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Glossary

Advanced Opportunity Fellowship/Education Graduate Research Scholars (AOF/ED-GRS)

Association of American Universities (AAU)

Curriculum and Instruction (C&I)

Curriculum Committee (in C&I)

C&I Graduate Student In-House Survey

Director of Graduate Programs (in C&I)

Graduate Program Committee (in C&I) (GPC)

Graduate Program Coordinator

Graduate School Support Competition (GSSC)

Graduate Student Support Committee

Institutional review board (IRB)

Ph.D. Graduate School Doctoral Exit Survey

Principal Investigator (PI)

Project Assistant (PA)

Research Assistant (RA)

Research 1 University (R1)

Teaching Assistant (TA)

Teaching Assistantship Committee (in C&I)

Decade of Excellence

The Department of Curriculum and Instruction (C&I) is the third largest Ph.D. granting unit on the University of Wisconsin–Madison (UW–Madison) campus. C&I maintained its number one ranking for graduate education in the *U.S. News & World Report* for 9 of the past 10 years. The department continues to produce cutting edge, world-class research delivered in leading research outlets, demonstrate excellence in instruction and course innovation, and provide a wide range of service to the university, the nation, and the world. C&I is renowned for the quality and the quantity of its students. For the past decade, the department was the premier graduate program in the country, with multiple graduates winning national outstanding dissertation awards in their fields and assuming prestigious post-graduation positions.

In initiating the present self-study, which is both a review of the past 10 years and a look forward, the Dean of the School of Education requested that the department focus on: (a) recent years; (b) funding for graduate students; (c) mentoring and assistantship opportunities for graduate students; and d) overall strengths and challenges. In addition, C&I faculty voted to pursue answers to five questions that will help the department build upon its strengths in a time of flux and guide innovative initiatives and strategies. We seek input from the external reviewers on these questions.

This report has two parts. Sections A–H address the general UW–Madison guidelines for review of graduate programs within which the first two of the Dean's foci are addressed. The second part addresses further of the Dean's concerns, sections I–K, and the five questions in which findings, strengths, challenges, and priorities are summarized across two themes: (1) intellectual breadth and depth of programs, and (2) possible futures and structures of programs.

A. Response to the 2009 Program Review Recommendations

Departmental responses to the 2009 review were organized around four conceptual categories: (1) funding and employment, (2) advising, (3) autonomy and community, and (4) program structures. Miscellaneous comments in the review focused on becoming more familiar with the impact of new e-learning ecologies and faculty knowledge of budgets, both of which constitute concerns for the present self-study.

Funding and Employment

In response to the issues such as transparency in position availability, the department reinvigorated its teaching assistantship committee so that it could serve as a deliberative body and forum for issues involving teaching assistant (TA) positions and concerns. This committee functioned for several years before being discontinued. Given the new School of Education policy to admit fulltime graduate students with 4 years of guaranteed funding, and the need to ensure that our graduate students experience a range of appropriate assistantships allocated thoughtfully across the years of their study, the department approved, in Fall 2019, the convening of a new student assistantship committee with faculty across departmental areas.

Advising

While the review pointed out potential problems regarding student access to information or different advisors offering different information, the department noted: "Problems like these

seem generally to arise from a discrepancy between institutional realities and a preconception on the part of some students that their graduate advisor either is or ought to be the sole source and authority about the steps and requirements of graduate study."

Yet, the department agreed there was a need to better inform students. Further, students have recommended through our surveys that we improve the clarity, consistency, and communication of program requirements. Another recommendation was to improve the accessibility of program information through a centralized online platform and to have this information periodically and systematically updated.

Thus, based on the 2009 review and subsequent student input, the department (a) revised the Student Handbook using student voice and with student input, and posted this online in a searchable form; (b) used graduate orientation days to address differences in cultural beliefs about rules and graduate study; (c) generated templates, flowcharts, and checklists for both students and faculty; (d) asked that new faculty meet separately with the Director of Graduate Programs to understand the milestones and responsibilities; and (e) offered one-on-one advising by the Graduate Programs Coordinator to help ensure that students receive accurate and consistent information.

Students also recommended clearly distinguishing formal policies (i.e., those that need to be stated in the Student Handbook) from idiosyncratic conventions by specific programs or faculty. The availability of one-on-one advising for students with the Graduate Program Coordinator and the new checklists and summaries of resources (available to both faculty and students) now makes it possible for this request to be addressed directly in individual advising meetings.

The 2009 review also noted uneven numbers in the load of advising responsibility among faculty, with some faculty mentoring much larger cohorts of students. The department response did not regard this as a problem, as the "handful of professors who have exceptionally many graduate advisees have voluntarily assumed this burden, and their advisees seldom if ever complain of neglect."

Autonomy and Community

The external report recommended more centralization in response to current conditions of change and uncertainty. The department response pointed to a nuanced understanding of the balance between autonomy and community: "We contend that these two factors are not in opposition. Still, we recognize that the elements [that] structure our autonomy and our community can be examined and strengthened. To do so in ways that do not involve sacrificing either, we must emphasize the normative rather than the legislative or administrative basis of our community."

Two strategies to strengthen the department's balance between autonomy and community were implemented based on the 2009 review: (a) enhanced faculty mentoring of new faculty so that "who we are" as a department and our responsibility to the collective is underscored through both the mentoring and the Chair's annual meeting with new faculty; and (b) a temporary series of departmental seminars titled "Friends of the Mind" presented by faculty to share our research.

The 2009 review also considered more "strong external leadership" as the factor that would be better able to deal with change and uncertainty. The departmental response recognized the

unique qualities of the department's diversity and flexibility and the campus principle of shared governance:

While it is tempting to assume that a more centralized organizational structure, what the committee calls 'strong external leadership,' would be better able to deal with conditions of upheaval and uncertainty, there is little support for this assumption in relation to governance practices at the UW–Madison campus. Indeed, there is ample historical evidence that university efforts to legislate the nature of departmental community by centralizing administrative functions can restrain or hamper intellectual work and limit the flexibility required for the development of instructional programs that respond to changes in external and internal conditions (at least in the field of curriculum).

Given the more centralized campus administrative changes since the 2009 review, however, and given the recent climate survey implemented by the Dean's office, it is time to revisit the ways in which autonomy, flexibility, and community can operate as mutually supportive and constitutive approaches while adapting to externally driven changes.

Program Structures

The department instituted a variety of innovations in response to the 2009 review, including a revision of the department website, enhanced access to course syllabi through e-reserves administered now by the Canvas learning management system, an enhanced three-course methodology requirement, and a core introductory seminar required of Ph.D. students.

Following the 2009 review, the department made innovative changes in several critical areas, including funding and employment.

—See self-study question 1b for discussion of advising and 2a for funding strategies—

B. Graduate Programs: Missions, Research Areas, Learning Goals, and Governance

Missions

As noted in its mission statement, the Master's of Science program (the research Master's is distinct from the Secondary Education Master's program for becoming a teacher) "prepares students ... to enter a new career as an educational specialist, to perform at a higher level in their existing job [or to prepare] for Ph.D. study." As our website further notes: "Motivations for the Master's degree work include professional updating, maintenance of accreditation, acquisition of new perspectives and skills, development of specialized knowledge, preparation to work with student teachers, preparation for leadership among teachers, and preparation for advanced graduate study."

According to its mission statement, the goals of the Ph.D. program are to imbue students "with a distinctive theoretical and critical edge; develop expertise in one of the department's areas of study...; acquire greater competence in curriculum evaluation and development; improve understanding of the teaching-learning process; gain depth and breadth of knowledge in related academic fields; and build a broadened professional background in areas related to curriculum and instruction."

The main differences for studies at the Ph.D. level lie in the kind of intellectual leadership that students are interested in pursuing. Ph.D. study in the department is research-oriented and prepares students for different forms of intellectual leadership in education, including research, teacher education and other teaching in higher education, and leadership positions in educational agencies. These different forms of leadership are not mutually exclusive, but the relative emphasis given to each varies among students and areas of study.

Research Areas

Under Dean Julie Underwood (2005–2015), the department was asked to generate new groupings as a condition of further hiring. The department named five areas of research:

- Curriculum Studies & Global Studies
- Digital Media

• Disciplinary Studies

- Languages & Literacies
- Multicultural Education, Teacher Education & Childhood Studies

The new groupings are a succinct and accessible range of departmental areas that our students can work within and across. This design and thematic structure helps meet the diverse interests of students, which enables our faculty to identify and work across domains.

Our programs contain a dynamic balance between C&I credits and credits that can be taken outside the department and outside the school (see Table 1). This interdisciplinary, inter-unit approach broadens the epistemological range of our students and helps them focus on specialized content. This is a significant part of the success of our students in their research areas and future contributions to their fields. The Ph.D. program does not yet offer certificates as part of its requirements; however, students can enroll in other graduate/professional certificates outside of C&I.

Table 1. C&I Credit Requirements.

Masters: 30 grad credits	Ph.D.: 36 grad course credits (51 total to graduate)				
• 15 C&I courses	• 18 C&I courses				
(no independent studies or	(no independent studies or independent reading).				
independent reading).	• 18 other credits				
• 15 other credits.	(usually a minor of 12 credits and research classes).				
	• C&I 712				
	3 Research methods courses from two different disciplines				
	Most students get to 51 by taking 36 course credits and then				
	dissertation credits.				
	Students who obtained a Master's in C&I are still required to do				
	36 total credits, but are only required to have 12 of those credits				
	be C&I classes. They are also exempt from taking C&I 712.				

A strength of our graduate programs is that seminars are held in common, enabling Master's and Ph.D. students to learn from each other and their instructors, and to form rich and diverse collegial networks that endure beyond the degree. (See Appendix A for a list of graduate seminars available in C&I over the past 3 years.) The Master's can be completed as a separate degree or as a continuation into the Ph.D. Students who wish to move from the Master's degree into the Ph.D. can apply for admission to the Ph.D. program without having completed the

Master's thesis. The same total number of credits remain required. Students who enter the Master's or Ph.D. degree programs without a background in education are assessed educational deficiencies at the point of admission (maximum number of credits is 12).

While the department does not have formal arrangements with other programs, Graduate School policy allows students to pursue two degrees or form a special committee made up of two departments, provided that they are admitted to both. C&I students can take multiple classes across campus. Some students have co-advisors just within C&I, while others have co-advisors from different departments. A smaller number of students complete a joint Ph.D. degree with another department within the school, but the majority of Master's and Ph.D. students work with a single advisor, in addition to a thesis or dissertation committee, and obtain a C&I degree.

Learning Goals

In May 2016, the department developed, vetted, and approved an assessment plan and list of learning outcomes for the <u>Master's</u> and <u>Ph.D. degrees</u> and forwarded these to the Graduate School. By 2017, it was clear that the original plan must be revised and resubmitted to be relevant across the variety of areas and subfields. In these revised plans, learning goals for both the Master's and Ph.D. are:

- 1. **Breadth of knowledge:** Examples of competence may include demonstrating awareness of historical and intellectual context, educational practices, critical research paradigms within the broader field of C&I, and theories and approaches from other fields as appropriate for their research.
- 2. **Depth of knowledge:** Examples of competence may include demonstrating mastery of concepts, theories, and research, and understanding of relevant educational practices and contexts, sufficient to pose questions that extend the current boundaries of knowledge within their chosen subfield of C&I.

A further Ph.D. learning goal is:

3. **Research approaches and epistemological foundations:** Examples of competence may include articulating research problems that build on history, theory, research, and practice within their subfield of C&I; choosing research methods appropriate to those problems and demonstrating understanding of epistemological foundations underlying those methods.

Governance Models, Faculty Engagement, Succession Planning

C&I's Graduate Program Committee (GPC) governs the programs. It comprises seven professors who serve 3-year terms and two graduate student representatives who serve 2-year terms. Faculty engagement is sustained by the rotating nature of appointment to GPC. In addition, GPC issues are communicated monthly or more to faculty members, including issues on which faculty vote and others which pertain to developing new policies. The GPC faculty are appointed by the Chair and the students are volunteers. A member of faculty is appointed Director of Graduate Programs, and the department hires a fulltime Graduate Programs Coordinator.

For more than two decades our graduate program had two consecutive, longstanding directors. In the past 4 years, due to retirement and turnover, the program has had three directors (current director Professor Bernadette Baker has served since 2017) and two coordinators

(currently Thomas Tegart). Such turnover of directorial and administrative staff requires a period of familiarization. While outgoing directors generously mentored and communicated with each new director, the succession between coordinator roles was less smooth due to the limited time for transitions. Yet, even with these internal challenges, evaluations of our current Graduate Programs Coordinator (per our in-house graduate student survey and his performance review) have been outstanding.

