

# STUDENT SUCCESS INITIATIVE GATEWAY GRADES, RETENTION AND GRADUATION STUDY IMPLEMENTATION TEAM

### GATEWAY GRADES SSI IMPLEMENTATION TEAM FINAL RECOMMENDATIONS – 10/15/2021

In March 2021, the Gateways Grades SSI Implementation Team was convened with a charge from Provost Andreas Cangellaris and Vice Chancellor for Student Affairs Danita Young. The charge instructed the implementation team to compile the **Big Ten Academic Alliance Cluster** data obtained through the University's participation in the **APLU Powered by Publics (PxP) Initiative**, to ``provide specific recommendations as to how to best make appropriate academic units and campus leaders aware of the critical analysis and conclusions and the impact on students", to ``recommend equitable policies and culturally responsive pedagogical practices to best match student preparation and course content and pedagogy", and to ``highlight existing programming and other initiatives celebrating the experiences of underrepresented and minoritized students, including expansion of and ways to refine this programming as applicable to support student success."

Implementation Team members represented a broad cross-section of campus units with expertise in many areas relevant for this charge. Members of the Implementation Team were:

- Jeremy Tyson, College of Liberal Arts & Sciences, Department of Mathematics, co-chair
- Kristy Valentin, College of Liberal Arts & Sciences, Access and Achievement Program, co-chair
- Jenny Amos, Senate Educational Policy Committee
- Tekita Bankhead (membership through August 13, 2021), Bruce D. Nesbitt African American Cultural Center
- Shari Clapp, Division of Intercollegiate Athletics
- Domonic Cobb, Office of Minority Student Affairs
- Stephon Fuqua, Division of Intercollegiate Athletics
- Rod Hoewing, Office of the Registrar
- Kathy Martensen, Office of the Provost
- Jennifer McNeilly, College of Liberal Arts & Sciences, Department of Mathematics
- Shawna Patterson-Stephens (membership through May 15, 2021), Office of Inclusion and Intercultural Relations
- Susann Sears, Disability Resources and Educational Services
- Sarah Sheeley, College of Liberal Arts & Sciences, Department of Chemistry
- Thomas Skottene, Office of Enrollment Management
- Emily Stuby, Division of Management Information
- Dustin Tarter, Office of Undergraduate Admissions
- Jamie Thomas-Ward, College of Liberal Arts & Sciences, Department of Economics
- Nicole Turner, Senate Educational Policy Committee
- Ross Wantland, Office of Academic Inclusive Excellence
- Maryalice Wu, Center for Innovation in Teaching and Learning
- Craig Zilles, Grainger College of Engineering, Department of Computer Science
- Himana Ancha, Provost's Undergraduate Student Advisory Board
- Reva Balakrishnan, Provost's Undergraduate Student Advisory Board
- Samantha Harris, Provost's Undergraduate Student Advisory Board

- Julia Ilecki, Provost's Undergraduate Student Advisory Board
- Sara Tolva, Provost's Undergraduate Student Advisory Board

The Implementation Team held its initial meeting on March 31, 2021. Subsequent meetings were held on the following dates (guest speakers identified):

- May 3, 2021 Guest: Gretchen Adams, chair, SSI: First Year Academic Experience Task Force
- June 24, 2021
- July 16, 2021
- August 12, 2021 Guests: Michel Bellini (CITL) and Drew MacGregor (Tech Services), ex officio members, Transition to Canvas Advisory Committee
- August 31, 2021
- September 10, 2021
- October 7, 2021
- October 13, 2021

The Gateway Grades Implementation Team reviewed draft and final reports from several other working groups, including the SSI Academic Support Task Group, the SSI First Year Experience Task Group, and the Post Pandemic Task Force (LAS).

The committee's discussions over its first five meetings led to a preliminary list of recommendations. Working subcommittees were convened to refine and expand upon these proposed recommendations. Each subcommittee was asked to organize their recommendation according to the following outline:

- Responsible units
- Actions to be taken
- Required resources
- Possible metrics/outcomes
- Likely result of taking action on this recommendation
- Likely result of not taking action on this recommendation

Subcommittees were also asked to comment, if relevant, on the degree and nature to which their recommendation impacts and interacts with other SSI initiatives. The subgroups' input was synthesized and organized into a coherent report, which was reviewed by the full committee prior to submission.

