Statement on the Proposal to Increase Enrollment Caps for Courses Offered in Terms Potentially Impacted by COVID-19

In early May 2020, Academic Affairs announced the possibility that the College would respond to budget reductions, in part, by increasing enrollment caps and by combining sections of individual courses. Increasing enrollment caps for courses offered in terms potentially impacted by COVID-19, in particular, has severe instructional design and pedagogical implications, and poses serious concerns regarding faculty workload, as outlined below.

I. <u>Increasing enrollment caps will impose substantial instructional design and training</u> <u>demands in order to maintain positive learning outcomes</u>

Distance learning instructional design and training initiatives at the College of Staten Island have undergone rapid and substantial development since our transition to distance learning due to COVID-19 in early March. The Office of Information Technology Services (OITS) and Faculty Center for Professional Development (FCPD) are challenged with not only developing instructional design guidelines for distance learning in these unprecedented conditions, but also with disseminating them in an effective and timely manner to faculty and staff. Indeed, many of the challenges of transitioning to distance learning on which OITS and FCPD are focusing their efforts are precisely those that would only be exacerbated if enrollment caps were to be raised. Among these challenges are (i) training faculty who have little or no previous experience teaching online or creating remote learning materials; (ii) assisting both students and faculty with limited access to technological resources; (iii) designing effective and fair remote assessments; and (iv) identifying technologically-based solutions to difficulties arising from the absence of in-person interaction and demonstration (particularly in the Arts and Sciences).

In order to offer distance education courses with higher enrollment caps than those currently implemented, it would be necessary to ensure that (i) all faculty are sufficiently trained in creating and implementing sound distance learning pedagogy; (ii) all students are provided tools with which to self-assess their readiness to embark on distance learning, and, in turn, identify any areas of concern prior to the start of classes; and (iii) an extensive network, consisting of multiple groups on campus dedicated to optimizing distance education, key faculty mentors (individuals who have worked with the online learning team and/or have successfully taught online in the past), and communities of practice (comprised of all faculty) is well established, such that individuals can access support in any domain of distance education, and to any reasonable extent necessary. Failure to fully meet even any one of these conditions would likely result in the rigor and integrity of existing standards of pedagogy being substantially compromised.

While numerous and extensive efforts on the part of several groups to satisfy the conditions described above are currently underway, a considerable amount of time will be necessary to fully cultivate and make widely available these support structures, and to evaluate their efficacy in optimizing distance education such that aspects of them can be refined over time.

II. <u>Increasing enrollment caps will result in reduced instructional efficacy and compromised</u> <u>student outcomes</u>

Maintaining large (rather than small) class sizes, particularly in the context of distance learning, has been demonstrated to result in less pedagogically sound instructional practices, and, in turn, negatively impact instructional efficacy and student outcomes in numerous ways. Research suggests that *reduction* in class size results in higher pass rates, better retention, and fewer students who ultimately fail or withdraw from courses (Horning, 2007). In the same vein, grade performance has been shown to be inversely correlated with class size (Johnson, 2010). Development of students' communication skills has also been demonstrated to vary as a function of class size. Individuals in smaller online classes are evidenced to be more cognitively engaged and participative (Jahang et al., 2010) and demonstrate more advanced communication skills (Kim, 2013) than those in larger online classes. With respect to mastery of complex course content, evidence suggests that smaller class sizes facilitate critical thinking and higher order learning (Maringe & Sing, 2014; Walls, 2016).

In addition to impacting students' learning and development outcomes, class size also affects students' overall experience of the course, with students in larger classes assigning lower ratings of the instructor based on overall effectiveness, level of instructor interactivity, and instructor evaluations of student progress (Bedard & Kuhn, 2008; Kingma & Keefe, 2006; Lowenthal et al., 2019), as well as lower self-reported ratings of learning (Monks & Schmidt, 2011). **Perhaps most strikingly, the factor of class size disproportionately impacts the very populations of which the student body at the College of Staten Island is primarily comprised.** While large class sizes negatively affect student grades in general, larger negative effects are observed for first generation college students, Black students, Latino students, international students, low SAT scoring students, lower SES students, and those students who work more hours per week (Beattie & Thiele, 2016; Diette & Raghav, 2015). Furthermore, research suggests that in larger classes, first-generation college students, Latino students, and Black students have significantly fewer interactions with professors and peers regarding course content and course-related ideas, and that they are less likely to correspond with professors regarding future career opportunities (Beattie & Thiele, 2016).

It is, perhaps, unsurprising that scores associated student learning outcomes, overall development, and course experience vary inversely with class size, given that at class size increases, faculty are afforded less contact time with individual students and diminished ability to individualize instruction (Ravenna 2012; Taft et al., 2019). In fact, when teaching more than twenty students in a given section, faculty are reported to be more likely to to change their pedagogical practices drastically (from more engaged interaction with students to less individualized interaction) to maintain instructional feasibility (Benton & Pallett, 2013; Mandel & Sussmuth, 2011).

It is not only students and faculty who recognize the dangers (at worst) and compromises (at best) associated with large class sizes. Additional support for the implications of class size on quality of instruction is given by the scoring system used by the U.S. News and World Report in determining college rankings, in which colleges are awarded credit for undergraduate classes with fewer than twenty students and no credit for classes with enrollment caps over thirty-nine (Morse, Brooks, & Mason, 2018).

III. Increasing enrollment caps without additional support will challenge academic integrity

Academic integrity requires that we do not tempt students to violate the honor code with easily cheatable tests, or penalize the honest students for their honorable behavior. However, the ease of cheating increases as class sizes increases, and the difficulty of enforcement grows exponentially in an online setting. We cannot attribute these challenges to large class size alone. The online element compounds the issues that large classes already face.