While department chairs and personnel committees have not carried out succession planning for leadership changes, we strive to maintain continuity (a) through participation of faculty on the GPC for 3-year service periods; (b) through graduate student representatives who serve for 2 years each, rotating off at different times so that the more senior student representative can mentor the incoming representative; (c) by ensuring that a wide variety of areas in the department are represented on the GPC, making communication with areas consistent; and (d) by providing monthly faculty meeting updates regarding GPC issues.

Through our Master's and Ph.D. degrees, students acquire an understanding of multiple knowledge bases and gain the necessary experiences for a variety of future possibilities and divergent career pathways.

—See self-study questions 2a, 2b, and 2c for discussion of potential program changes—

C. Assessing Students and Programs

Student Assessments

Direct assessments of student performance are the primary means for evaluating student progress and learning outcomes.

Standards-based assessment system. Each semester each instructor directly assesses learning standards. Each course or learning experience in the curriculum is linked to one or more objectives in the syllabus. Performance indicators that describe expected student knowledge, skills and abilities are associated with each course-related standard and are listed in the syllabus. Assessments in graduate coursework include examinations, project artifacts, book reports, oral presentations, papers, annotated bibliographies, video production, and other required assignments reflected through the course syllabi.

Evaluation of theses and dissertations. We use the thesis or dissertation quality as determined by faculty committee members (three to five per committee) to gauge the achievement of learning goals specific to each degree. In addition to the oral defense at the Ph.D. and Master's levels, the Master's degree allows theses projects and examinations to be submitted in the form of capstone assessments, which are then graded by the faculty committee.

Student self-assessment. There are many opportunities for graduate students to self-assess with their advisor's and other students' guidance. An example is the multiple reading groups that professors run for their advisees in addition to regular seminars. Some of these groups are longstanding and have a national and international reputation for aiding student development and self-assessment in a supportive environment. Faculty run such reading groups over and above their regular course loads. They often invite visiting scholars to attend and present, and give students opportunities to teach, lead discussions, try out ideas, and self-assess their performance.

This informal but historical and integral structure is one of the salient pillars for community, networking, and learning goal achievements that mark the department's success.

Qualitative assessment. While not always statistically robust, our in-house graduate student survey administered over the past 3 years provides qualitative content regarding student experiences of assessment and preparation for assessment. The results of the surveys are reported to the GPC, to graduate students, and to the whole faculty at faculty meetings. Discussions of how to address particular comments or patterns led to clarifications in the Student Handbook, in orientation sessions, and in one-on-one advising regarding learning goals and assessment procedures, where necessary.

Indirect assessment. The Graduate School Doctoral Exit Survey provides data for Ph.D. students regarding aspects such as immediate job placement and quality of program and satisfaction. We combine these data with our in-house graduate student survey to refine our learning and assessment practices. An important site of concurrence between the two surveys is student satisfaction with the quality of the programs.

Learning Goals and Program Assessments

We are continually looking to make curricular and program improvements. As a result of the Annual Assessment Reporting exercise which is reported annually to the Provost's office and our own internal assessment, the department instituted the following changes in the programs.

Revised preliminary examination form. In 2018, as part of the Provost's Office Annual Assessment Reporting we examined the pass/failure rate for the preliminary exam in the doctoral program. While 99% of students passed, faculty needed an additional option of "revise and resubmit" on our rubric. We amended our preliminary examination form to explicitly state the Ph.D. learning goals so that greater consistency between feedback, ratings, and the stated goals is apparent, and to enable clarity regarding the nature of a revision where necessary (see p. 5 and Appendix B-1).

Revised Master's oral thesis evaluation form. In 2019, in response to comments on the C&I Graduate Student In-house Survey, we revised the assessment form to include the Master's learning goals (see p. 5). This form, in addition to the preliminary examination form, is made available to students prior to sitting the examination or the oral defense so that they can discuss expectations again with their advisor and committee.

Formation of the Curriculum Committee. Our curricular improvements have been supported by this major innovation since the 2009 review. The Curriculum Committee vets and approves 675 and 975 level topics courses so that replication is avoided and epistemological diversity enhanced in graduate offerings. Another responsibility handed over to this committee from suggestions by the GPC was to develop new certificate programs of shorter duration that is hoped will reach previously marginalized audiences, such as prospective students who cannot always make it to a campus. Undergraduate, post-bachelor's, and graduate/professional certificates (discussed in self-study question 2b) have been proposed. Currently, we are determining which certificates across which areas to develop.

New professional development series. This new series lets students practice upcoming conference presentations, public speaking or lecturing, and job talk presentations in a supportive environment and to practice fielding questions. It runs monthly (more often where necessary),

and students can request that their presentations be videoed as a further source of feedback. The advisor must agree to attend so that feedback is from a faculty member as well as other students.

Increased student travel and dissertation funding. We greatly enhanced the funding made available to our graduate students by increasing the amount requested from the Graduate School through the former Graduate School Support Competition (GSSC) and supplementing with significant departmental funds. In the most recent 2 years, we made \$20,000 available for domestic and international conference travel and for dissertation preparation and data gathering. This allows students to learn about how current initiatives are operationalized and which new ones are coming.

Instituting the in-house graduate student survey. The Graduate School Doctoral Exit Survey has not historically focused on the experience of Master's students and does not provide opportunity for qualitative assessment. Our in-house survey indirectly measures the achievement of goals. While the statistical significance is not robust, qualitative responses reveal possibilities for improvement, which faculty have acted upon. An example is better preparation and greater clarity regarding the Master's oral defense experience, which resulted in the graduate programs making that the focus for the 2019 learning assessment exercise, redesigning the rubric, and communicating more strongly with faculty about the necessity for clarity in meetings prior to the examination. The 2019 rating of Master's students' satisfaction and feeling of preparation greatly improved (discussed in more detail in later sections).

Developing flowcharts, timelines, and milestones templates. We must ensure that our students achieve the stated learning goals in a timely manner and with a sense of a clear pathway ahead of them that keeps open the possibility for their specific focus to emerge. To that end, the Director of Graduate Programs developed a series of handouts given to all faculty at the start of each year, which are to be distributed by advisors to each entering student. These are explained in separate meetings with new faculty, and are now available online via the new Student Handbook (see Appendices B-2 and B-3).

Spreadsheets for tracking student progress and committee membership forms. Our department recognized that faculty turnover disrupted the continuity of mentoring. The Director of Graduate Programs and Coordinator developed a system that records important information for students, including their degree, start dates, advisor, committee members, date of preliminary examination, meeting of educational deficiencies, and more. This took significant research by the Graduate Programs Coordinator regarding existing software systems and compatibility. The result is a tool that helps keep our students on track with their learning goals. This spreadsheet preceded and now will supplement the new Graduate School Tracking System currently being rolled out across campus.

Innovative Responses to Emerging Changes in the Discipline

Emerging changes are driven in part by wider changes in the conditions of knowledge production that have especially impacted the social sciences and humanities. With less state funding available to universities nationally and a shift in the social compact about the role of higher education and its relationship to the wider world, the department placed increasing emphasis on innovating in four areas: developing interdisciplinary approaches with social

impact, responding to the pressure to secure external funding, rebalancing work time allocation and expectations, and increasing internationalization.

Developing interdisciplinary approaches. The department's inherently interdisciplinary research occurs in an era where such multi-theoretic work accrues more attention. This advantages our graduate students. It is not uncommon for our students to write dissertations across departmental areas and thereby compete for jobs in more than one domain. The simultaneous autonomy of areas that sustain distinct subject matter knowledges, the intellectual range of our faculty, and the flexible design of the Ph.D. credits give our students leverage in a competitive job market.

Building on and expanding beyond past foundations, over the last 10 years our faculty developed very strong programs in five major thematics: social justice education; qualitative research; historico-philosophical research; impact of educational technologies; and informal education. These thematics cross disciplinary fields and departmental areas, enabling students and faculty to develop even greater expertise in interdisciplinary work and its impact, allowing our graduate students to become strong in methodological approaches that can be deployed across subject matters. In addition, the methodology requirement that our department instituted in the Ph.D. program since the last review captures this innovation.

Securing external funding. While having a graduate student work with a specific professor as a project assistant on a externally funded grant is a positive experience for the student's research skill development, open questions remain regarding yearly planning: (1) the success rates with large granting bodies is usually less than 10%; (2) not all areas of C&I fit neatly within funders' objectives; (3) grants typically do not last for the full 4-year cycle of guaranteed funding now required; and (4) the pipeline to knowledge production and impact (e.g., publication, reform, or innovation) from successful grant applications can exceed 5 years.

Some areas of the department have a more natural fit with large agencies such as the National Science Foundation. However, a "natural fit" between an area within the department and a funder still requires a variety of methods, approaches, and techniques to sustain a healthy diversity within knowledge production that can shape our contributions to social science.

The department is working to improve our success despite these challenges. We creatively repositioned itself for future and emerging opportunities by seizing opportunities to (1) plan and write grants across units in the university in areas such as human ecology, computer science, science and technology studies, social policy, nursing, and geographic area studies, (2) write grants with other universities or in other geopolitical regions such as the EU, Australia and Asia, (3) build research knowledge and grants through collaborations and partnerships with start-up companies and community participants, and (4) mentor early career faculty in grant-writing. This offers our graduate students an extensive network of colleagues and insights into subject matters within and beyond education.

Rebalancing work time and expectations. The department instituted productive conversations at faculty meetings about how time available and expectations directly and indirectly impact our graduate students' experiences. These discussions raise concerns over performance review, rethinking tenure expectations, and promotional guidelines that recognize competing pressures. The intensification of labor, historical attrition of faculty who have not been replaced, the change

in expectations for the kinds of work faculty do, and the kinds of questions we can pose within the field create challenges for how faculty and students rethink the cultural principles that support and vitalize the department's research traditions. Issues regarding balance, structure, and expectation in people's everyday lives impact recruitment and retention of faculty and have follow-on effects for recruiting and educating students. To thoughtfully consider these issues in the context of existing and incoming graduate students' employment and experiences, the department voted in Fall 2019 to form a Graduate Student Support Committee to oversee how assistantships are allocated. For example, if graduate students can be assigned by this committee to assist in developing new certificate programs in the department, we potentially can help faculty workload in regard to such innovation, provide a graduate student important experience, and generate new possibilities for recruiting a broader range of students to enroll in our courses.

Increasing internationalization. C&I faculty have built international networks, published in international forums, been invited to deliver keynotes at international conferences, gained awards and recognition from prestigious units such as the United Nations, and been awarded honorary doctorates abroad. Four C&I faculty secured Fulbright fellowships in the last 10 years to research and teach overseas. Significantly, the research output of our faculty draws a large percentage (typically around one-third) of our graduate students from nations outside the United States. Our faculty also secure funding in transnational teams of principal investigators (PIs), which in turn generates research publications, project work for graduate assistants, and sometimes even future employment for our graduates.

In discussing the affordances and limits of innovations in our programs, our faculty demonstrate an agile, dynamic, and responsive department, working at the cutting edge of the field and continuing to lead graduate education in the 21st century.

—See self-study question 1a for challenges to maintaining the strength of our programs—

D. Recruiting, Admissions, and Enrollment

Recruiting

The department receives names of potential applicants through the Graduate School and School of Education recruitment fairs. C&I staff also attend graduate recruitment fairs on campus or other locations. Faculty recruit individually at conferences and professional events, in schools, through social media outreach, and faculty publications in our specific areas draw significant interest from potential students.

For much of the past decade, faculty and staff invited applicants to visit individually or in groups, using departmental funds, funds from the Graduate School for domestic targeted minority student recruitment, or having the applicant fund themselves. The last 2 years, however, we innovated our recruitment. In 2018, the department focused on recruiting domestic targeted minority students across a variety of areas such as multicultural education, mathematics education, and ESL/bilingual education. A full-day event was held with a structured program of faculty presentations, a campus tour, class observations, and more. The enrolment rate from this event was not significantly different from previous years.

In 2019, therefore, we extended this effort to a department-wide *Visit Days and Celebration* of *C&I Research* event, in which 14 admitted applicants visited campus across 2 days.

Approximately 80 other members of campus attended. Admitted applicants were given a campus tour, sat in on graduate seminars, met with their potential advisors in person, and participated in a conference lunch and dinner. They also could attend four formal research panels focusing on the work of faculty and graduate student presenters. Panelists focused on four key themes of research and issues related to domestic targeted minority students, students with disabilities, international students, and the politics of "truth" in the current national educational arena, themes that C&I faculty felt were crucial for emphasizing social justice and dedicated recruitment. After the event our enrollment rate went up substantially, to the extent that we can repeat the event only with changes to the current funding formula.