The committee was provided with an extensive set of resources and data for review, and identified several other highly informative resources and datasets. Links to these resources and others can be found in the appendix at the end of this report:

- Data from the APLU PxP initiative associated to schools in the Big Ten Academic Alliance (appendix item 1)
- Findings from the Illinois Multi-Institutional Study of Leadership Campus Climate Survey, conducted by Student Affairs
- Draft and final reports from multiple other taskforces, implementation teams and working groups, as discussed above
- Material from the Student Experience Project website (appendix item 2): studentexperienceproject.org

In addition, the committee benefited from feedback and comments provided by several guest attendees, including members and co-chairs of other task forces, implementation teams, and working groups as noted above. The committee would like to thank all of these individuals for their time, creativity, and willingness to consult with our group.

#### INTRODUCTION AND SUMMARY OF RECOMMENDATIONS

The APLU's **Powered by Publics** initiative (<a href="https://www.aplu.org/projects-and-initiatives/center-for-public-university-transformation/powered-by-publics/overview/">https://www.aplu.org/projects-and-initiatives/center-for-public-university-transformation/powered-by-publics/overview/</a>) is a collaborative effort involving over 100 U.S public institutions of higher education. The broad aims of the initiative are to increase student success, to expand access, and to advance equity.

Within this initiative, the **Big Ten Academic Alliance (BTAA) Cluster** focused specifically on a high-level examination of course and curricular data, particularly for entry-level or gateway courses, and emphasized the closing of achievement gaps for individual student populations. In 2021, the BTAA Cluster completed a cross-institutional analysis of "DFW" (final grades of D+, D, D-, F, and Withdrawals) rates for multiple student groups in large courses, and reviewed this data in terms of impact on both retention and graduation outcomes. Specific University of Illinois Urbana-Champaign courses included in the PxP data and the BTAA Cluster analysis are: ACCY 201; BTW 250; CHEM 101, 102, 104; CS 101, 105; ECON 102, 103; MATH 112, 115, 220/221, 231, 234; MCB 150; PHYS 211, 212; PSYC 100; RHET 105; SOC 100; and STAT 100.

The charge given to this implementation team was to consider opportunities to leverage the information gathered by the BTAA PxP Cluster to improve student success and address equity gaps on our campus. The implementation team was also invited to consider how this charge intersects with the work being done by various other committees, taskforces, and working groups currently in operation, including the First Year Experience Taskforce and the Canvas Implementation Team.

In contrast with some other institutions in the BTAA Cluster, institutional culture at the University of Illinois Urbana-Champaign is particularly decentralized. This fact complicates any attempt to institute a global, top-down structure in response to this data. Nevertheless, this committee sees particular value in utilizing the PxP data to provide good information for instructors, academic support professionals, and students in critical gateway courses, including longitudinal course performance as well as "just-in-time" data regarding course-wide and student-specific information while a course is in operation.

Outside-of-classroom academic support and intervention is also of critical importance for students enrolled in gateway courses. Both in person and online resources remain of great relevance. The pandemic has magnified and exacerbated existing inequities, and has introduced extraordinary new challenges for students unfamiliar with the campus environment and unfamiliar with available resources.

Many units provide academic support resources of this type, but information about such resources can be difficult for students to find. The creation and maintenance of a centralized website with timely and accurate information about academic support and tutoring resources will significantly benefit all students, but especially underrepresented populations (and most especially first-generation students).

At the same time, some ideas which we propose signal towards an increased use of analytics, tracking, and 'big data.' Student privacy concerns must be taken into account in the design and rollout of such

systems. Existing University academic policy may also need to be updated and modified. The PxP data points to specific areas where existing academic policy disadvantages certain student populations.

