of the culminating experience as an “unfunded mandate,” creating incentives for some departments and programs simply to fold it into existing offerings or sequences rather than creating something distinctive and research-oriented.

The committee requests, as an appropriate next step, that the COI conduct a study of how departments and programs currently implement the culminating experience, and develop a means to assure that each major’s culminating experience is both sufficiently rigorous and conforms to the principles outlined above. In 2014-15 the COI, as part of its own initiative to review and increase academic rigor began a review of the culminating experience consistent with this recommendation.
The broader institutional effort. The committee expressed appreciation for Dartmouth’s broader institutional infrastructure designed to facilitate undergraduate research. This includes competitive funding opportunities for students administered by the Dean of Faculty office, individual departments and programs, and co-curricular centers and institutes. Committee members praised the Office of Undergraduate Advising and Research, headed by Professor Margaret Funnell, for its work in publicizing, funding, and coordinating research opportunities for undergraduates. To enhance the broader institutional effort, the committee recommends:

1. That adequate resources be made available to support every Dartmouth student with the motivation and qualifications to undertake undergraduate research under faculty supervision.

2. That students be made aware of all opportunities, including those lodged in Dartmouth’s professional schools. The committee views the creation, in 2013-14, of a cross-school council to oversee undergraduate research as an important mechanism for carrying out this recommendation.

3. That Dartmouth develop more effective means to keep track of undergraduate research experiences, both to publicize this positive aspect of Dartmouth’s curricular experience and to identify and address gaps in research opportunities across fields and class years. For example, it would be useful to have records over time of undergraduates who publish papers either individually or in collaboration with faculty mentors.

4. That the Dean of Faculty recognize faculty members who make extraordinary efforts to facilitate and mentor undergraduate research.

5. That Dartmouth continues to invest in the celebration and recognition of undergraduate research accomplishments on an annual basis.

C5. Revise the weekly academic schedule to reinforce and expand learning opportunities

The CRC recognized that Dartmouth’s academic or class schedule – the blocks of time available during the weeks of a term for course offerings – is a critical framework that structures student-faculty interaction and influences the overall learning experience of Dartmouth undergraduates. Committee members reviewed Dartmouth’s existing class schedule and propose a number of modifications intended to strengthen the overall curricular experience. These include allowing longer passing times between classes, developing options for additional types of teaching blocks during the day, and providing faculty members the option to offer classes in the evening. The committee recognized that revising a class schedule is no simple matter, and that making beneficial changes in some areas could have unintended consequences in others. The committee enlisted the assistance of an academic consultant with considerable experience in this area and asked that he produce a set of alternative class schedules to accommodate preferred changes while maintaining desirable core features of our current schedule. In addition to working closely with the CRC, our consultant met with focus groups of faculty members from the humanities and arts, engineering, the sciences, the social sciences, and the writing program to understand the elements each found
pedagogically most desirable in a class schedule. He also met with several groups of students and with administrators from the Dean of the College office, the Hopkins Center, and athletics. In this section we review the features of Dartmouth’s current schedule and provide a rationale for additional features proposed by committee members. We then propose a modified class schedule that accommodates these new features while preserving to the extent possible the desirable elements of our current schedule.

C5.1: Dartmouth’s Current Class Schedule

Dartmouth’s current class schedule is presented in Figure C2 in grid format. The current schedule provides instructors two options to teach 50 minute classes, four or five times per week, in the early morning. In “prime time,” between 10 a.m. and 3 p.m., there are four options for 65 minute classes three times per week (beginning at 10, 11:15, 12:20, and 1:45), and two options for 110 minute classes two times per week (beginning at 10 and at 2; the 2 p.m. blocks end outside of prime time, at 3:50 p.m.). There is also a 110 minute option later in the day, beginning either Monday at 3 p.m. or Tuesday at 4 p.m. and concluding with a block that begins Thursday at 4 p.m. In the current schedule the passing time between classes is 10 minutes. Classes begin no earlier than 7:45 a.m. and end no later than 5:50 p.m. X-hours, or one additional class period per week, are attached to each block of class time and are scheduled in some cases in prime time and sometimes in the late afternoon.

The CRC appreciates the desirable features of the current schedule. It gives instructors reasonable options to offer classes in different time blocks and to teach in different combinations of weekdays. It provides each class with the flexible option of an x-hour. It is a “clean” schedule in that it minimizes overlapping class blocks. Overlapping blocks allow for more scheduling options, but also increase the conflicts students face when scheduling their classes in any given term. Overlapping blocks also have a negative impact on classroom utilization; rooms assigned in one block cannot be available for any block that overlaps it.¹

C5.2: New Features for a Revised Schedule to Accommodate

The CRC asked our consultant to devise a schedule that would maintain desirable characteristics of our current schedule and accommodate the following features.