The department has not had difficulty recruiting qualified applicants at the Ph.D. level or attracting a diversity of applicants nationally and internationally (see Figure 1 in the enrollment subsection below). Even amid a worldwide drop in Ph.D. applications we sustain an application and admissions rate at the Ph.D. level consonant with our resources. The noticeable drop at the Master's level we suspect is aligned with the fact that teachers in Wisconsin are no longer guaranteed remuneration for obtaining Master's degrees (see discussion under self-study question 2b). Overall, while declining over the past 10 years, the number of applications match our plans and program resources. With the move to full funding for admissions, however, our rates are expected to change.

In recruiting students from underrepresented groups to pursue graduate studies, the department works with the Graduate School to identify talented domestic targeted minority candidates, including those in the McNair Scholars program. In addition, we participate in a Summer Education Research Program, which gives undergraduate students of color, low-income, and first-generation college students from colleges and universities across the country the opportunity to come to Wisconsin to conduct a small research project while they are considering graduate school.

Further, our department competes for and receives funding from the Graduate School to recruit domestic targeted minority candidates. Historically, we used this money to fly in admitted Ph.D. candidates to visit UW–Madison and meet C&I staff, faculty and our existing students in an effort to convince the candidates to select UW–Madison.

For most of the past decade (the past 2 years excepted), we left recruitment to individual faculty. In 2019, however, because of the change to funding and admissions, the department generated a new strategy for recruiting domestic targeted minority students. A separate department committee is reviewing School of Education recruitment strategies for domestic targeted minority students in an effort to generate a more holistic, systematic, and department-wide suite of recruitment efforts to be used for both graduate programs.

Admissions

In 2019-2020 our admissions procedure underwent changes instantiated by the campus-wide policy change regarding full funding for all admitted Ph.D. students. Previously, all students recommended by advisors and admitted by the department were offered letters of admission (see Appendix C, Former Admissions Process and Materials, for a list of an applicant's material reviewed for admissions decisions). If we use this same procedure for the Fall 2020 admissions cycle it will result in too many students being admitted for the department to fully fund.

Faculty are excited by the possibility of students being fully funded and understand this as a justice issue. Faculty voted on new procedures to reduce the number of students accepted to enable the policy's implementation. For the Ph.D., there are now four steps in admissions. Step 1, which is new, is for the department chair, in consultation with the GPC, to determine the number of fundable positions available for the relevant year. Step 2 is faculty review of applications. Step 3, which is new, entails faculty or areas ranking prospective Ph.D. students. Step 4, required only if the number of desired applicants exceeds the funding available for 4-year fulltime offers, entails the GPC reviewing this ranking. The GPC also takes into consideration a 250-word statement written by the faculty/area regarding the applicant to determine which students should be sent offer letters. If additional information is needed, the GPC will examine the students' admissions file and the needs of the department or areas to determine admissions and a ranked waitlist. The list for admissions and waitlist then come to the whole department for final approval and there is an appeals process.

The changes produce positives and challenges. The ability to have all students fully funded enables us to compete with peer institutions. It also allows us to re-secure the very top students and to make more concrete package offers to convert applicants from admission to enrollment. We would hope that more certain funding for domestic targeted minority students in particular would mean that we are not only reliant on the Ed-Grs scholarships. In addition, the changes offer us an opportunity to rethink how we deliver graduate education, such as the range and sequence of courses offered and whether the faculty want to generate more interlinked graduate seminars that build upon each other, offered on a regular basis.

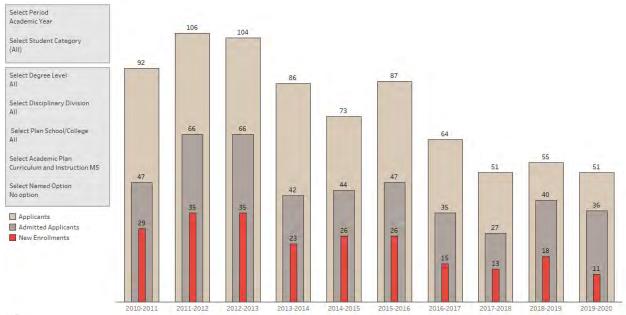
The challenges are those related to the pressure toward centralization without concomitant central administrative financial support. Because we can admit far fewer students, faculty have felt forced to be severe in their assessment of applicant files. Reducing the number of admitted students could negatively impact our standing and ranking in the field and limit the ways in diversity in admissions can be achieved. In addition, an admissions procedure that had been done area by area in a department that views such area differences and expertise as a strength risks becoming fractious. In turn, because these issues may reduce our enrolment they could strain the department's ability to sustain its nationally and internationally renowned graduate seminars. The Graduate School policy of requiring a minimum of eight students for a graduate class cannot be sustained if admissions continue to decline in our department and across the School of Education. Further, without addressing the limitations that such a policy produces, there may be relatively less course selection for incoming students. If there are fewer seminars on offer, students may be participating in a seminar that is of no interest to them or not relevant to their field. We do not know how likely this scenario would be but if it did eventuate it could reorient the department's basis for success and recognition, which over the past decades has been deeply indebted to the strength of its graduate seminars as a core part of graduate programs. Faculty have also discussed how reductions in our enrollment may risk diminishing the collegial networks of our graduate students, which in turn could impact the post-graduation gatekeeping opportunities of our alumni.

To date, the size of our Ph.D. program has remained relatively steady and consonant with our resources, enabling our graduate students to occupy key leadership and scholarly roles in the

fields in which they work and enabling them to find high-profile future employment. The range of positives and concerns indicated above, as well as uncertainty about our admissions numbers in the future, leave us with several issues to reconsider and balance: (a) the breadth of graduate education subject matter that could be interlinked and the depth of specialization that our respective fields still require and hire within; (b) how to rethink graduate student experiences in seminars, where to date, robust cohorts teach each other about cultural differences and constitute an important part of our success within and beyond the department; and (c) the balance and diversity of existing course offerings relative to "topics" or experimental courses that faculty create to capture new trends. Additional funding for graduate education would certainly help to relieve some of this pressure and also give the department time to thoughtfully consider such balances and to evolve. Sustaining our exceptionally high ranking in graduate education, and our commitment to epistemological and demographic diversity, are paramount and commitments that the department sees as mutually constitutive.

Enrollment and Student Integration

After a student is admitted by the department, the Graduate School admits the student once official documents, such as transcripts, have been received. During admissions season, fellowship awards also are offered to incoming students. Final enrollment numbers are determined when students show up for class in the Fall or Spring. The enrollment statistics for the department for the past 10 years are shown in Figures 1 and 2. The data for the 2019-2020 year do not include the 2020 Spring or Summer admission periods for our Master's degree. The Ph.D. figure is complete because we will not admit more students this cycle. All admissions data is taken from the Graduate School Explorer available online.

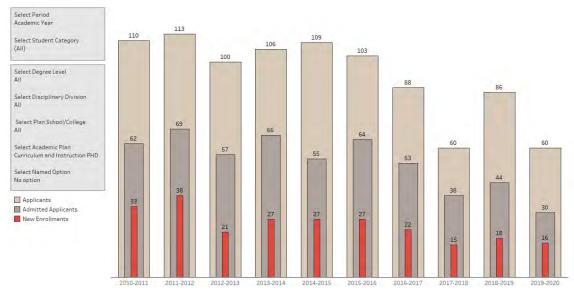


Source: Graduate School Explorer

Figure 1. C&I Master's Fall Applicants, Admits, and New Enrollments.

In our efforts to further generate diversity in our student body, we are able to award 2-year fellowships to incoming first-generation or domestic targeted minority students (referred to as

Advanced Opportunity Fellowship/Education Graduate Research Scholars [AOF/Ed-GRS] awards). The number varies by year but generally is two to four 2-year fellowships for Ph.D. students or 1-year fellowships for Master's students. Our department supplements the fellowship for Ph.D. students with an additional 2 years of guaranteed funding as a TA or Project Assistant (PA) in an effort to improve candidate recruitment.

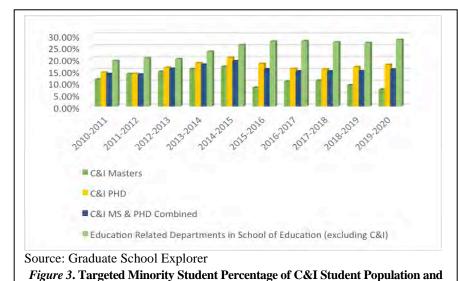


Source: Graduate School Explorer

Figure 2. C&I Ph.D. Fall Applicants, Admits, and New Enrollments.

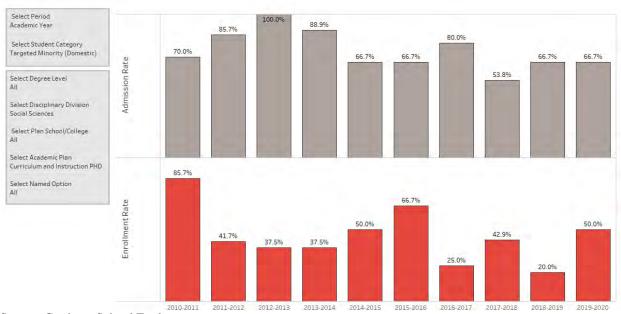
Figure 3 shows the population percentage of domestic targeted minority students for our Ph.D. and Master's programs, the combined data for our Master's & Ph.D. program, and then the comparable combined Master's & Ph.D. data from education-related units within the School of Education. The Ph.D. program percentages improved from the beginning of the decade, and our combined percentage also improved. The Master's program percentages, though, declined.

As shown in Figure 4, in 2019-20 our department admitted 66.7% of the domestic targeted minority students who applied for the Ph.D. program, which greatly exceeds the targeted minority student population percentage of 10% for UW-Madison as a whole. Our 2019-20 enrollment improved to 50% from 20% in 2018-19. Figures 3-5 thus underscore that we



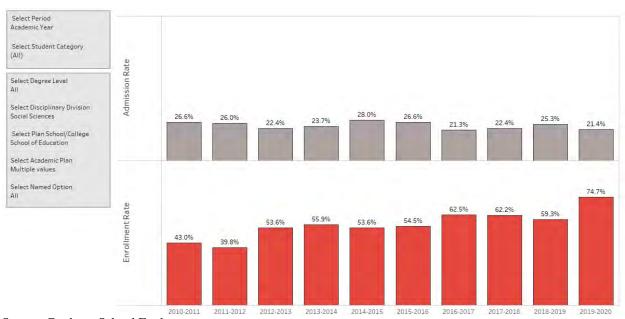
Other Education-Related Departments in the School of Education.

exceeded UW-Madison norms in applications and admissions but lag behind other education-related departments in converting admitted students to enrolled students. Figure 5 shows a higher percentage of success in enrollment for the education-related departments in the School of Education (Education Psychology, Education Policy Studies, Counseling Psychology and Education Leadership & Policy Analysis). We do not know the reasons for the discrepancy but do know that while not formally announced at the point of admissions other departments have offered full funding to all of their Ph.D. students in past years relative to C&I.



Source: Graduate School Explorer

Figure 4. C&I Ph.D. Targeted Minority Admission and Enrollment Rate.



Source: Graduate School Explorer

Figure 5. Ph.D. Targeted Minority Admission and Enrollment Rates across Other Education-Related Departments in the School of Education.

Based on the experience of other departments that already moved to full funding, we expect that the new funding policy will dramatically change our enrollment gap and that our new recruitment strategies will improve our Master's and Ph.D. enrollment.

Approximately one-third or more of our graduate students have been international. This enables both our domestic and international graduates to occupy premier appointments around the globe, and it gives our domestic and international alumni tremendous global reach and brand recognition. Against the trend of national and international decline in Ph.D. admissions pools, our department has not suffered low application numbers, admissions, or enrollment.

Student integration. Before Fall semester each year, the department holds an orientation for Master's & Ph.D. students. Students learn about credit requirements, expectations, resources on campus, graduate seminar cultures, and department policies. At that event, current students serve on a panel to answer questions. The panel includes domestic targeted minority students, students who participate in the Graduates and Professionals with Disabilities Initiative that began in our department, and representatives from the department's International Student Association.

After the semester begins, students are advised by their faculty advisor and can ask questions of the Director of Graduate Programs or Coordinator. The C&I student body and faculty have generated three official student groups that run beyond the orientation: the International Student Association, the Graduates and Professionals with Disabilities network, and the Multicultural Learning Community. Students also can join the Multicultural Graduate Network, the Network Fellows Program, individual professors' reading groups, and a host of other student groups.

C&I also established the aforementioned monthly Professional Development Series (see pp. 7-8) to practice job talks in an inclusive environment. The GPC provides funding for students to travel to conferences and do research, and hosts various events relevant to professional development that assist with student integration. A career center in the School of Education provides advice, headshots, resume/CV tips, mock interviews, and job talks. Lastly, the Graduate School hosts events and networking opportunities for all graduate students on campus. All C&I events are communicated regularly through the graduate student listserv and broader campus events.