We present a set of five interlocked recommendations. These recommendations are **not** a `laundry list' of possibilities. Each recommendation builds upon its predecessors and sets the stage for those to follow. We aim to provide a global ('birds-eye') view of a plan for what UIUC can do with the PxP data.

In each of the following sections, the committee has highlighted resources that are needed to effectively implement these suggestions. Important to note is that the committee strongly advocates for the new allocation of staffing resources to oversee and administer such implementation. Going further, we suggest that assessing for equity gaps, particularly for low-income, historically underrepresented, and first-generation student outcomes, should be woven throughout the job description for such a position.

Communication is an overarching theme of these recommendations. Any concrete outputs need to be marketed to and communicated to students. We particularly emphasize marketing of any new early alert functionality, as well as the availability of academic support resources. We encourage the SSI First Year Academic Experience Taskforce to consider ways to broadcast such functionality in first-year courses, working in tandem with the Canvas Implementation Team.

We now present our recommendations in abbreviated form. Detailed discussions of each recommendation appear later in the report.

- #1: **Tableau reports** of student performance for 2-3 introductory courses specific to the University of Illinois Urbana-Champaign's DFW list (identified above from the BTAA Cluster analysis), to include elements as provided in the PxP examples from peer institutions (see appendices). Suggested pilot courses to come from Math and Chemistry.
- #2: Partner with the Canvas implementation team to understand **early alert** features of interest in Canvas for both instructors, student-facing staff, and students. Roll out such features in **dashboard** format in a set of pilot courses.
- #3: Assist instructors participating in pilot programs with inclusive, **student-centered teaching practices**, assess efforts, and scale program up to a wider campus initiative with ample instructor outreach and training related to new DFW dashboard data and Canvas-based early alert functionality.
- #4: Assess and revise academic policies to address equity gaps and improve impacts on the student experience.
- #5: Improve and expand **physical and online facilities** for student academic support. Create a centralized and visible **academic support website** to condense and organize information about our diverse learning centers and learning resources available at Illinois.

In summary, this is an implementation plan that provides a roadmap for campus to create, implement, and market a new suite of tools — informed by and building off of the APLU PxP dataset — to enable instructors, staff, and students to more effectively engage in critical gateway courses and to better understand their performance and activity in a wider context. Successful implementation of these recommendations will especially benefit historically underrepresented and minoritized students, and will enable them to have a successful academic experience at UIUC.

Before turning to the recommendations themselves, we would like to highlight some examples of existing units who are already addressing equity gaps at UIUC.

- Pre-academic support from New Student Programs, particularly RISE and Inbound
  - https://newstudent.illinois.edu/programs/rise/
  - https://newstudent.illinois.edu/programs/inbound/
  - Both RISE and Inbound facilitate interaction between incoming students and faculty, staff and existing students. Incoming students learn about available resources for academic and social life as a University student. Topics addressed in the RISE program include: campus spirit and traditions, the classroom experience, counseling services, sustainability, community engagement. Topics address in the Inbound program: civic engagement, student success, self-reflection, mental health, and sustainability.
- Office for Minority Student Affairs
  - o https://omsa.illinois.edu/about/mission/
  - OMSA supports recruitment and yield, provides advising, mentoring, and tutoring services, and collaborates with individual colleges, departments, and units to support student success. OMSA services are for students in the Educational Opportunity Program as defined by the Office of Undergraduate Admissions, first generation, historically underrepresented, or low-income status at UIUC.
- Current academic support and tutoring centers
  - o https://dgs.illinois.edu/tutoring-resources
  - Existing tutoring centers provide academic support for the cluster of courses outlined in this charge: C.A.R.E., Chemistry Learning Center, DIA, Economics, Gies peer tutoring, OMSA, MATH/STAT Student Support Center, MCB, Writer's Workshop.
- The Merit Program for Emerging Scholars
  - o https://merit.illinois.edu/about-merit/
  - The Merit Program philosophy, based on the research of Dr. Uri Treisman, emphasizes direct student-to-student interaction in small group settings, under the supervision of a trained facilitator-instructor. Merit supports historically underrepresented students enrolled in introductory courses required for a variety of STEM majors (e.g. chemistry, mathematics, and biology). An important goal of the Merit Program is to enable students to succeed in these courses and in STEM majors more generally. Another important goal is to create a strong, supportive academic peer group both inside and outside the classroom. Over 1000 students participate in roughly 50 Merit sections in Chemistry, Math, IB, MCB, and ECE each fall semester, and Merit sections are offered in these departments for many courses defined as critical gateway courses in this report.
- Access and Achievement Program
  - o <a href="https://las.illinois.edu/academics/accessandachievement">https://las.illinois.edu/academics/accessandachievement</a>
  - AAP provides access to historically underrepresented populations to study 70+ majors in the College of LAS. Through intensive advising, major and career exploration, celebration of achievement, and referral services, some 2,000+ students are supported in AAP. Students are largely from first generation, historically excluded backgrounds, from EOP sending high schools, are part of the President's Award Program, and/or from rural sending counties in Illinois.

