Thoughts on Major Qualification

For the Committee on Educational Policy

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Background

The Committee on Educational Policy shifted the campus from major disqualification to major qualification in 2010-11 as a result of LR 6.11.C concerning SR 900.C.2 (“Undergraduate students in particular schools or colleges may be subject to more stringent norms with respect to academic probation or disqualification, but only on the basis of regulations adopted by a Division of the Senate and approved by the Assembly of the Senate.”).

Major disqualification processes included two types:

1. Those focused solely on completion of core lower-division courses, essentially a qualification requirement turned into a disqualification policy. However, since there was not always a sequencing requirement that students complete the courses early in their career, seniors could technically be disqualified on failing a lower-division course as their final requirement.
2. Those with a dual focus on both lower and upper-division courses either course-based or GPA-based. For example, including specific core lower-division courses in the disqualification policy as well as preclusion against failing upper-division courses multiple times. The system used by majors in the BSOE relied on cumulative and quarter GPA in science and engineering courses to evaluate both major qualification and major disqualification. Other programs have primarily used failed and repeated class criteria rather than averaged performance.

The Senate made a significant change for 2008-9 from requiring major qualification in the first quarter of junior standing to requiring qualification prior to enrolling in the third year (or equivalent). This change moved major qualification to the end of the second year from the start of the third year for typical students. Most importantly, for students making minimal progress, this moved declaration from the middle or end of the third year to the end of the second year because class level is based on units rather than time. Major declaration for upper-division transfer students remained in the second quarter.

For the 2012-13 catalog, major disqualification was eliminated for students using the 2012-13 catalog and latter, and programs have either moved to permanent major qualification systems, 2-year qualification systems pending review and permanent approval, or have not yet developed a replacement qualification process.
Also in 2012-13, Admissions and the Committee on Admissions and Financial Aid (CAFA) are piloting major qualification as a significant criterion for transfer admission. While some programs already screen transfer students prior to admission to UCSC, this has not previously affected their campus admission, just the ability to declare specific majors. For 2012-13, review of BSOE, biology, psychology, economics, and physics major transfer records may result in denial of admission to the campus due to lack of major preparation. This should ensure that students in these majors are prepared to declare and succeed in their proposed plan of study, and is also consistent with recent language from BOARS.

The 2012-13 adjustments, and the organic growth of different approaches to major qualification and the evaluation of major qualification proposals have resulted in a variety of strategies and motivations. The purpose of this rumination is to discuss some observations as a result of studying a number of these proposals.

**Caveat**

These thoughts are significantly informed by both of my current roles, Vice Provost and Dean of Undergraduate Education, and program chair of the B.S. in Bioengineering. For the bioengineering program, I undertook a detailed analysis of qualification and worked closely with BSOE Office of Undergraduate Affairs to implement the qualification and appeals process. I have used, improved, and shared the resulting data tools to help understand other qualification proposals.

**Goals**

There are several goals for major qualification, especially as it relates to pre-third-year-enrollment.

1. Providing a clear definition of the first 5 quarters of work necessary to successfully complete a major.
2. Ensuring that students qualified into a major are prepared to succeed within four (or two) years.
3. Assisting college advisors in identifying students who need additional assistance in finding an educational path toward the baccalaureate.
4. Helping programs plan for and meet the curricular needs of their majors and of students considering their majors.

**Structures**

Qualification policies, as with campus and college performance measures, are generally based on two interleaved considerations: progress through the completion of courses and performance in courses. Resource-impacted programs, with approval, may develop competitive entry requirements related to available seats. Because approval of qualification based on impaction has a high threshold, programs with concern about the number of majors tend to seek approval of qualification schemes
only based on progress and performance, but possibly with levels higher than strictly necessary to ensure that declared majors are likely to complete the major.

Programs have developed a variety of approaches to these two items, and I have several thoughts on both topics, all of which are focused on “typical” lower-division matriculants with regular Fall entry and FWS enrollment. It cannot be over-emphasized that many many students have atypical enrollment paths.

**Progress**

In completing a 4-year degree, the typical frosh undertakes 45 units per year, 15 per quarter. Qualification is based on the first 5 of 12 quarters, and so should not include more than 40% of the course requirements of a major. Because students in their first 5 quarters should be focused on major selection, major qualification, and writing, a lower portion is appropriate, such as 20% (for majors with fewer course requirements) to 33% (for majors with many course requirements). These levels also allow for the occasional preparatory course, failed course, or flexibility in major exploration.

The course list should not have any single points of failure. That is, no single non-passing grade should preclude a student from declaring a major. A student who begins preparing for the major in their first quarter should therefore be able to complete the qualification requirements by the 4th quarter (allowing one additional quarter for a non-passing grade, pre-requisite preparation, or additional writing preparation), and qualification courses must be offered sufficiently regularly to allow all interested students to complete qualification by the end of the 5th quarter with up to one non-passing grade. In particular cases, it may be reasonable to allow major declaration based on work in the 6th quarter (e.g., a one-quarter extension by the college) for students who otherwise meet the qualification requirements but were unable to retake a course until Spring of the second year.