Over the past decade, the department recruited, admitted and enrolled a strong and competitive student body because of the quality of our research, the robust size of cohorts and alumni we generate, and our dedication to social justice and inclusion. With 4 years of guaranteed funding, we expect we will be even more successful in attracting top students. Yet, we remain uncertain about future admissions numbers based on budget, further sources of funding for domestic targeted minority student recruitment, and the balance between graduate education and faculty retention.

—See self-study question 1a for a discussion of strategies to maintain our strengths—

E. Advising and Student Support

Advisors in C&I are faculty within our department or faculty affiliates from other units voted on by the department to have that status. Advisors are expected to meet with students multiple times per semester around course-related selections and themes and/or upcoming writing tasks.

Students also develop a thesis or dissertation committee, typically at the end of the first year of coursework. These three-to-five-member committees (depending on the degree and the stage)

ensure multiple intellectual inputs on student research. Students also can turn to the Director of Graduate Programs, Graduate Programs Coordinator, student representatives, and the Graduate School for immediate assistance. The Coordinator maintains the Student Handbook and keeps students abreast of Graduate School rule changes via email, in-person meetings, and phone calls.

Students select advisors at the point of admission, typically based on our recruiting efforts and/or the students' interest in faculty research and publications. When faculty leave UW—Madison, the existing advising committee helps the student select a new advisor. We also implemented a process in the past 2 years as departures impact committee membership beyond the advisor role. All students now fill out a form stating who is on their research committee, with consenting emails from the faculty members who agree to serve. This form prevents students from slipping through any potential cracks regarding a change of advisor or committee membership and has been helpful for faculty who carry large committee loads.

Until 2 years ago there was no electronic system to help our students see where they were located in their trajectory. This required a one-on-one meeting with the Graduate Programs Coordinator; sometimes students did not arrange for this meeting in time to adequately prepare for preliminary examinations. Thus, we developed a spreadsheet to track a student's credit requirements, whether they have met any educational deficiency requirements, dates and outcomes of examinations, thesis or dissertation committee memberships, etc. This is crucial to our students, and helps faculty understand and review the milestones and trajectories of the program.

We generally have a professor-student ratio of approximately six students per faculty. Over the past decade, some faculty voluntarily assumed much higher advising loads due to their national and international reputations, publications, and popularity. This robustness in certain areas has been pivotal in generating a positive, inclusive climate, and some students seek out C&I precisely for the community and cohort experience that such weight in advising numbers provides.

Each year the Director of Graduate Programs meets with all new early career scholars to outline the department's graduate degree programs, mentoring norms, and advisor responsibilities. Our faculty also make use of tools soliciting input regarding our quality of advising. These tools, including the in-house graduate student survey and Graduate School Doctoral Exit Survey, provide quantitative and qualitative information about advisor performance (see Figures 6 and 7) and are discussed further in Section I.

Answer	N	Percent	
Very helpful	54	67.5%	
Somewhat helpful	18	22.5%	
Not very helpful	6	7.5%	
Not at all helpful	2	2.5%	
Total	80	100%	

Source: C&I Ph.D. Graduate School Doctoral Exit Survey

Figure 6. Helpfulness of Faculty Advisor.

How helpful was the advice you received from your primary faculty advisor in each of these areas?

Item	Very helpful	Somewhat helpful	Not very helpful	Not at all helpful	N
Selection of dissertation topic	67.1%	28.8%	1.4%	2.7%	73
Your dissertation research	64.9%	27.3%	6.5%	1.3%	77
Writing and revising dissertation	67.1%	25%	5.3%	2.6%	76
Academic career options	54.1%	27.9%	11.5%	6.6%	61
Non-academic career options	38.1%	28.6%	16.7%	16.7%	42
Search for employment or training	50.9%	30.2%	9.4%	9.4%	53

How timely was the advice you received from your primary faculty advisor in each of these areas?

Item	Very timely	Somewhat timely	Not very timely	Not at all timely	N
Selection of dissertation topic	77.1%	20%	0%	2.9%	70
Your dissertation research	73.7%	22.4%	2.6%	1.3%	76
Writing and revising dissertation	74.7%	16%	9.3%	0%	75
Academic career options	67.8%	22%	8.5%	1.7%	59
Non-academic career options	56.8%	27%	13.5%	2.7%	37
Search for employment or training	58.5%	22.6%	15.1%	3.8%	53

Note: Percentages reflect only students who received advice from their primary faculty advisor.

Source: C&I Ph.D. Graduate School Doctoral Exit Survey.

Figure 7. Helpfulness of Faculty Advisor by Area.

The impact of advising is addressed most directly through multiple forms of assessment. Figures 6-7, and 9 are from the 2018 Ph.D. Graduate School Doctoral Exit Survey, the last year that data were available; Figure 8 is from our 2019 in-house Ph.D. graduate student survey (the Master's exit survey is not required and the data pool is very small, which is why it is not shown here). As seen in these figures, C&I generally does extremely well in meeting advising expectations across a range of topics.

Ph.D. & Master's students (n=72)

	Agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Disagree	Not applicable
My advisor meets with me at a frequency that is helpful and comfortable for me.	53%	19%	6%	6%	8%	4%
My advisor responds to me in a timely manner.	68%	25%	1%	1%	4%	0%
My advisor provides quality feedback that is helpful.	70%	13%	3%	3%	4%	4%
My advisor provides feedback in a form or manner that suits my needs (verbal, written, etc.).	67%	20%	4%	1%	4%	3%
My advisor completes letters of reference in a timely manner.	60%	7%	7%	1%	0%	25%
Overall, I am satisfied with the advising I receive.	61%	22%	6%	1%	6%	4%

Source: C&I In-house Graduate Student Survey

Figure 8. Satisfaction with Faculty Advisor.

Was there another faculty member other than your primary faculty advisor whom you considered to be a mentor?

N	Percent
47	58.8%
33	41.2%
80	100%
	47 33

Was the faculty mentor in your program/department?

Answer	N	Percent
Yes	36	76.6%
No	11	23.4%
Total	47	100%

Note: Answered only by students with a mentor who was not their primary faculty advisor.

How helpful was the advice you received from your mentor in each of these areas?

Item	Very helpful	Somewhat helpful	Not very helpful	Not at all helpful	N
Selection of dissertation topic	65%	35%	0%	0%	40
Your dissertation research	64.3%	33.3%	2.4%	0%	42
Writing and revising dissertation	64.3%	31%	2.4%	2.4%	42
Academic career options	55.6%	36.1%	2.8%	5.6%	36
Non-academic career options	48%	36%	8%	8%	25
Search for employment or training	37.5%	53.1%	3.1%	6.2%	32

Note: Answered only by students with a mentor who was not their primary faculty advisor. Percentages reflect only students who received advice from their mentor.

Source: C&I Ph.D. Graduate School Doctoral Exit Survey.

Figure 9. Satisfaction with Mentoring.

Overall, the two surveys indicate that students agree or somewhat agree that they are satisfied with the advising they receive (83% in-house survey) or that their advisor is helpful (90% Graduate School Doctoral Exit Survey). Students also often develop mentoring relationships outside of their faculty advisor. Our Graduate School Doctoral Exit Survey data show that students rely on a wide variety of faculty and staff to help them through the program, both inside and outside the department.

In our in-house graduate student survey, a few students requested more feedback at the preliminary examination stage. The data also revealed student insight that faculty are weighed down by multiple other responsibilities. Nonetheless, the figures above underscore the high quality of C&I advising, with 93% of students marking the highest two categories for "My advisor responds to me in a timely manner," while more than 98% indicated the highest two categories for their advisor's helpfulness in writing and revising the dissertation.

The data suggest that the department's graduate advising is extremely strong in the face of multiple concurrent duties and across epistemologically diverse areas.

—See self-study question 1b for a discussion of strengthening student mentoring—

F. Program Community and Climate

Both the Graduate School Doctoral Exit Survey and the in-house graduate student survey concur that C&I students are satisfied with their experience in the department. Our most recent in-house survey shows that 86% of Ph.D. students indicated that the quality of their program was "good," "very good," or "excellent," 82% of Ph.D. students indicated they felt "satisfied" or "very satisfied" with their program overall, and 100% of Master's students indicated that the quality of their program was "good," "very good," or "excellent" (an increase of 28 percentage points when compared to the prior year, but more in line with survey results from 2 years ago when 95% of Master's students thought their program was "good," "very good," or "excellent"). In the latest survey, 84% of Master's students reported feeling "satisfied" or "very satisfied" with their program overall (an increase of 39 percentage points over the prior year, and 27% over 2 years ago). Although we cannot make more granular breakdowns by population group (most respondents do not mark their identity categories in the boxes provided), the data suggest an extremely responsive faculty who attended to Master's students' concerns expressed in the prior year and made a concerted effort to regain and build upon the positives from the past.

The Graduate School Doctoral Exit Survey shows a similar situation, with exceptionally high ratings across "excellent," "very good," and "good" (Figure 10).

Please rate your overall satisfaction with each of the following

Item	Excellent	Very Good	Good	Fair	Poor	N
Your graduate program	53.8%	22.5%	17.5%	5%	1.2%	80
Your academic experience at this university	45%	33.8%	16.2%	3.8%	1.2%	80
Your student life experience at this university	26.2%	32.5%	30%	10%	1.2%	80
Your overall experience at this university	37.5%	38.8%	16.2%	7.5%	0%	80

Source: Graduate School Doctoral Exit Survey.

Figure 10. Overall Satisfaction with Graduate Experience.

In the most recent Graduate School Doctoral Exit Survey, students reported a lack of funding and availability of funding as barriers to successful completion. Our in-house survey data corroborate that the stress of finding funding weighs on students, an issue that should be vastly diminished by the new full funding policy. Additionally, the Graduate School survey suggests that students with families report problems with funding, class scheduling, and balancing work and family life. These two issues also appeared on the survey as significant obstacles, as noted in Figure 11.

Rate the extent to which the following factors were an obstacle to your academic progress:

Question	Not an obstacle	Minor Obstacle	Major Obstacle	N
Work/financial commitments	23.1%	29.5%	47.4%	78
Family obligations	30.7%	32%	37.3%	75
Availability of Faculty	46.2%	42.3%	11.5%	78
Program structure or requirements	63.3%	32.9%	3.8%	79
Course Scheduling	60.8%	38%	1.3%	79
Immigration Laws or Regulations	78.2%	12.7%	9.1%	55
Other	69.2%	7.7%	23.1%	13

Source: Graduate School Doctoral Exit Survey.

Figure 11. Obstacles Encountered in Graduate Program.

Students responding to our in-house survey generally feel welcomed in the department, with 95% stating that they always or sometimes felt included in courses (see Figure 12). Comments in the survey revealed issues students felt needed to be addressed, such as race, lack of support for international students, lack of support for students with families, struggles with mental health conditions, and funding.

	Always	Sometimes	Rarely	Never
Do you feel welcomed in the C&I department?(n=70)	60%	31%	9%	1%
Do you feel included in the courses you have taken in C&I?(n=71)	64%	31%	4%	0%

Source: C&I In-house Graduate Student Survey.

Figure 12. Feeling of Being Welcomed and Included.

While UW—Madison students as a whole expressed dissatisfaction regarding climate issues across the campus, the data for C&I indicate the reverse locally—that is, more than 81% of student respondents strongly agree or agree that the intellectual climate of their graduate program is positive. Figure 13 from the most recent Graduate School Doctoral Exit Survey underscores this mostly broad satisfaction of students with the C&I intellectual climate relative to UW—Madison as a whole. We acknowledge, though, that 81% satisfaction is not enough and creates a significant margin that we need to better investigate, understand, and respond to.

To what extent do you agree or disagree with each of the following statements about your *graduate* program?

Question	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	N
Students in my program are treated with respect by faculty	53.2%	27.8%	11.4%	5.1%	2.5%	79
The intellectual climate of my program is positive	55%	26.2%	7.5%	8.8%	2.5%	80
The social climate of my program is positive	37.5%	33.8%	11.2%	15%	2.5%	80
Students in my program are collegial	45.6%	36.7%	12.7%	3.8%	1.3%	79

To what extent do you agree or disagree that UW-Madison is a welcoming and inclusive place for

Question	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	N
Students of color	14.1%	22.5%	19.7%	33.8%	9.9%	71
Female students	0%	11%	26%	39.7%	23.3%	73
Low-income students	16.7%	16.7%	28.3%	26.7%	11.7%	60
First generation college students	3.5%	17.5%	28.1%	35.1%	15.8%	57
Students with disabilities	3.6%	21.4%	32.1%	26.8%	16.1%	56
LGBTQ Students	0%	10.7%	26.8%	42.9%	19.6%	56

Note: Students who responded "Don't know" are not reported.