- Illinois Academic Enrichment and Leadership Program (I-LEAP)
  - o https://www.ahs.illinois.edu/I-LEAP
  - I-LEAP provides 1:1 mentoring, counseling, workshops, academic skill development, leadership training and referrals to students in Educational Opportunity and President's Award Programs in the College of Applied Health Sciences.
- Enrichment Experience Program
  - o https://dgs.illinois.edu/dgs-enrichment-experience-program
  - The Enrichment Experience Program provides advising, mentoring, first year instruction, academic skills prep (see DGS tool kit in next bullet point), and major exploration to students from the Educational Opportunities Program, students from rural sending counties, or historically excluded backgrounds for undeclared first- and second-years in the Division of General Studies.

#### Division of General Studies

- o https://dgs.illinois.edu/toolkit
- The DGS toolkit provides students with resources and action steps to help improve academic performance. It addresses equity gaps by providing a holistic set of learning skills that are helpful for all students at various touch points during their undergraduate years. The online website is available to all UIUC students, faculty, and staff.
- Division of Intercollegiate Athletics
  - o Student-Athlete Handbook (page 40)
  - Prior to their first semester at UIUC, all 1<sup>st</sup> year student-athletes participate in a onetime academic assessment in order for the academic services staff to gain a better understanding of individual learning styles and forecast possible academic resource needs to succeed. Based on this assessment, DIA preemptively schedules subject tutoring, academic coach and/or learning specialist support.
  - DIA Academic Services provides academic assistance to new and continuing students including, but not limited to, individual and group tutoring, academic coaching, and mentoring to provide supplemental academic support.
  - The Tutoring Program offers student-athletes the opportunity to receive subject-specific academic assistance. The DIA staff of over 40 undergraduate and graduate tutors supplement student-athletes' own study skills, help them to understand course content, and enable them to develop successful course strategies.
  - The Academic Coaching Program provides student-athletes with the opportunity to work with graduate students interested in the field of higher education who assist with reading comprehension, brainstorming, understanding assignment guidelines, time management, preparation for exams, and the writing process.
- Career Center: FOCUS Scholars
  - o <a href="https://www.careercenter.illinois.edu/focus-scholars">https://www.careercenter.illinois.edu/focus-scholars</a>
  - Through a series of workshops, F.O.C.U.S. provides an intensive year-long experience aimed at eliminating the gap in post-graduation outcomes and starting salaries between underrepresented, first-generation students and their peers to positively impact their career trajectory, earnings potential, and economic security.

#### RECOMMENDATION #1: DEVELOP TABLEAU REPORTS FOR A SET OF PILOT COURSES

The rich and detailed information available in the PxP data can serve as a starting point for course-specific and campus-wide tableau reports, which will provide a longitudinal and high-level perspective on student performance in critical gateway courses. Widespread availability of such data can benefit instructors, administrators, advisors, and other academic support personnel. Broader dissemination of such information should be handled carefully, as there are genuine concerns about making certain information of this nature directly available to enrolled students.