The courses should all be lower-division courses, or articulate to lower-division courses, as the qualification requirement is based on the first 5 quarters of work, and upper-division work is intended to begin after the 6th quarter.

**Performance**

There are an immense number of ways to measure performance. Many of the current methods have foundations in our campus’ course-based approach to performance measurement, a necessity decades ago before grades were uniformly available. Course-based approaches (e.g., not more than 2 grades below B, no more than 1 F, and so forth) can lead to abrupt transition points between qualified and not qualified, and are not necessarily tied to future academic performance (for example, if a student had to withdraw from a class for medical reasons).

The now-enforced triple-take rule (Regulation 9.1.8), a course-based measure, means that students may not be able to qualify if any courses required for qualification have been unsuccessfully attempted twice. The new process ensures that college advisors can help students find a better fit. Thus, major qualification
rules that include criteria such as “not more than one fail in a class” are redundant. Exceptions to this policy are appropriately placed with college advising for those rare instances in which significant external issues, such as major illness, resulted in attempts that should not count in the tripe-take rule.

Other programs evaluate performance based on grade point averages, sometimes with the inclusion of course-based caveats.

The many ways to calculate performance mean that students are not able to self-advise, and that our campus AIS system cannot easily reflect to students whether they are on track to qualify for a major without significant programming to include a different calculation for each major. GPAs with differing rules about course repeating and non-passing grades (NP, D, F, W, I, not to mention DG) make it difficult for a student to be sure whether or not they have qualified. Alternatively, per-course performance measures (’not more than one C’) are less holistic.

**Available Seats**
Qualification based on available seats is appropriate only for small and highly competitive programs in which the sponsoring agency has an alternative major that does not qualify students based on available seats. Thus, available seat qualification should be reserved for honors, intensive, or senior thesis majors that may have additional resource requirements beyond the standard major and its capstone.

**Appeals**
There are a variety of approaches to major qualification appeals. While CEP policies (not to mention due process) require some sort of appeals process, it is usually not well defined. Typical appeals processes include a written appeal delivered to the department, which may then be reviewed by the chair or undergraduate director. Some programs require that a major be declared if the appeal is taking place after the major declaration deadline. Other policies may indicate that declaration after the major declaration deadline is not possible, or that appeal more than once is not possible. Most appeals text does not include any deadlines for undertaking an appeal.

**Possibilities**
1. Adoption of a single GPA calculation for assessing qualification performance

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1 [Regulation 10.4.2](#) indicates that a student can change from one declared major to another declared major only with approval of the receiving program. However, any student who is undeclared (e.g., has been provided an extension in major declaration by their college) should be allowed to declare any major according to its major qualification requirements taking into account appropriate degree progress.

2 [Regulation 9.4.1f](#) states "if a student has taken courses more than once due to
a. AIS has the ability, without modification, to calculate GPA in a degree audit plan (e.g., the GPA among all UCSC courses applied to plan requirements). The GPA could be made available to students and advisors, and is robustly defined.

b. The GPA is calculated according to campus rules
   i. W, P, NP, I not counted.
   ii. If any of the courses in the plan are among the original courses corresponding to the first 15 units of UCSC repeated work, they are not counted.\(^2\)
   iii. Programs that restrict P/NP for courses in the program require an advisor-approved exception to satisfy a plan requirement when the in-plan P/NP limit is exceeded.

c. It would also be possible to modify AIS to include a different way of calculating GPA in plans, but it must be one that is applied to all programs. Some issues different qualification proposals have raised include:
   i. P could be neutral (not counted in the GPA), 2.0, or something else.
   ii. NP could be neutral, 0.0, or something else.
   iii. W could be neutral, 0.0, or something else.

d. Definition of a campus-wide way of calculating qualification GPA would enable its implementation and display in AIS for the student and the students’ advisors. Some programs may consider whether or not automatic qualification of students who have completed declaration requirements by the declaration deadline would be advantageous.

e. These rules could also be extended to the concept of GPA in the major, a possible asset for programs as they work to determine eligibility of students for honors in the major or other advanced opportunities.

f. A single in-plan GPA, combined with in-plan progress (a more complicated issue) would enable one to begin considering full-scale advising strategies based on major performance and progress.

g. As with the campus GPA, it is my belief that qualification GPAs should only be based on grades that are part of the UCSC transcript. Transfer and AP courses should count toward progress, however, and high performance outside of UCSC should be taken into account in the appeals process for students who do not fully qualify.