A) Longer passing time between classes. Committee members and many faculty members in focus groups expressed a desire to extend passing time from the current schedule’s 10 minutes to 15 minutes. The Dartmouth campus has expanded its geographic footprint over the last 50 years, making it very difficult in some instances for students to exit one class and enter another within 10 minutes. Some faculty members teaching in the Life Sciences Center during 2012-13 indicated that they needed to begin their classes 5 or 10 minutes later than scheduled to accommodate students arriving from prior classes around The Green. The committee considered 15 minute passing times to be essential and the cornerstone of any modified class schedule.

B) A one-hour block, in the middle of one designated day per week, during which no classes

¹ The current schedule also includes a few infrequently used additional modes and time sequences which overlap.
are scheduled. In the current schedule there is no prime-time block during the week in which no classes are scheduled. Committee members feel there is value in leaving at least one-hour per week free of any formally scheduled class time. This hour could be used for community events such as a special Presidential address, a weekly faculty lunch and/or a set of group discussions open to faculty, staff and students along the lines of the Moving Dartmouth Forward community conversations initiated by President Hanlon during fall of 2013. Faculty members who wish to continue the type of discussions held during the “day of reflection” in spring 2013 have noted that an unscheduled hour one day per week would open opportunities for cross-campus dialogue.

C) The option to teach weekly in one three-hour time block. Some faculty members, particularly in social sciences and humanities, expressed interest in the ability to offer advanced classes in one extended session. A three-hour block could be used to distinguish classes that fulfill the culminating experience in a major (e.g., a research seminar) from that department’s regular upper-level class offerings. In this view, the use of a different type of class block would signal to students that the culminating experience class and its expectations were different from “normal” classes. Given the options provided by our current schedule, faculty members frequently teach both upper-level classes and research seminars in the two times per week, 110 minute slots.

D) The option (though not the obligation!) to schedule evening classes. Although not every instructor wishes to offer classes in the evening, at least some faculty members would find, and expect students would find, the use of an evening class slot preferable to the use of one during prime time. There is already considerable “off the grid” class activity taking place at Dartmouth during evening hours including labs, exams, and the viewing of films. Providing one or more formal class blocks during some weekday evenings would enable some professors to use the evening time systematically while not forcing others to do so. This initiative also has the potential to relieve some pressure on popular classrooms that are in great demand during prime time. At the same time, the committee recognized that scheduling evening classes would conflict to some extent with existing curricular and extra-curricular practices for the use of evening time.

E) Maintain the x-hour for purposes of class scheduling flexibility. From the perspective of a class scheduler, Dartmouth’s distinctive x-hour feature is a mixed blessing. On the one hand, it provides valuable flexibility to instructors; on the other, it takes up valuable prime time space in the class schedule.

The CRC recognizes the variability among faculty members in the use of the x-hour. Some instructors never use them, while others use all of them. Reflecting what it took to be broad faculty sentiment, the committee argued strongly for maintaining the flexibility that x-hours provide to instructors to reschedule regular classes in order to accommodate professional travel and other obligations that arise during typical academic terms.

The CRC was less enthusiastic about the practice of some instructors who use most or all of their available x-hours during to term for various purposes, including increasing content delivery of class material in their courses. This was not the initial intent of the x-hour, but a practice
that has developed among certain instructors over time. In recognition of the variability with which the x-hour is used and the confusion this might create for new faculty members, the committee recommends that the Dean of Faculty, in consultation with the Committee on Instruction, provide a set of guidelines to clarify the purpose and appropriate uses of the x-hour.

C5.3: Proposal: A Modified Class Schedule

The committee proposes to modify our class schedule to increase passing time from 10 to 15 minutes, create a block for a three hour seminar, maintain the x-hour feature, and develop evening class options. A schedule that meets these existing and new requirements is presented in Figure C3. Several features of the proposed schedule are worthy of note:

First, the new schedule maintains the variety of class time options found in Dartmouth’s current schedule. There are two 50 minute, 5 day per week periods in the early morning. In prime time, there are four 65 minute periods 3 days per week, and two 110 minute periods 2 days per week. In late afternoon there is a third 110 minute block 2 days per week, and a fourth one is scheduled in a new evening slot. The proposed schedule, like our current one, minimizes course scheduling overlaps.

Second, the schedule allows for 15 minute passing times by slightly extending class times later into the day. Classes that ended at 2:50 p.m. on MWF now would end at 3:15 p.m.; classes that ended at 3:50 p.m. on TTh would now end at 4:15 p.m.

Third, the schedule creates a new option for evening classes on Monday and Wednesday. Instructors can choose to offer a “6A” of 110 minutes twice per week, or a “6B” of 180 minutes once per week. The latter option may be attractive to faculty members who prefer a three hour block in which to teach culminating experience seminars. The evening time slots may also prove useful to faculty members teaching laboratory sessions, most of which are now arranged informally in the late afternoons and evenings.