To this end, the first recommendation is for the creation of a series of tableau reports focused on student performance in a small sample of introductory courses specific to the University of Illinois Urbana-Champaign's DFW list. The committee suggests the following course sequences, MATH 112, MATH 115, and MATH 220, and CHEM 101 and/or CHEM 102, for the pilot study. The study should include relevant elements as provided in the PxP examples from peer institutions. This committee specifically highlights the PxP data for the University of Wisconsin (Madison) and the University of Nebraska. See appendix item d, parts i & ii.

Responsible units: Enrollment Management data team, Tech Services

#### Actions to be taken:

- Consult with the Enrollment Management team and other campus data teams (Office of the Registrar, CITL, Technology Services, Division of Management Information) to ensure appropriate access to data and support from administration.
- 2. Meet with involved department Executive Officers, key faculty (e.g., Directors of Undergraduate Studies), and Academic Advisors to inform about equity gaps and to discuss tableau reports.
  - a. Share Wisconsin and Nebraska models; identify strong opinions about what should or should not be used from those models; identify what, if any, metrics should be added. See appendix item d, parts i & ii.
- 3. Build interactive tableau reports.
- 4. Create and maintain a means by which reports will be shared with key individuals as identified in action item 2 above, and determine frequency for sharing.
- 5. Meet with key individuals from action item 2 above to discuss the reports, and to assess willingness to share lessons learned with other colleagues, etc.
- 6. With permission from pilot departments, share information from action item 4 above with other departmental EOs and key individuals in courses on DFW list, or as deemed most important for further consideration for campus; continue to socialize project and data with relevant stakeholders.
- 7. Highlight the work done and lessons learned at the campus annual Student Success Conference and within the API U PxP work.

#### Required resources:

- 1. Release time for Enrollment Management team and/or other appropriate data teams to build and maintain the Tableau reports and sharing repository.
- 2. IT management resources.

- 3. Release time funding to prioritize this project from Vice Provost for Undergraduate Education with continuous buy-in from administrators, e.g., Assoc. Provost for EM.
- 4. Communications/Marketing resources to refine and highlight the outcomes to be shared more broadly across campus and within APLU PxP.

#### *Possible metrics/outcomes:*

- 1. Identification of equity gaps and their influence on metrics outside the classroom like: retention, persistence, time-to-degree, and graduation rate.
- 2. DFW rates between groups by courses within pilot.
- 3. DFW rates between Pell/Non-Pell; URM/Non-URM; 1st gen/non-1st gen students.
- 4. Student satisfaction with pilot courses.

#### Likely result of taking action on this recommendation:

- 1. Reduced gaps in DFW rates between Pell/Non-Pell; URM/Non-URM; 1<sup>st</sup> gen/non-1<sup>st</sup> gen students as a result of faculty's own actions inspired by this knowledge.
- 2. Increased student satisfaction with pilot courses, student persistence, student retention.
- 3. Decreased gaps in time-to-degree and graduation rates.
- 4. Demonstrated commitment of diversity, equity, and inclusion practices for undergraduate student performance at UIUC.

#### Likely result of not taking action on this recommendation:

- 1. Lost opportunity for faculty awareness of student experience and equity gaps in courses.
- 2. Student satisfaction with pilot courses remains unchanged.
- 3. Equity gaps continue to exist in gateway grades coursework, time-to-degree, retention, and graduation rates.
- 4. Work to reduce equity gaps at benchmarking institutions in BTAA will continue to be highlighted and UIUC will be noticeably missing from that group.
- 5. Work that's been done in APLU PxP and within this SSI implementation committee is stalled and makes no forward progress at UIUC.

#### How does this recommendation impact and interact with other SSI initiatives?

This recommendation will impact other initiatives as the SSI moves forward via collaborative efforts to decrease equity gaps in retention and graduation rates and improvement of the Illinois experience.