Please rate your satisfaction with your experience at UW-Madison in each area:

Question	Very satisfied	Satisfied	Neutral	Dissatisfied	Very dissatisfied	N
Overall sense of community among students	26.6%	38%	32.9%	0%	2.5%	79
Respect for the expression of diverse beliefs	25.3%	27.8%	26.6%	17.7%	2.5%	79
Understanding of students from diverse backgrounds	30.4%	35.4%	24.1%	8.9%	1.3%	79
Campus diversity climate	15.2%	30.4%	29.1%	16.5%	8.9%	79

Source: Graduate School Doctoral Exit Survey.

Figure 13. Intellectual and Social Climate in Department and Campus.

In sum, while UW–Madison as a whole presents significant obstacles for student populations who identify as of color, female, low-income, first generation, with disabilities, and/or LGBTQIA+, the climate of C&I provides a much appreciated context for graduate education, where 81% of 79 graduates strongly agreed (53.2%) or agreed (27.8%) that students were treated with respect by faculty, where 71.3% of 80 graduates strongly agreed (37.5%) or agreed (33.8%) that the social climate of C&I was positive, and where 82.3% of 79 graduates strongly agreed (45.6%) or agreed (36.7%) that students in C&I were collegial. Nonetheless, there is much room for improvement here, especially regarding the social climate of C&I, and the need to aim at full satisfaction, complete respect, and better collegiality in the future.

A climate of opportunity. An aspect of climate that often goes unrecognized but has salient effects is that our department encourages participation by national and international visiting scholars who often come to our department for a semester or a year. Visiting scholars contribute important insights in reading groups, seminars, formal presentations, and informal settings. In working with our students, they offer publishing opportunities and an enhanced network for conferences and professional development, which sometimes results in future employment. The department works with students in our three student associations to secure small grants for holding workshops, panels, and events related to students' specific concerns. The department supports students with their writing and planning, and hosts and advertises events and workshops the students indicate they are interested in, such as panels dedicated to mental health issues and workshops dedicated to job hunting for international students. These frequent, intangible aspects of atmosphere and climate may not be visible to all students, but they constitute much behind the scenes work and entail a large commitment of time and affective labor by faculty, staff, and especially the Director of Graduate Programs and Coordinator.

Enhancing representation and retention of diverse faculty and staff. C&I is committed to enhancing the faculty/staff representation of traditionally underrepresented groups. Every faculty and staff position posting is assessed at the school and department level to ensure that it reaches a broad audience. Particular attention is paid to advertising in publication outlets, job boards, and on listervs tailored to reach potential candidates from underrepresented groups. Throughout the search and screen process, departmental search committees build diverse pools of candidates and make every effort to ensure that the diversity of candidate pools extends to those invited for campus visits. In 2019, the department availed itself of the campus Target of Opportunity Hire program, dedicated to hiring professors from underrepresented groups, and which provides funds for units to recruit outstanding candidates. C&I was recently approved for such a recruitment and is beginning that process. Over the past 5 years, the department recruited and hired eight new faculty members, four of whom are from underrepresented groups. During this same period, the department recruited two faculty of color (a senior faculty member in the area of Games and Education and a junior scholar in Social Studies Education). Although we were unsuccessful in those hires, the continued recruitment of such faculty shows we are serious about faculty/staff diversity.

The data show that our students are largely satisfied with the department and feel welcomed. Obstacles such as funding and climate remain, however, and our surveys identify at-risk students, exposing issues we must investigate and to which we must respond.

—See self-study question 1b for issues of intellectual climate—

G. Time to Degree, Degree Completion, and Equity

As we note in the Graduate School Support Competition Report for 2018 (Appendix D), we significantly reduced time to doctorate degree, from a median of 7.0 years to a median of 5.9. In 2018, we were performing very close to Association of American Universities (AAU) peers even where recognizing that we have 15 students with McBurney visas (disability-identification), a significant number of students working fulltime in teaching and school administration positions, and (we suspect) a higher international student enrollment than our peer institutions. In the first 5-6 years our domestic targeted minority students performed better in time to degree than our international students, while our non-targeted domestic students were fastest. We suspect the slight gap pertains to the unique challenges of international students around funding, as many cannot take up local TAships, which require American teaching licenses. Our new full funding model, it is hoped, will improve time to degree for international students. In addition, many of our students do research in schools that require IRB applications from both UW-Madison and a school district. Students report delays in getting started on fieldwork in the local school district due to the requirements for entering its schools. Even with much fulltime workforce participation, the problem of access to local schools faced by many of our domestic students, and differential teaching credentials, we demonstrate a very reasonable time to degree.

Over a 10-year period, however, our time-to-degree data show that while the majority of Ph.D. students finish in the 4-6 year window, students from underrepresented groups take longer, with time-to-degree statistics higher than non-targeted, non-international students. Figures 14 and 15 show the time-to-degree statistics for Ph.D. students in C&I for both groups across years. This data is taken from the <u>Graduate School Explorer</u>.

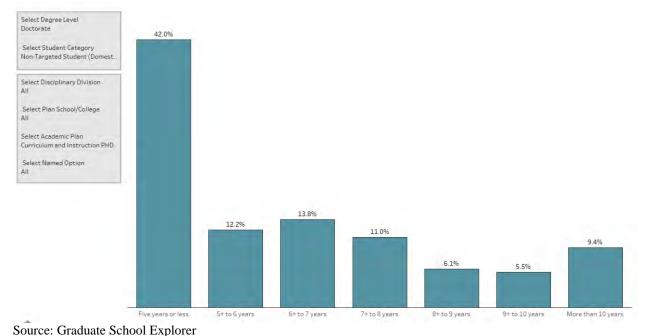
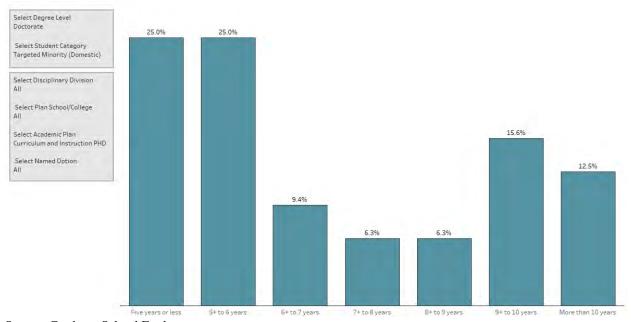


Figure 14. Time to Degree for C&I Domestic, Non-targeted Students, 2010-19.



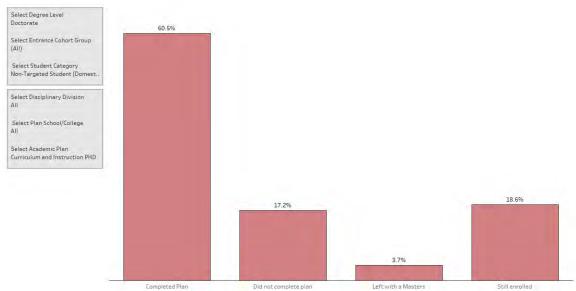
Source: Graduate School Explorer

Figure 15. Time to Degree for C&I Targeted Minority Students, 2010-19.

For non-targeted domestic students, completion in the first 7 years is approximately 68%, while for domestic targeted minority students in the same period it is approximately 59%. Although a comparable amount of students also finish within 6 years (50% vs. 54.2%), a greater number of non-targeted students finish earlier (42% vs. 25%), and a larger number of targeted minority students take more than 9 years to finish (28.1% vs. 14.9%).

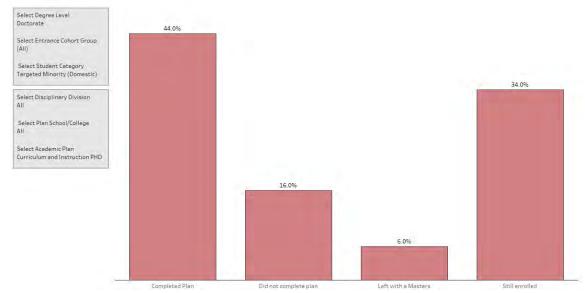
Our completion rates show disparities as well, indicated in Figures 16 and 17. For domestic non-targeted Ph.D. students who entered the program between 2008-2016, 60.5% completed the program, 17% did not, and 18.6% are still enrolled. For domestic targeted minority students, the completion rate is 44% and the still-enrolled rate is 34%. The 16% who did not complete indicates that our domestic targeted minority students are not dropping out, but taking longer to complete.

While our 10-year completion rate generally is better than our AAU peers, we note a difference between domestic students and domestic targeted minority students in recent years after a more even completion rate in the 2006/07 cohort. We also note the generally excellent completion of our international graduate student cohort across the decade. To address greater completion of our domestic students, we addressed the balance between recruitment and retention in our Graduate School Support Competition applications, in part by enlarging the request for funding of research projects, dissertator data preparation, and conference travel to help move students along their trajectory. This was the basis of our increased request for such funds over the past 2 years. Moreover, not all of our domestic targeted minority students are funded through AOF/Ed-GRS programs, and we suspect that financial hardship plays a significant role in completion, even when TAships at 33.3% were secured. This recognition was the basis for our request for a larger number of fellowships (10) for incoming students in the three most recent Graduate School Support Competition applications (see Appendix D for the department's 2017 and 2018 applications).



Source: Graduate School Explorer

Figure 16. C&I Completion Rates for Non-Targeted Students (excluding international), 2008-16 Entrance Cohorts.



Source: Graduate School Explorer

Figure 17. C&I Completion Rate for Targeted Domestic Minority Students, 2008-16 Entrance Cohorts.

Disaggregation of data from our graduate student survey did not permit a direct answer to why there is a slight difference in our underrepresented student retention rate. However, from our in-house graduate student survey, our special brownbag held for students to generate more qualitative feedback, and our research areas, we are aware that students from underrepresented groups commonly experience academic and social culture shock. UW–Madison may be different from the institutions where they received prior degrees, and the Whiteness of the Madison community may be unlike anything they previously experienced. Feeling isolated—in class, on campus, and in the larger Madison community—is common and exhausting. Fatigue also can come from engaging in the important but time-consuming labor of furthering equity causes, labor

that many of our students—especially those from underrepresented groups—undertake in addition to their regular academic load. We also are aware that many students from underrepresented groups are regularly confronted with micro- and macroaggressions on campus. This makes for experiences in academe that are quite different from members of majority groups, and the wider UW–Madison climate issues may affect retention rates.

We are also aware that financial burdens and family responsibilities are common among our students, forcing some to drop out of the program temporarily or permanently. While our completion data indicate that departure and completion rates for domestic minority students are slightly different from other students, we do not know precisely what factors come into play. We believe from talking with our students that funding problems and family responsibilities may play an even larger role for students from underrepresented groups than they do for other students. The move to full funding in upcoming years may help alleviate stresses and close gaps.

A wide array of other strategies are now in place. Students can attend a yearly full-day Graduate Student orientation. An ongoing Multicultural Learning Community is run by a senior professor for underrepresented students. Our required course, Introduction to Research in Curriculum and Instruction, makes explicit the department's research expectations. Further, we use a listsery to provide information about where students can turn for different issues within the department and the wider campus, including grievances, mental health, and family issues.

Another factor that can help our students is the diversity of the C&I faculty. A significant number (11 out of 27; 41%) are from underrepresented groups nationally and internationally, and/or from low-income and first-generation college experiences. They are acutely aware of students' needs for positive climate and strong community. This strength of our faculty diversity positively affects departmental climate for many students from underrepresented groups. This would be even further aided by recruiting a more diverse staff workforce.

In addition to the department-based resources that foster a strong tie between professors and graduate students, we added to the total funding for dissertation preparation and travel awarded by the Graduate School to assist with time to completion from the C&I budget. For the past 2 years we significantly increased this funding relative to 10 years ago.

Our completion rates and time-to-degree medians improved over the last decade, while current gaps are addressed interpersonally and through pedagogical, extracurricular, funding, faculty recruitment, and campus-based strategies that recognize that there is no one-size fits all solution.

H. Career Services and Post-Graduation Outcomes

During their time in the department, students can access the School of Educations' Career Services office for helpful resources, including interview help, headshots, mock job talks, and job search help. In addition to our Professional Development Series, our faculty and visiting scholar programs provide strong professional networks for our students, which operate as informal but powerful ways of generating career resources and job opportunities.