Fourth, the proposed schedule maintains x-hours in both prime time and late afternoon. The committee initially considered a schedule in which all x-hours were moved to late afternoon, to allow for a three hour teaching block in prime time and a one hour block in the middle of one day per week in which no classes would be scheduled. Members of the Committee on Instruction, Committee on Policy, and Committee of Chairs reviewed that schedule and raised a variety of concerns about moving all x-hours to late afternoon. The CRC took those concerns into account in developing the modified schedule proposed in this report.²

² The proposed schedule is likely to have a few additional modifications, such as an “8A” early morning time slot.
Figure C2: Dartmouth’s Current Schedule
Figure C3: Dartmouth’s Proposed New Schedule
C6. Embrace technological opportunities that reinforce Dartmouth’s core identity and mission

The committee recognized the importance of technological opportunities with the potential to have a significant impact on curricular and pedagogical issues at Dartmouth and elsewhere. These include the emergence of massive open online courses (MOOCs), online study guides such as those provided by the Khan Academy, and the use of resources to “flip” classrooms by encouraging students to digest readily available content online, at their own pace, thereby freeing class time for discussion and other more useful engagement.

Given its mission and identity as a residential college emphasizing close faculty-student interaction, committee members did not envision Dartmouth playing a leading role in projecting course material to the world through online platforms. In the committee’s view, the potential payoff in terms of global exposure and reputation would not justify the resource commitment needed. In light of its established commitment to and reputation for undergraduate teaching, however, committee members felt Dartmouth should have some presence in the MOOC world, both as an opportunity to showcase faculty and with the hope that insights gained through developing even a few online courses might enhance teaching and learning effectiveness in regular on campus courses. The committee notes with approval that in 2013-14 Dartmouth jointed the edX consortium and as part of its initial commitment will develop four online accessible courses in environmental studies, English literature, engineering, and music.

Beyond this more modest commitment to MOOCs, the committee emphasized that Dartmouth should take fuller advantage of technology-enabled learning opportunities. The key point is that technological opportunities should support, rather than direct, the faculty’s curricular and pedagogical objectives. To committee members, the appropriate question to ask is “given Dartmouth’s commitment to a scholar-teacher model and to close faculty-student engagement, in what ways might technology enhance our ability to carry out our core mission even more effectively?” In response, the committee recommends:

1. That the College provides the resources and infrastructure to make it as simple as possible for faculty members to introduce and utilize new classroom technologies. If the barriers to entry are too high (i.e., the time or expertise commitment for the individual faculty member is too high), or if the teaching benefits are less readily apparent, then the average faculty member will be less likely to make the commitment. The committee views DCAL as a key institutional mechanism since it is directed by faculty members and already has as its mission the enhancement of teaching effectiveness. It recommends that DCAL resources be augmented so that it can identify, introduce, and diffuse technology-enabled learning techniques to interested faculty members.

2. That the Dean of Faculty and DCAL provide incentives to encourage faculty-student engagement in more challenging curricular settings, e.g., large introductory courses. Though not discussed by the committee, Dartmouth’s participation in the “Gateway” initiative that began in 2014-15 is directly responsive in that it enables faculty members in selected fields (Classics, Biology, Economics, and Math) to experiment
with techniques design to all more class discussion and student engagement in introductory courses.

**Recommendations and Next Steps**

In this section the committee summarizes action items that are needed to implement the recommendations contained in this report. We suggested in parentheses the campus entity best positioned to take the first steps, while recognizing that most will require actions by multiple players at multiple levels.

**Strengthen Dartmouth’s Intellectual Environment:**
- Enhance academic rigor in classes and majors (instructors, departments and programs)
- Revisit faculty teaching guidelines to assure high academic expectations (COI)
- Advance discussion of grading practices (COI)
- Ensure better fit between campus social life and academic mission (Provost, Dean of College)

**Make Improvements to Academic Advising:**
- Explore alternative models of first-year advising (Dean of Faculty, UGAR)
- Establish a model for the second year (Dean of Faculty, UGAR)

**Modify Distributive Requirements:**
- Apply distributive designations to courses in new categories (COI)
- Implement reflective document requirement (departments and programs)
- Develop guidelines for “understanding of differences” requirement (COP to develop charge)

**Strengthen Undergraduate Research:**
- Review culminating experience (COI)
- Increase support for and recognition of students and faculty engaged in undergraduate research (Provost, Dean of Faculty, UGAR)

**Revise the Weekly Academic Calendar:**
- Implement recommended changes (Registrar, Dean of Faculty)
- Review purpose and use of the x-hour (Dean of Faculty, COI)

**Use Technology to Reinforce Core Academic Mission:**
- Provide resources and infrastructure (Provost, DCAL)
- Address challenging curricular settings (Provost, Dean of Faculty)