As class sizes increase, coursework will tend towards more objective questions, and less comprehensive review of individual student work (e.g., essays, long answer questions, individual projects). These objective questions are more easily resolved by simple internet queries, using "find" functions among distributed documents, or pooling photographs of test questions into a group document. These methods of cheating are impractical for in-person classes, but extremely viable online. Many of these methods (e.g., shared group documents) become more effective as the pool of cheaters grows. For example, in one study, when given easily queryable vocabulary questions, even with online proctoring technology and honor statement prompts, students grades increased (on average) by 10% (Golden, Kohlbeck, 2020). While some attempts can be made to mitigate these problems by raising the costs of online cheating (e.g., manufacturing an abundance of unique problems for each student's exam, oral exams, eschewing objective questions, etc.), most of them involve additional work per student. Therefore, raising the course enrollment caps while being online only exacerbates this problem.¹

In addition to challenges in making cheating more difficult, we do not have readily available and equally cost-effective tools with which to identify cheating behavior in an online setting. More importantly, students are aware of that fact. For example, we cannot easily distinguish between a student who has memorized a verbatim correct definition and one who has copy-pasted it from a textbook. There are challenges in even determining if the proper student is actually taking the exam (Rowe, 2004). In less objective questions, one would expect a strong degree of similarity between correct essays, but in an online setting, the amount of guesswork and number of pairwise comparisons faculty must make increases substantially with each additional student. In person, such a distinction can easily be made simply by surveying the classroom, assigning seating, and patrolling during exams. With these measures, the costs for maintaining academic integrity remain relatively constant even for large classes. This is not true for online courses.

IV. Increasing enrollment caps will unjustly increase the workload demand on faculty

Developing and executing online pedagogy is generally acknowledged to be more time-consuming and labor-intensive than doing so for face-to-face instruction (Freeman, 2015; Jones, 2015; Maringe & Sing, 2014; Mupinga & Maughan, 2008; Sorensen, 2014; Sword, 2012; Taft et al., 2011; Tomei, 2006; Tynan et al., 2015), with development and execution of online pedagogy being estimated to require 39.9% more time than for face-to-face pedagogy (Finley et al., 2005; Zuckweiler et al., 2004). This is recognized not only by researchers, educators, and administrators across fields, but also by the College of Staten Island, itself. **Under** *typical* **circumstances at our College, it is estimated that optimal development of distance learning curricula for courses**

¹ We note that there are some private solutions offered by publishers, but this simply offsets the cost directly onto the students, many of whom are fiscally constrained.

already offered in person requires twelve weeks of work alongside an instructional designer, **per course**, as evidenced by protocols and practices of the OITS Online Learning Initiative. It is also the case, historically, that stipends have been provided to faculty who make this investment in developing their online pedagogy. Faculty transitioning to distance education due to COVID-19 are working under circumstances drastically different than those described above; faculty no longer have twelve weeks² at their disposal, nor do they have virtually unlimited access to instructional design specialists, nor are they being commensurately compensated for this additional labor. Considering this from a purely logistical perspective, it is clear that a serious challenge is posed: How can faculty be expected to fit development of distance learning curricula that is expected to take twelve weeks of time *with* maximal assistance from an instructional design specialist, *per course*, into the remaining days of the current semester and the one day³ between the start of the following semester and the beginning of classes offered in that semester? Any development of distance learning curricula done outside of these periods would be labor completed outside of full-time faculty's nine-month contractual obligation, and outside of the semester-based contractual obligation of adjunct faculty.

In sum, it is clear that faculty's workload demand has substantially increased due to the recent transition to distance learning, alone. Based on the implications of distance learning on workload, the literature provides sound and compelling justification for online class sizes being *reduced*. Instead *increasing* enrollment caps, without reducing faculty's time-based teaching load, will further exacerbate the issues at hand, resulting in an increase in workload demand far beyond those already introduced by the sudden transition to distance education due to COVID-19.

V. Increasing enrollment caps will set a precedent with potentially serious implications

Setting a precedent of raising course enrollment caps, particularly in this exceptionally trying climate, is likely to give rise to the misconception that increasing course enrollment caps is a reasonable, viable, and low-risk way of addressing fiscal concerns in the future, despite the extensive literature and experience on the part of both faculty and students demonstrating otherwise.

Furthermore, even if all concerns outlined above were to be addressed (i.e., if faculty received sufficient training in creating and implementing sound distance learning pedagogy; if all students are provided tools with which to self-assess their readiness to embark on distance learning; if sufficiently extensive networks of faculty support were well-established; if solutions to preserving academic integrity and adequate assessment were provided; and if faculty were compensated commensurately for their additional labor), the issue would still remain that there is no policy in place that would effectively reverse this action, preventing revised (increased) enrollment caps

 $^{^{2}}$ At an absolute minimum; distance learning curriculum development is expected to be even *more* time-consuming and labor-intensive for faculty who have never previously taught their current classes in person.

³ In the case of Fall 2020, for which the semester begins on August 25 and classes begin on August 26.

from holding, once the existing (and impending) budget crisis has resolved and once distance learning is no longer necessary, and face-to-face learning can commence.

In summary, the repercussions of adopting increased course enrollment caps are likely to be numerous, severe, and far-reaching, having the realistic potential to negatively impact students, faculty, and the College at large. We request that these repercussions be taken into serious consideration when proposing ways in which to address the budgetary concerns of the College.

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