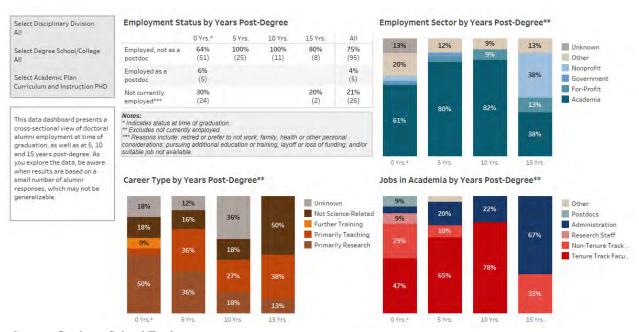
The 2018 Graduate School Doctoral Exit Survey data show that the majority of our Ph.D. students who have jobs at graduation go on to careers in academia, and 96.3% report that their job is in the field of their doctoral training. While approximately 30% of students do not report

employment of some kind at graduation, this is part of a wider and longstanding field trajectory where graduates sometimes seek other positions such as lectureships as they continue to publish (see Figure 18).

While C&I does not track former students after graduation, the university recently began to survey alumni across all graduate programs. Figure 19 shows the results of the alumni survey for the department's Ph.D. program. The survey was answered by 126 alumni and indicated that nearly two-thirds (65%) took up tenure-track faculty positions in the first 5 years post-graduation, increasing to 78% over 10 years, and then a majority (67%) moving into administrative positions by the 15-year post-graduation mark, reflecting a common higher education sector trajectory. In addition

An	iswer	N	Percent	
Ac	ademia	34	60.7%	
Fo	r-Profit	1	1.8%	
Go	vernment	1	1.8%	
No	nprofit	2	3.6%	
Ot	her	11	19.6%	
Un	known	7	12.5%	
To	tal	56	100%	
			employed stu	
				dents. octoral training
s the po				
s the po	sition in th	e fie	ld of your d	
s the po	sition in th	e fie	ld of your d	
s the po	esition in th Answer Yes	e fie N 52	ld of your d Percent 96.3%	

to obtaining positions at prestigious R1 universities in the United States and abroad, the alumni survey affirms what we know anecdotally: smaller percentages of our students are employed in non-profits such as UNESCO, government-based policymaking bodies, and liberal arts colleges.



Source: Graduate School Explorer

Figure 19. Doctoral Career Outcomes.

During their time in the department, students can access formal and informal resources to help with their job search. The great majority of our former Ph.D. students report that their job is in the field of their doctoral training.

I. Self-Study Focus Questions

Sections A-H follow the UW–Madison guidelines for program review and respond to the Dean's concerns enumerated in the opening regarding focusing on the last few years especially and questions of funding (some of section J). In this following section, we incorporate the UW guideline sections I-K which include the following content: 1) the key findings, strengths, challenges, and priorities (section I); 2) the Dean's concerns regarding professional development and breadth, including the mentoring of graduate students via assistantships (addressing the content of section K); 3) we additionally address the five focus questions C&I faculty voted to approve for the present self-study (which incorporates further content of section J on funding). The key findings, strengths, challenges, and priorities are arranged under two themes: (1) intellectual breadth and depth of programs, and (2) possible futures and structures of programs.

Theme 1. Key Findings, Strengths, Challenges, and Priorities: Intellectual Breadth and Depth of Programs

Historically, C&I developed through important autonomous strands in its intellectual life that are continually recognized nationally and internationally. The strengths of the program are both quantitative and qualitative: we are the third largest Ph.D. granting department on campus; we persistently contribute to prominent and recognized research quality, as reflected in the success of our graduate students in major campus and external fellowships and awards and on the job market; and from 2000–2018 we were the number one ranked department in curriculum and instruction for graduate education (*U.S. News & World Report*), moving in 2019, after significant faculty attrition, to number two.

Self-study question 1a: How can we build upon our unique strengths in intellectual and program area diversity to sustain and enhance our graduate education?

Our graduate programs allow students to develop scholarly and research competence in their fields, and our success in placing our graduates into prestigious research positions in higher education globally is a distinguishing feature of our programs. Our Master's and Ph.D. students participate in courses renowned for pushing the theoretical, methodological, and substantive boundaries in the field. Our course requirements encourage students to interact closely with faculty across the School of Education and Letters and Sciences through coursework, in their selection of minors, and in building their theses and dissertation committees. Because our governance structures work against an intellectual stasis in programs, students can pursue their intellectual interests in a manner that allows the department to respond to changing circumstances, new trends, and emergent intellectual movements. These changes, over time, allowed the department to develop vibrant new program areas, for example, in multicultural education studies, informal education, disability studies, and digital games.

We seek to maintain this vibrant autonomy and flexibility within the graduate program structure that fosters a culture that enables students to enjoy new ideas across diverse intellectual areas, including theoretical perspectives, methods of investigation, and documentary or data gathering. To do so, we must address five challenges facing our programs.

¹ The vote occurred prior to the School of Education announcement that all fulltime incoming Ph.D. students were now to be offered 4 years of funding at 50% support, in 9-month assistantship appointments.

- 1. Maintain the cultural principles of shared governance in our orientation to graduate programs within the new demands for collective and centralized actions that relate to campus funding models and graduate funding. How do we maintain shared governance in graduate programs in a manner that responds productively to campus changes? What issues and dilemmas do new mandates pose to the balance between centralization and autonomy? How does a department take the good elements of the culture that previously existed and rethink/redefine them in a way that recognizes both the importance of faculty autonomy and governance while operating within the current conditions?
- 2. Respond to the push to develop courses, certificates, and programs that are marketable to a wide number of potential students. These new directions in outreach have implications for the academic, cultural, and procedural aspects of the graduate programs' research-oriented elements. We must consider not just new students but how new programmatic avenues align with the faculty's existing load, intellectual pursuits, and area responsibilities. While making programs marketable has a tendency to move to establishing certificate programs, our challenge is to make such programs integral to the intellectual and research strengths of our graduate programs.
- 3. Make consequential decisions regarding two forces related to the quality of graduate programs:
 - a. *Faculty attrition*. In 1998, C&I had 49 budgeted professors. In 2018, it had 25 and by Fall 2020 potentially 30. We must further the integrity of intellectual productivity and the development of programs in a manner that does not replicate previous conditions but enables a productive culture and work environment within the new circumstances.
 - b. *New funding policy*. Full funding for incoming graduate students is necessary if the department is to remain competitive in attracting and maintaining high-quality applications. Yet, the impact on admission processes, organization of funding obligations (how to organize the 4 years of assistantships among TAships, PAships, research, faculty assistance related to research, etc.), and potentially declining enrollments might make it difficult to sustain vital graduate program course offerings and diversity in those offerings.
- 4. Develop responses that recognize and strengthen the professional culture in which the graduate program is organized and under which it has been preeminently successful in attracting outstanding faculty who wish to work within it. How does the department approach new faculty positions in a manner that recognizes programmatic needs but at the same time allows for new programmatic development in areas that may be crucial for the future intellectual vitality of its graduate program? New faculty accept positions in the department related to their research interests. How can we ensure that these interests can continue to evolve and exist within an academic/intellectual climate that already fosters excellence and diversity in its graduate studies and contributes to the high quality of our graduate students' contributions?
- 5. Uphold the diversity and quality of the graduate programs. We must continue to strive to achieve participation of underrepresented domestic populations, particularly in relation to historically produced social wrongs, and also maintain diversity through the international students whom we attract. These two senses of diversity intersect in the social and intellectual

commitments of the department's graduate education, yet the new funding requirements may tend to overvalue fitting admissions to available assistantships or undervalue a faculty member's research productivity that draws a diverse student body to the program.

Self-study question 1b: How can we strengthen the mentoring of graduate students, including but not limited to faculty advising, to sustain our dynamic and flexible intellectual climate and enhance our graduate education?

The intellectual depth and breadth of C&I attract some of the most sought after prospective graduate students. Once enrolled, these students receive rigorous training that helps them develop high-quality and meaningful research as well as strong pedagogical approaches in their teaching. Below, we outline aspects of our mentoring, highlighting program strengths as well as areas for improvement we gleaned from the Graduate School exit surveys (Fall 2015 to Summer 2018) and from our in-house graduate student surveys (2017–2019).

Program quality and satisfaction. In 2018, on the Graduate Student Doctoral Exit Survey, more than 90% of doctoral students reported that the quality of the program in C&I was excellent, very good, or good. Reports of program satisfaction (as distinct from quality) were also positive in 2017 and 2018. For example, in our in-house survey from 2018, 87% of Ph.D. students felt satisfied or very satisfied with the program overall (an increase of 16 points from 2017). Data from the Graduate School Exit Survey for Ph.D. students confirm these trends, with 76.3% of graduates from C&I ranking their satisfaction with the program as excellent or very good, 17.5% as good, and only 6.2% evaluating the program as fair or poor.

The percentage of Master's students reporting in our in-house survey that they were either satisfied or very satisfied with their programs dipped to 57% in 2017 and then 45% in 2018. Enthusiasm for the program recovered to 84% of students satisfied or very satisfied in 2019. Overall quality of the program followed a similar trend. In our 2017 in-house survey, 95% of Master's students reported that the overall quality of the program was excellent, very good or good. In 2018 that dropped to 72%, but in 2019 rose to 100%.

Mentoring via advising. Of the 68 respondents to the 2018 C&I Graduate Student In-house Survey, students agreed (68%) or somewhat agreed (18%) that their respective advisors provide helpful feedback. Respondents agreed (66%) or somewhat agreed (21%) that their respective advisors provide feedback in a form or manner that suits their needs (e.g., verbal, written). Of respondents, 57% agreed with the statement that overall they were satisfied with the advising they received, 18% were somewhat satisfied, and 10% neither agreed or disagreed.

Qualitatively, many students described the exemplary mentoring and support practices of faculty advisors across academic, professional development, emotional, and pedagogical domains. Yet, several students also pointed to areas for improvement, including the frequency of advising interactions and the timeliness of advisors' responses and submission of letters of reference. Students expressed concerns about the difficulty of continuing their studies when their advisors leave the institution. As one student shared, "Two of my advisors have left the university in the past 3 years.... [T]he fact that faculty are leaving C&I ... creates pressures for students, and also for faculty who step in to make sure the students can continue their studies. There should be some sort of backup plan, or an advising committee for each student" (2018). Consistent with this

recommendation (and similar suggestions), a few students remarked on the benefits of having a second faculty mentor or a supportive and involved preliminary or dissertation committee.

The issue of turnover could arguably be related to other issues in the department that students commented upon in the 2019 in-house graduate student survey. Some students noted tensions among faculty, which negatively impacted themselves and the field: "I think that the faculty doesn't interact in front of students in any meaningful way.... This is a loss to the program, and the students who are in it. If we cannot collaborate across lines of inquiry, I think the profession suffers" and "The political climate of the department can at times have an influence on graduate students and the opportunities provided or not provided for them. While I have had an overall positive experience, I do think my experience has been limited at times by internal conflicts amongst faculty that impact us as students."

Noting that faculty are not the only important source of mentoring in the department, graduate students expressed gratitude for peer-to-peer mentoring experiences, describing positive interactions with and support from more senior graduate students, either through structured coadvising experiences designed by faculty or via informal or formal interpersonal conversations.

In the future, the department might build or further develop the mentoring capacity of faculty, especially of junior or newer faculty, by sharing "best practices" and "ethical standards" for mentoring. This could include fostering collaborative, cross-advisor, and/or peer-to-peer mentoring networks. It is also worth considering how the different components of student mentoring are (or might be) integrated into new student orientations or via the structure of advisors' meetings with their advisees.

Mentoring via research and teaching opportunities. The Graduate School Doctoral Exit Survey indicates that in both 2017 and 2018 more than 50% of students had opportunities to teach or supervise in the department, and more than 40% worked with a faculty member on their research. Students reported largely positive experiences working with faculty on research projects, especially when these included structured training or apprenticeship regular meetings, and ongoing feedback and support.

Yet, there is a clear need for more teaching and research opportunities in the department and for more scaffolded research mentoring and apprenticeship opportunities. Results from the 2018 in-house graduate student survey show that only 65% of Ph.D. students feel very prepared or somewhat prepared to conduct original research. Across the different surveys, most Ph.D. students reported that they would have appreciated better quality and greater frequency of training and mentorship for teaching, both prior to and during their early teaching experiences. Notably, Master's students wanted more mentoring in scholarly tasks such as preparing articles for publication and writing grants or fellowships applications.