# RECOMMENDATION #2: IDENTIFY AND IMPLEMENT LMS FEATURES, ESPECIALLY IN CANVAS, TO ASSIST INSTRUCTORS, STUDENT-FACING ACADEMIC PROFESSIONALS, AND STUDENTS IN EARLY RECOGNITION OF COURSE ENGAGEMENT AND ACADEMIC SUCCESS CONCERNS

The ongoing rollout of the Canvas learning management system provides a timely opportunity to build on the outcomes of the previous recommendation. This committee particularly recognizes a critical unmet need for integrated systems which provide early alerts to instructors, advisors, and other academic support personnel for at-risk students. An advisory group constituted for this purpose, working in concert with LMS providers and CITL, can explore opportunities to provide instructors with greater access via Canvas-based early alert functionality, to provide academic support professionals with

information surrounding student performance for targeted interventions, and to provide students with just-in-time information about their own course engagement.

Doing so will enable instructors of gateway courses to better understand their students' performance individually, as members of the course in question, and historically. This will also enable instructors, advisors, and other stakeholders to obtain timely information about student performance including warning indicators, to facilitate directed efforts to ameliorate emerging concerns. This committee stresses the fact that many units across all sectors of campus engage in academic support activity. The committee urges that implementation of this particular recommendation take into account all of these units, and the ways in which greater access to information as described here will enable those units to better serve their own student populations.

On the student level, greater access to course analytics and performance via Canvas or other LMS will enable students to realize the impact of their behavioral patterns on course outcomes. We envision a specific opportunity here to re-engage with the FYE taskforces and working groups, as such an outcome will be especially impactful for first-year students.

The committee recognizes that providing course data to all audiences but especially students can have unintended or negative consequences. Ongoing assessment of data that is provided to students, instructors, and academic support staff is recommended and should be updated regularly.

As a final note, this committee observes that there may be a greater chance for departmental and instructor buy-in on this entire package of recommendations if faculty/departments who participate in the pilot program are prioritized for initial usage of and access to these new Canvas features.

Responsible units: Tech Services, CITL, instructors of pilot courses. The committee also urges that the responsible units overseeing Ask Alma's one-stop-shop center collaborate with members from the Provost office represented on the SSI Steering Committee to oversee this particular recommendation.

#### Actions to be taken:

- Charge a student/instructor advisory group to interface with the Canvas implementation team towards the creation of off-the-shelf and custom dashboards, embedded within Canvas or another LMS, which could be made available to instructors, advisors, and (with caution) students. These dashboards would exist at the course level.
- 2. Provide feedback on what types of features and data within the Canvas system are useful and appropriate for various stakeholders to facilitate early alert functionality.
  - a. Determine what early alert information is appropriate to be communicated to students on the front end. Careful attention should be paid to the nature of the information provided, and unanticipated ways in which availability of this information may impact student performance.
  - b. Determine what data about student performance can be useful for instructors on the back end.
  - c. Determine which data and which Canvas functionality can be shared with Academic Advisors and other student-facing academic professional staff (e.g., OMSA Counselors, DIA Academic Coaches) to make timely contact and suggest interventions with students in danger of receiving a D, F or W (see action item #5 in this recommendation).

- 3. Determine other metrics that need to be included.
- 4. Building on the outcome of Recommendation #1, identify a group of courses to pilot and finetune the Canvas dashboard.
- 5. Enable canvas observer functionality (appendix item f) and explore other functionality which could include building in new functionality tied to the tableau dashboards of Recommendation #1, if feasible. Assess the impact of providing this data and functionality to different audiences.
  - a. Guiding questions: What data is useful? Do observers need more/less access? Should other functionality be enabled/disabled?

- 1. Employee time to evaluate options
- 2. Potential employee time for programming/customization depending on the solution
- 3. Potential funds to purchase an off-the-shelf solution
- 4. Ongoing maintenance and IT resources

#### *Possible metrics/outcomes:*

- 1. Students' increased understanding of their own learning outcomes.
- 2. Survey items and/or an analysis of pre/post dropouts and final grades.
- 3. Survey instructors on the usefulness of just-in-time data regarding student performance
- 4. Outreach to struggling students could be assessed for impact

