

Supporting Cross-Campus Interdisciplinary Graduate Certificate Programs

There is a need to revisit incentives and strategies for educating graduate students across disciplinary lines as well as professional specialties. The reality is that most (i.e. significantly more than 50%) of graduate students will not go on to a traditional academic career as a professor, whether by choice or not by choice. We need to be offering educational opportunities for our students in topics and skills outside of their primary major to enhance their ability to be competitive for non-academic positions and to also expose them to alternative paths outside of their discipline if they have become less enthusiastic about pursuing a career in their direct discipline. This need is not new: indeed, one of the authors of this white paper recalls similar needs for graduate students in the early 1990s. However, the University of Colorado Boulder currently is not structured well to offer graduate students opportunities across the university to obtain skills and knowledge to be competitive for non-academic careers in the 21st century.

Certificate program courses are often eye-opening for majors across the campus. Chemists, integrated physiologists, engineers, and the like have become aware of completely new career pathways through engaging in the Science and Technology Policy certificate, for example. It is possibly only a slight exaggeration to say that this type of educational “opening up” is a life saver for many students who have realized that they do not intend to pursue the single pathway of college professor and may not realize the wealth of options available to them to use their degree in valuable and productive ways. In some cases we have heard that the existence of a certificate program has drawn graduate students to enroll at CU Boulder.

Drawing on the experiences of the Science and Technology Policy Certificate and the Renewable and Sustainable Energy Certificate, we would like to offer the following observations on the challenges facing interdisciplinary graduate certificate programs at CU Boulder:

- It is difficult to fund the teaching capacity for certificate programs that are interdisciplinary across departments and even schools at CU Boulder. Because the programs often educate students from many departments but not a critical mass from any one department, certificates wind up begging for resources cap in hand in order to offer their program. This has detrimental effects on being able to plan ahead for staffing courses and therefore being able to offer them, and thus can negatively impact the ability of students to be able to finish a certificate in a timely way.
- Certificate programs can be seen as “non essential” to the department where the faculty member running the certificate sits, putting the program at risk should teaching needs shift locally within the department or priorities change.
- Certificate programs can draw on teaching expertise from outside the traditional professor ranks. These professionals from outside of academia often teaching current skills and application to professional fields that complement the academic content of many disciplinary courses. Resources are needed however, to hire these individuals, and compensation levels must be sufficient to attract talent from the private sector.

Action Items and Path Forward:

- Resources need to be identified to help support certificates that cut across departments and colleges. It would be helpful to have a 5 year outlook for funding that can allow planning of courses and hiring of instructors and be able to confidently relate to students that they can finish the certificate during their time on campus.
- With these resources, measures need to be developed to prioritize and evaluate which certificates are seen as most valuable across campus and thus deserving of support.
- Accountability and measures for success need to be articulated and communicated so that certificates can be effectively evaluated for renewal.
- Certificates need a mechanism for connecting with Colleges to ensure that their curriculum is meeting the changing needs of departments across the university.

Respectfully submitted:

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