Some students expressed concern about their preparation for future employment. In 2017, the in-house survey revealed that 66% of doctoral students felt very prepared or somewhat prepared to secure an academic position, with 43% feeling prepared to pursue non-academic positions. In 2018, this dropped to 51% and 39%, respectively, and in 2019, 46% and 45% across the same categories. While the vast majority of our students graduate to tenure-track positions, there is room to better prepare students to go on the job market (irrespective of the type of position). Whether through advising or structured mentoring, we can develop such opportunities. For example,

the GPC instituted a new Professional Development Series for students (see pp. 7-8) that enables students to prepare and practice for job talks with feedback from advisors and other students. The department also instituted a suite of writing and publication courses for students to assist with job market preparation. Yet, the lack of PAships, which cost more than TAships for the department, remains a significant problem. The department may need to consider additional more pragmatic aspects of professional preparation as well, such as instructing students in how to write letters of application that forward their strengths in relation to the job advertisement's requirements.

Mentoring via funding. Prior to the change in the funding policy, students' noted that being funded as a TA, PA, or RA (Research Assistant) was invaluable to their graduate school career and professional development. Students viewed these funded positions as opportunities to learn from and be mentored by faculty (their advisors and others). When these opportunities were well structured and scaffolded, students found great benefit in them but also realized that this kind of training might be idiosyncratic. As one student (2019) shared, "The professor who was my PI went above and beyond to train and prepare her graduate research assistants—this was the equivalent of an entire methods course during the summer before our project." Which kind of TAships and PAships students obtained also mattered. Students sometimes commented on working in positions that they felt had little direct bearing on their future work. For example, teaching a different language to English-speaking students in other UW–Madison departments gives some students an assistantship, but if their future work was not going to be teaching language to English-speakers it might not be directly related to their future content area specialties.

In current full funding models, departments must pay extra for PAships, bearing the tuition costs relative to TAships. This structural difference in part limits a more creative and balanced employment trajectory for all of our students. If we commit to mentoring students across both TA and non-grant-based PAs positions across 4 years, we must admit even fewer students (see discussion of admission numbers under Question 2a).

Mentoring for preliminary examinations, dissertations, and theses. Both the C&I Graduate Student In-house Survey and the Graduate School Doctoral Exit Survey indicate that Ph.D. students in the department overwhelmingly (more than 90% in our 2019 in-house survey) reported feeling prepared for preliminary examinations. The vast majority of Ph.D. students also felt prepared to conduct dissertation research and indicated that they received sufficient support in developing their dissertation proposal. However, students felt less supported as they moved from collecting their data, through writing, and finally defending their dissertation (see Figure 20).

Experience (n=25)	Agree	Somewhat agree	Neither agree	Somewhat disagree	Disagree
I felt prepared to begin my dissertation research. (n=30)	57%	33%	7%	3%	0%
I felt Supported during my dissertation research. (n=30)	46%	30%	7%	10%	7%
I felt supported during my dissertation writing. (n=25)	44%	40%	4%	8%	4%
I felt prepared to defend my dissertation. (n=17)	35%	24%	35%	0%	6%

Source: C&I Graduate Student In-house Survey, 2019.

Figure 20. Ph.D. Students Feelings of Being Supported During Dissertation.

This suggests that the department should scaffold students' throughout the dissertation process and offer a more optimal level of support from dissertation proposal to defense. Students offered various suggestions for how this might be done, such as allowing dissertators to enroll in relevant existing methodology courses or offering dissertator-specific dissertation analysis and writing courses.

Master's students expressed different concerns in different years that are difficult to extrapolate from due to the extremely low number of responses. The 2018 in-house survey captured the concern that the four students who responded felt largely unprepared to conduct independent research, including that related to their Master's thesis. Three of the four felt unprepared to do their thesis research, and all four felt unprepared to write their thesis. The 2019 in-house survey showed somewhat more positive responses, with only two of the six who responded feeling unprepared to do research, and three of five feeling unprepared to write their thesis. The change is difficult to interpret on the basis of the small sample size but nonetheless suggests that we give greater attention to how Master's students experience the research function in their graduate degree and provide more explicit mentoring. The department should discuss what supports might be offered for Master's students within the more limited time and credit constraints of that degree.

Policy on faculty advising responsibilities. C&I values pedagogical processes that contribute to high-quality standards for student success. As reported in our in-house survey, some students experience problems with their advisor failing to give feedback in a timely manner, supply letters of reference for fellowships and funding opportunities (in cases where faculty have agreed to write those letters), and set up meetings and/or show up to set meetings. In cases where faculty may not meet advising responsibilities, several options have been put in place for students. These include approaching other faculty committee members beyond the advisor, approaching the Graduate Student representatives for advice on how to proceed, meeting with the Director of Graduate Programs, approaching the department chair, and visiting the new Graduate School office. Because students may not want to risk alienating an advisor, and in cases of continuing negligence, the GPC approved two further levels of action: (1) the Director of Graduate Programs can communicate directly with the faculty member regarding complaints from a student or group of students, and/or (2) patterns of neglect, repeated complaints by one student, or across students can be referred to the department's Personnel Committee for further review and action.

Breadth and depth of professional development. The Graduate School has a professional development office that holds events for student across campus. Students also can begin an individual development plan using software the Graduate School provides. Additionally, students gain professional experience as TAs or PAs. Historically, we did not guarantee funding for our students, yet most were employed in some capacity on campus during their degrees. We understand anecdotally that positions in programs outside C&I are an important source of experience for a significant number of students, including those in their 5th or 6th year. In 2019, the department developed a mechanism to track the funding of existing students. Most of the employment opportunities available in the department are teaching assistantships, and the majority of Ph.D. students find this experience beneficial (see Figure 21).

While there are opportunities to work with professors on research tasks, opportunities to do paid work with professors in our department on their research are not available as often as opportunities to be TAs (see Figure 22). Part of this is due to the budget structure of C&I and the School of

Education, in which much of the 101 budget is dedicated to the core mission of teacher education which supports our graduate students in their teaching assistant roles. Research opportunities are mainly offered outside the department through grants administered by the Wisconsin Center for Education Research or through campus-

	Answer N	Per	cent
	Yes 59	73	.8%
	No 21	26	.2%
	Total 80	10	0%
ful was	your TA experience w		
ı helpful was	Answer	N	Percent
ow helpful was	Answer Very helpful	N 39	Percent 67.2%
ow helpful was	Answer Very helpful Somewhat helpful	N 39 11	Percent 67.2% 19%
How helpful was	Answer Very helpful	N 39	Percent 67.2%

based awards won by faculty. This has meant that for much of the last decade students who want funding and tuition remission were usually required to be hired as a TA in the department or were seeking TA and PA opportunities elsewhere.

While over half of the students said they had been a PA in the 2018 Graduate School Doctoral Exit Survey, students do not necessarily find PA experiences as helpful. Figure 23 lists the responses of Ph.D. students employed as PAs.

Opportunities (n=72)

Have you had a chance to work with a faculty member in the department on their research?

Yes No

32% 68%

Source: C&I Graduate Student In-house Survey.

Figure 22. Opportunities to Do Research with Faculty.

Were you a program or project assistant (PA) at any time during your graduate studies?

	Answer	N	Percent
3	Yes	46	57.5%
	No	34	42.5%
	Total	80	100%
119			

How helpful was your PA experience with respect to your professional development?

Answer	N	Percent
Very helpful	3	6.8%
Not very helpful	17	38.6%
Not at all helpful	24	54.5%
Total	44	100%

Source: Graduate School Doctoral Exit Survey.

Figure 23. PA Experiences.

International students, whose background often does not allow them to be hired for certain positions within the department (e.g., positions that require domestic teaching licensure or experience with U.S. school systems) have been especially concerned about obtaining PA and TA opportunities. These concerns have been most acute in their first year, after which they often found funding and employment in the University. While the change to the full funding model in the next year alleviates these more repetitive concerns from earlier, it does not resolve how students' experiences will actually align with their future career pathways in substantive ways. The new Graduate Student Support Committee thus has as part of its charge the responsibility to map, consider policies for, and oversee assistantship experiences across the 4 years of guaranteed funding for all students.

How many research or scholarly presentations (including poster presentations) did you make on your campus during your graduate studies?

Number of Presentations	N	Percent
0	24	30%
1	17	21.2%
2	17	21.2%
3	10	12.5%
4	3	3.8%
5	1	1.2%
6	1	1.2%
7	1	1.2%
8	1	1.2%
10 or more	5	6.2%

How many research or scholarly presentations (including poster presentations) did you make at meetings or conferences away from your campus?

Number of Presentations	N	Percent
0	7	8.8%
1	5	6.2%
2	10	12.5%
3	11	13.8%
4	7	8.8%
5	6	7.5%
6	5	6.2%
7	1	1.2%
8	2	2.5%
10 or more	26	32.5%

If you made a presentation away from campus, did you receive funds for travel from any of the following sources?

Answer	Responses	Percent
Your program	45	56.2%
A research grant	24	30%
Other institutional funds	30	37.5%
No funds received	13	16.2%

Source: Graduate School Doctoral Exit Survey.

Figure 24. Opportunities for Presentations.

The department offers students travel funding to attend conferences and conduct research. The Graduate School provides additional funding for student travel and research, as do some research

centers. These typically favor dissertators in the Ph.D. program. Additionally, there are small sources of travel funding available through the School of Education. The Graduate School Doctoral Exit Survey data indicate that this funding has been important to students' professional development by enabling them to travel to obtain experience giving scholarly presentations (see Figure 24).

In addition to participating in presentations, almost 70% of Ph.D. students authored or coauthored at least one scholarly work (see Figure 25). To encourage this critical form of scholarly professional development, the department developed a suite of writing courses designed to move students to publication and to assist in thorough literature reviews necessary for grants and monographs.

Based on research conducted while you were a graduate student, how many scholarly works that have been published or accepted for publication have you authored or co-authored?

Number of Scholarly Publications		Percent	
0	25	31.2%	
1	16	20%	
2	8	10%	
3	6	7.5%	
4	9	11.2%	
5	1	1.2%	
6	5	6.2%	
10 or more	10	12.5%	

Source: Graduate School Doctoral Exit Survey.

Figure 25. Authorship Opportunities.

In sum, the strengths of our mentoring lie in the rich variety of curricular and extracurricular experiences provided by faculty above and beyond teaching assignments, the high standards for completion of projects, and the support provided by faculty and areas that tailor graduate student experiences to the future field. Our major challenges for mentoring doctoral students are:

- 1. providing structured research mentorship opportunities given limited access to externally funded research opportunities and the greater cost of funding PAships relative to TAships;
- 2. providing TAships or other teaching opportunities that match the pedagogical and scholarly breadth of the department (i.e., chances to teach outside of teacher education contexts) and that expand our students' curriculum vitae and knowledge bases.

For our Master's program, where students express greater dissatisfaction, we face a broad range of concerns tied to the direction and purposes of this program, which in turn must respond to shifting contexts at the University and beyond. Our mentoring-related challenges here relate to:

- 1. balancing the research function in the Master's program with our students' wide variety of employment opportunities and career trajectories;
- 2. deciding the role that our Master's program should fulfill in the future relative to changes in the field, competition from our peer institutions, and the advent of fully online instructional Master's level programs.

Theme 2. Possible Futures and Structures of Programs

The points above regarding mentoring tie directly to our second theme about the future. Globally, enrollment in graduate education declined in the past decade. Statewide, there have been recent changes in motivations for enrolling in a Master's degree (e.g., diminished

professional incentives for practicing teachers to pursue additional degrees and the proliferation of non-degree credit opportunities at other institutions). In terms of the Ph.D., we have had relatively more consistent enrollment that contributes to the diversity of our student body, which we take as a strength. Taken together, such factors prompt our three questions under Theme 2.

Self-study question 2a: What is the faculty's role in funding concerns related to Ph.D. students and how might we achieve a more equitable distribution of existing funding resources across areas, advisors, and students?

In 2018-19, the department was tasked with providing 4 years of guaranteed funding for all incoming students. The department voted to include recently admitted students within this funding guarantee, thereby expanding the number of students we fund by the number of students currently in the first 3 years of their program. This move to full funding for Ph.D. students required an analysis of the C&I budget and a reassessment of budget priorities.

Currently, the majority of C&I funding opportunities come from teaching assistantships within the department. These typically are positions supervising teacher-certification students completing their practica or student teaching experiences in the Madison-area schools. A smaller number of students are hired to be stand-alone instructors for courses offered in our teacher education programs for which we do not have enough faculty to staff. Students also are funded on project/research assistantships supplied by extramural research grants, as TAs by departments other than C&I, and by foreign governments or non-profit organizations.

To determine how much funding the department could directly allocate, the chair and department administrator looked at previous years' budgets to determine the number of TA positions (supervisory, sole course instructorships, and assistants to faculty) available. Table 2 shows the rough distribution of positions within the C&I department for the past 2 years and projection for 2020-21. (All numbers are based on 33.3% appointment levels.)