#### Likely result of taking action on this recommendation:

- 1. Increased faculty awareness of the trends and patterns in undergraduate student grades for different populations in their courses.
- 2. Provide timely transparency to students regarding their performance
- 3. Empower students to make better learning decisions that directly affect their grades
- 4. Increase student satisfaction with LMSs
- 5. Increase instructor utility/adoption of and satisfaction with Canvas
- 6. Movement on implementation of a robust, data-informed early alert system

#### Likely result of not taking action on this recommendation:

- 1. Student understanding of actions that they can take to improve their own engagement and outcomes in a course will remain primarily dependent on outreach by instructional faculty and staff; invariably this may leave some students behind, potentially widening equity gaps.
- 2. Loss of an opportunity to encourage student self-efficacy and independence
- 3. Potential less satisfaction and lower engagement on behalf of students who use Canvas
- 4. Lower instructor satisfaction with Canvas and less utility of Canvas for instructors
- 5. Loss of an opportunity to establish an "early alert system" that this committee feels is an overdue priority and is a long-standing academic support intervention that other campuses use to provide outreach to struggling students

How does this recommendation impact and interact with other SSI initiatives?

Recommendation 2 intersects with the Transition to Canvas Implementation Team.

### RECOMMENDATION #3: ASSIST INSTRUCTORS WITH INCLUSIVE, STUDENT-CENTERED TEACHING PRACTICE, ASSESS EFFORTS TO DATE, SCALE TO WIDER CAMPUS INITIATIVE

The next recommendation concerns a set of new tools, training, and assistance for instructors participating in the pilot programs described in Recommendations 1 and 2. At the same time, an evaluation of these efforts will serve as the basis for scaling up the program to a wider campus initiative with ample instructor outreach and training related to new DFW dashboard data, Canvas-based early alert functionality, and the implementation of inclusive, student-centered teaching practice.

Responsible Units: Departments of courses identified for pilot programs described in Recommendations #1 and #2, SSI Steering Committee or Vice Provost for Undergraduate Education (or other centralized entity, likely in the Provost's office), iSTEM or some other unit for help conducting evaluations.

#### Actions to be taken:

- Work with relevant units (departments/colleges) to identify instructional staff (faculty, instructors, experienced TAs) who teach identified courses (if consistent) or who have taught/may teach identified courses (if not consistent); ideally those who are identified will be teaching the course in upcoming semesters
- 2. Assessment and data collection
  - a. Identify individuals/units with experience in program evaluation to not only provide evaluation of this initiative specifically but also to provide guidance on collecting and analyzing data to understand student experience within the pilot courses (or perhaps to actually collect/analyze said data)
  - Collect baseline data related to student experience/satisfaction/access to resources in these courses; collect baseline data related to instructional staff experience/satisfaction/access to resources in these courses
  - c. Evaluate the implementation of actionable steps that instructional staff developed during PD (should include hearing from students/instructors directly as well as continuing to monitor the data dashboards)

#### 3. Outreach and Training

- a. Provide technical training to instructors in pilot program on course development to maximize use of Tableau dashboards and new Canvas features
- b. Provide professional development activities for this team of instructional staff to participate in as a community; activities should be focused on developing actionable steps to address equity gaps that data dashboards identify in courses and be based on inclusive teaching practices. Ideally, some actionable steps can be identified that could be implemented immediately (without changing course structure significantly or requiring significantly more resources) but steps that do require more time/resources should also be imagined and shared with relevant units to pursue over time.

For an example, see appendix item #2c, which explores the impact of different types of course assessments in course outcomes on disparate student populations. The data streams available via the new dashboards and Canvas functionality provide heretofore unexplored opportunities for instructors to better understand the impact of their own assessment portfolio across different populations of students.