\(^2\) Regulation 9.4.1.f states “if a student has taken courses more than once due to receipt of a D or F, for the first 15 credits of repeated work, only the last grade recorded shall be computed in the student’s GPA.” This is implemented such that repeated courses that originally earned a D, F, or NP count against the 15 credits. It would be similarly consistent with this rule to include W as well, bringing the implementation of this regulation in line with the inclusion of W as an attempt in 9.1.8. Such would require an AIS rule modification.
h. A change to a campus definition of qualification GPA would then require analysis of individualized program calculations to determine any changed to the GPA threshold needed to preserve the same level of qualification.

i. Definition may be accomplished through policy rather than regulation, as CEP already has authority qualification policy.

2. Adoption of criteria for assessing qualification progress
   a. That it include at least one fifth or quarter, and at most one third of a program’s units, depending on the total number of units required in the major. Too few courses can lead problems in degree completion, while too many can lead to problems in timely qualification.
   b. That for most students, qualification can be completed in the fourth quarter, for fifth-quarter declaration.
   c. Articulated AP and transfer credit satisfies corresponding progress requirements, but should not be included in the performance criteria.

3. Adoption of a standard appeal process, addressing:
   a. A quarterly date or dates on which appeals are due, and when responses to appeals will be returned.
   b. A minimum structure for the appeals committee, such as two faculty members and the lead staff advisor.
   c. A restriction to several specific outcomes, for example: (1) qualification into the major, (2) qualification after completing one or two courses in the current quarter at a specific performance level not higher than, e.g., B-, (3) qualification into the major only as a single major due to time-to-degree and/or performance issues, (4) qualification into a related less-intensive major, and (5) denial of appeal.
      i. In this example, the second case should never be provided to the student without approval of the college if a single-quarter extension of the major declaration deadline is required.
   d. The focus of the appeals committee should always be on the likelihood of success of the student in the major. The response to the student in cases (3)-(5) should always include the reasons why the appeal was denied or not fully accepted, and all results should be copied to the students’ college.
   e. A consideration of whether or not it is appropriate to require alternate major declaration if an appeal takes place after the declaration deadline.

4. Consideration of criteria for the evaluation of qualification proposals
   a. The portion of recent graduates who did not meet the progress or performance criteria at their time of major qualification.
      i. It is reasonable for some of these students to have had to pursue an appeals process.
      ii. The articulation of new qualification progress requirements will have an impact on course selection. Even though some current psychology graduates completed pre-calculus in the
third or fourth year, inclusion of that course within the qualification requirements would result in its completion earlier in a student’s career.

b. The relationship between performance in early courses and performance in latter courses.
   i. Because of the uniqueness of each student, this is generally very difficult to assess. CEP may wish to establish statistical thresholds for which this may be considered evidence. The key criteria here is whether or not the qualification progress and performance measures have particularly strong correlation with non-passing work in specific required upper-division courses. Correlation with receiving C grades (rather than A or B) is insufficient, unless students earning Cs in some core course nearly certainly fail a following course or capstone.

c. The motivation for the qualification proposal.
   i. The motivation should be a mixture of student success and ensuring that all students likely to succeed in the major are able to declare the major.

d. Frequency of course offerings required in the progress measure.
   i. In considering a qualification proposal or the continuation of a qualification proposal, it may be necessary to require a certain frequency of offering and capacity for specific courses to ensure that all students have an opportunity to enter the major.

5. Consideration of clusters of degrees
   a. Related degree programs, such as a general, graduate school, and honors within the same department may offer departments the ability to address pedagogic and resources issues with a spectrum of qualification requirements and degree options.
   b. For example, it may be appropriate for honors or intensive majors that have a corresponding “standard” major to have qualification criteria that include Available Seats without the high level of review this would normally impose for the “standard” major.
   c. The Committee may also wish to set specific within-the-major performances levels that might require a simple proposal, given the establishment of a standard means of qualification GPA calculation. For example (without analysis), 2.3 for any “standard” major, and 2.8 for any honors major with a corresponding “standard” major.
   d. A system such as this may encourage units to develop a range of programs that could then assist with degree completion and student goals.

6. Consideration of the ownership of declared students
   a. The change to qualification is a fundamental recognition that when a student has declared a major, that major is responsible for their success. Current curricular-based financial systems prize enrollments rather than completed majors. However, upper-division enrollments (majors) are significantly more expensive to serve than lower-division
enrollments. To ensure that overly strict qualification processes do not advantage programs, direct distribution of enrollment funding as a result of successful major completion may be appropriate. UC Davis, for example, distributes tuition funding at a divisional level based on enrollments, major headcount, and graduates. Such an approach (a “carrot” approach) seems more likely to succeed than specific major retention goals with unclear consequences when not met.

7. Consideration of third year qualification
   a. Major declaration is required by the second year. However, students reasonably may wish to change to a related major or add a second major in the third year.
   b. It is worth considering whether or not third-year declaration criteria should be required in all majors, and how they relate to transfer students in their first year. These would have higher levels of progress, such as 50% to 66% of major requirements, and may have higher performance standards as well. Higher deference could be given to programs in setting these levels, but a clear articulation of what students need to do for a third year declaration (based on 8 quarters of work) would reduce special cases and be fair to all students.