Table 2. Distribution of Teaching Assistantships

Year	El Ed, World Lang & supporting classes	Secondary	Electives	Chair Appointed	Grants/Awards
2020-21	40.0	10	6	5	Incomplete data
2019-20	37.6	10	5	2	Incomplete data
2018-19	47.4	11	6.5	1	Incomplete data

Source: C&I Budget documents.

The new funding initiative called for the department to increase funding from the usual 33.3% up to 50%, which required an additional analysis to determine the effect that increase would have on the budget. In prior years, the department spent approximately \$600-\$700,000 of department funds on hiring TAs. Funding from the Secondary Education program provides approximately \$140,000, while an additional \$120,000 is projected to come from other departmental sources. This amount could support about 43 positions a year. Support from the Graduate School and the School of Education in the form of fellowships could account for 12 more positions a year, for a total of 55 positions a year.

That is what the department could support with funds it directly controls. A significant number of our students, though, find positions outside of our department. Using historical data,

the department estimated conservatively that approximately 20% of students in their first 4 years received funding from non-departmental resources, thereby increasing the amount of students we can support to approximately 65 per year.

Under these budgetary circumstances, the department can support about 16 new students each year. This, however, assumes that all of our current, departmental-controlled funds be redirected from all students currently employed (including students in their 5th, 6th, and 7th years of Ph.D. study and students currently employed who are in Ph.D. programs in other departments on campus) to C&I students in their first 4 years of study. Due to a large increase in admissions in the past year, this number will be much lower for the next 4 years, but it is expected to eventually stabilize at around 16, if the budget remains the same.

Most of our department support comes in the form of teaching assistantships in our teacher education programs. This is not an ideal means of supporting Ph.D. students throughout their careers. Nor does it provide an equitable distribution of funding across department areas. Some areas of the department are not part of formal teacher preparation programs, and C&I admits students who may not be eligible to teach in teacher education programs as a result. The faculty initially decided to admit students without consideration of their ability to meet the teaching needs of the department or of their ability to work as research assistants on externally funded grants. On this point, see the description of the new four-step admissions procedure (p. 12).

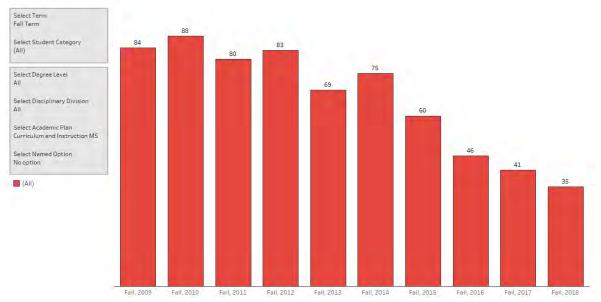
The department believes that students would benefit from research positions or fellowships rather than 4 years of teaching experience. Thus, the department will, ideally, move towards funding students with a mix of teaching assistantships, grants, fellowships, and research positions, which will allow our Ph.D. students to gain a wide variety of experiences essential to their careers. This desired state would require more funds, which could come from increased success in faculty obtaining extramural research grants, and/or from increased funds from new and existing revenue-generating programs offered by the department, and/or from greater funding of graduate education from the Wisconsin Alumni Research Foundation. Another option would be to reduce the number of students admitted with funding to make existing funding go further toward research positions and/or fellowships. Given the extreme concern faculty exhibited at reducing the current year's admission to 16, however, this does not seem viable or popular, and it may negatively impact recruitment and retention of faculty.

The mandate to provide 4-year funding guarantees, combined with the constraints of the departmental budget, prompts our questions related to the faculty's role:

- 1. How are student admissions allotted across faculty and programs given that the majority of the TA positions are constrained by either prior teaching experience or subject-area expertise?
- 2. In what way should external funding matter in allocating admission slots? If faculty are successful in getting grants, should that funding be viewed as a bonus on top of departmental funding (rewarding the grant getting)? Or should that be viewed as allowing department resources to be used for areas that are not generally supported by external funding agencies?
- 3. How should faculty-support TAs (those not teaching any specific courses but helping a faculty member) be assigned? Who or what gets priority and how is that decided from year to year?

Self-study question 2b: In light of the trends articulated above, how might we revitalize the Master's of Science program?

The Master's program in C&I historically served primarily practicing teachers in the state of Wisconsin. This was tied to professional development pay scales that saw teachers remunerated in the state public school system for obtaining higher degrees. Over much of the last decade, the State government removed the scales that incentivized practicing teachers to seek out Master's degrees. While the department's Ph.D. enrollments have been fairly consistent, the department has experienced a decline in Master's enrollments (see Figure 26).



Source: Graduate School Explorer

Figure 26: C&I Master's Total Enrollment Over Time

We view this change in law and in enrollment as an opportunity to rethink how the Master's program might be given renewed attention. Any redesign of the Master's program impacts the overall fabric of graduate education. For example, our Master's students currently take all of their coursework seminars with our doctoral students in face-to-face seminars. While studying alongside more experienced Ph.D. students may prove initially daunting, the faculty perceive that this produces a stronger Master's thesis and a stronger Ph.D. dissertation.

Modifications to the Master's experience have to be considered within several contemporaneous contexts, including new professional needs within and beyond teacher education; our peer institutions' competitor programs; the proliferation of online Master's degrees nationally; and the limited Master's student feedback obtained from in-house surveys. We also must consider the specificities of education as a social science and a profession, in which relationship-building and group interpersonal communication are paramount, where instructor real-time feedback is labor intensive, and where modeling is not easily achieved or necessarily substitutable via online interfaces;

We seek the input of the external reviewers on several possible pathways for the existing Master's degree relative to the delivery of new Master's degrees and/or certificates. We have not settled on whether any *new* Master's degree programs would be advisable, and if so, whether

they should be delivered on campus, online, and/or in a blended format. (Note that in our most recent in-house graduate survey the vast majority of students recommended an in-person degree rather than a fully online degree, while acknowledging that some blended format may be suitable.) We also considered worthwhile modifications of our *existing* Master's program, and whether there should be an additional post-baccalaureate certification. Issues to consider in regard to these possible pathways include:

- 1. Developing new certificates for students with an existing bachelor's degree. Examples include a *Certificate in Advanced Skills Teaching*, *Certificate in Reading Licensure* and a *Certificate in Teaching with Digital Media*.
- 2. Allowing completed certificate credits to count toward the required Master's credit points.
- 3. How to balance shorter term online certificate programs against residential or on campus teaching responsibilities and course loads in the Master's program.
- 4. How to get new certificates, new Master's degrees, or renovations of the existing Master's program developed and implemented amid existing workloads.
- 5. How to weigh the in-person, relationship-building priorities of education and pedagogy relative to online delivery.
- 6. How to develop and deliver new certificates, new Master's degrees, or renovations of an existing degree that makes use of non-academic linkages and trajectories such as with NGOs, non-profits, community centers, corporations, government bureaucracies, etc., and the time to develop such relationships into jointly-sponsored programs.
- 7. How to use existing courses, converted potentially to online and/or blended formats, as a starting point (e.g., with an expected enrollment of 9-15 per year with the following format: Summer: 3 credits; Fall: 3 credits; Spring: 3 credits; Summer: 3 credits).
- 8. How to balance teaching different student populations (those coming to Madison for a Master's degree relative to those enrolling in an online certificate course) if present in the same classes and for very different purposes (i.e., one group doing a Master's degree to write a research-based thesis, another doing a 12-credit certificate).

Some modifications of an administrative nature we can make immediately, such as 1 and 2 below. Other reflections for refining the *existing* Master's degree are more structural (3 below):

- 1. Whether a unified Master's degree point of entry and timeline should be instantiated (i.e., no separate dates for international and domestic students). Historically, the later summer deadline allowed domestic teachers time to consider and complete admissions, and the earlier deadline for international students enabled visa processing.
- 2. Diversifying the grading rubrics for different forms of Master's capstones—thesis, project, take home exam, and in-house exam—to meet the different professional and academic trajectories of an existing or new student body.
- 3. Whether a separate Master's degree should be offered in online format only, with all fulltime research seminar students entering the Ph.D. from the Bachelor's level (the Humanities model) or with an existing Master's degree completed.

We also would appreciate input on how to exercise stronger oversight for faculty Master's thesis advising in the scenario where different kinds of Master's programs are implemented, so that all students receive quality feedback and contact. Based on a relatively small number of in-

house graduate student survey comments (four in 2018 and six in 2019) there was relatively less overall student satisfaction with their degree experience, particularly with regard to preparing for a Master's thesis. Satisfaction increased in the most recent survey, but the issue remains of how standards for potentially different kinds of Master's degrees would be set and monitored.

Self-study question 2c: What purposes, needs, and complexities might the introduction of graduate/professional certificates alongside the Ph.D. and Master's degrees fulfill and bring?

UW-Madison offers multiple post-baccalaureate certification pathways. These include:

Undergraduate or special student certificates, which may be completed within the context of an undergraduate degree or as a special student after an undergraduate degree has been awarded from any institution. The certificate may be completed in its entirety while enrolled as a special student.

Graduate/professional certificates, which are available to all degree-seeking graduate and professional students. These are not stand-alone certificates but can be used to meet the minor requirement within the Ph.D., where specified.

The Specialist Certificate, which represents work beyond the Master's level (e.g., the Education Specialist Certificate Program to become a school Superintendent in Wisconsin).

Professional capstone certificates, which can operate as stand-alone certificates. Enrollees need not be a graduate student at UW–Madison (e.g., Capstone Certificate in Computer Science).

Such innovations can prepare graduate students for or increase access to an alternative but related career path from the major study. They also help prepare students to pursue careers outside of academia and train those who wish to remain within academia to articulate new horizons for their research, broadening the application or services of the major study. These innovations also contribute to professional development; develop ability to engage both specialized audiences/clients and the wider community; generate interdisciplinary perspectives and skills; enable part-time study options or flexible graduation times to improve work-life balance; prepare students to launch into more advanced study in topics allied to the Ph.D. or Master's degree programs; and provide linkages to community organizations, NGOs, non-profits, and government agencies.

While the department's Curriculum Committee is attending to issues such as which certificates, in what areas, and in what order of rollout might be viable, our faculty have raised and discussed multiple concerns regarding certificates. These recognize the diversity in purposes and needs, and the limited resources faculty have in the context of current duties to generate new programs that can move through the necessary UW–Madison system of approvals. The faculty identified several issues as important to consider:

- structure and support for faculty to implement innovation and for marketing and sustaining certificates;
- generating cooperation across departments and gaining recognition from related authorities, institutes and industries;
- the relation to a minor:
- coursework and evaluation of marketable skillsets;
- balance between versatility and distinctiveness;
- sustaining interest and commitment.

Challenges and recommendations. We seek recommendations on the following issues:

- Which kinds of graduate/professional certificates should be launched and when? While we have a Curriculum Committee process, faculty largely are not free to undertake such development, and standing teaching commitments must be met.
- 2. What would be a serviceable number of enrollees for such new programs?
- 3. What are the best number and combination of credits (e.g., 4 x 3-credit classes or 3 x 4-credit classes, etc.)?
- 4. What processes could be developed to ensure that setting up new programs, certificates, or capstones is worth the input and innovation? While we have the potential assistance of units such as Continuing Studies and the Professional Learning and Community Education, faculty do not have the time to seek out marketing expertise should numbers not initially meet desired goals.

Conclusion

C&I has generated a top tier graduate education experience for its students that has been sustained with only approximately half the faculty members than two decades ago. This effort of retaining the highest possible ranking in which we see excellence and equity as mutually constitutive is underscored by our commitment to an epistemologically and demographically diverse student and faculty body. Our continuing attention to excellence and equity and our commitment to cross-disciplinary, cross-campus, and inter-unit cooperation has taken place in the context of tremendous changes in university policy. The changes, while necessary and lauded in terms of funding for Ph.D. students, generate challenges to some of the pillars on which our success has been built, such as decentralized autonomy in admissions, research agility, robust graduate student cohort numbers, and cutting edge graduate course and program innovation.

Our department embodies epistemological and demographic diversity with high ranking and high standards. The research autonomy of our faculty draws a diverse student and faculty body. The strong mentoring of graduate students connects them to units beyond education and assists them to win prestigious positions worldwide. These strengths intersect with new challenges such as the requirement to reduce Ph.D. admissions, our ability to fund a variety of assistantships across a student's time that reflects stronger professional development, the recognition of the true range of faculty research areas including but beyond teacher education, the need to refresh our Master's program given the loss of state-based incentives to the teaching workforce, and our desire to provide access to new audiences and new kinds of research through various certificate programs. Preserving what has made C&I at UW–Madison the most respected graduate education platform in the nation, while adjusting to and absorbing more centralized and collectivist policy changes, is probably the greatest challenge to our department's reputation, recruitment, retention, and functioning over the next 10 years.