- c. Workshop series and/or professional development course and/or reading group curriculum focused on inclusive teaching practices and how to best use reports from DFW dashboard (could be developed on-campus like the Illinois Summer Online Teaching Academy or built off existing resources such as the <u>Student Experience Project</u> (see appendix item 2a), the <u>Inclusive STEM Teaching Project</u> (see appendix item 2a), University of Nebraska-Lincoln "Deep Dive into Course Data" course (see appendix item 2c). Explore possibility to provide stipend to instructors who attend this training.
- 4. Identifying and Advocating for Future Needs
  - a. Provide support to instructional staff if more resources are needed from their units to actually implement the actionable steps (additional staff, IT support, restructuring of course schedule, release time to develop new course materials, etc)
  - b. Conduct an assessment of the pilot program after a set period of time (this committee recommends two years) to understand how and to what extent the new data tools and LMS functionality are used, gather feedback from instructors, students, administrators, advisors, and other individuals across campus involved in the academic support enterprise. In particular, assess unexpected or negative consequences of the widespread availability of such information and consider mitigation strategies.
  - c. Using the evaluation of this pilot program as a guide, scale up the program with more cohorts of courses/instructional staff in future semesters/years; invite instructional staff from pilot program to be involved in the scale up if interested

- 1. Release time, summer salary, or SIE pay (depending on what makes most sense with their position) for instructors who participate in professional development
- 2. Funding/personnel to support evaluation related activities both those focused on the effectiveness of this effort and those focused on understanding the student and instructional staff experience in these courses

#### *Possible metrics/outcomes:*

- 1. Awareness of student experience in their courses for instructional staff
- 2. Awareness of potential causes and intervention strategies for student success
- 3. Adjustment of pedagogical methods that are known to exacerbate equity gaps
- 4. Reduced gaps in DFW rates
- 5. Student satisfaction with these courses
- 6. Decreased course repetition by students in these courses
- 7. Increased student retention (especially in majors requiring these courses)
- 8. Increased academic performance in subsequent courses that rely on these courses

#### Likely result of taking action on this recommendation:

- 1. Development of a community of practice within and across units that teach these courses
- 2. More positive student experience in these large, introductory courses
- 3. More positive teaching experience in large, introductory courses for faculty/instructors and TAs
- 4. Lowered equity gaps in these courses

Likely result of not taking action on this recommendation:

- 1. No/limited instructional staff awareness of these issues continues
- 2. DFW gaps remain
- 3. Student satisfaction with these courses does not change
- 4. Retention, performance in subsequent courses, time to degree all remain unchanged

# RECOMMENDATION #4: ASSESS AND REVISE COURSE POLICY AS NECESSARY TO IMPROVE THE STUDENT EXPERIENCE

The PxP data on DFW rates in gateway coursework illuminated equity gaps among underrepresented students as part of the SSI Gateway Grades initiative. This committee's next recommendation is that a review committee be charged to assess equity gaps that may be present in academic and financial aid policies and within the academic calendar. This new committee should research and recommend potential changes to policies if equity gaps are present and found to be particularly significant when compared to benchmarking institutions and cohorts of the larger UIUC student population. While the first three recommendations are sequential and will (if implemented) span a number of years, review of existing policies must be handled on a separate timeline and should be conducted on an ongoing basis.

Responsible units: The new committee should be formed with campus representation particularly important to include (but not limited to): Academic Senate (Educational Policy Committee), Council of Undergraduate Deans, College Undergraduate Advising Deans, Faculty Directors of Undergraduate Studies, Instructional Faculty/Staff especially those involved in Recommendations #1-3 pilot of this report, Provost's Office including VCAA and OVCDEI (or designee), and undergraduate student voices

#### Actions to be taken:

- 1. Development and charge of a review and assessment committee
- 2. Assess for and identify existing equity gaps pertaining to:
  - a. Academic policies such as (but not limited to):
    - i. Overall student placement and efficacy of student placement exams
    - ii. 10- day add/drop, mid-semester drop deadline, W-grade petition procedures
      - 1. Investigate the impact of on students final grades, but in particular the DFW rates, for undergraduate students who add courses during the 1-5 day and then the 6-10 day ranges of the 10-day add period
      - 2. Consider the impact of DFW rates for students when drop deadline was extended during the 2019-2020 pandemic
      - 3. Consider if W's in courses should be automatically assigned or remain a college-wide petition process.
      - 4. Consider how W's are assigned at peer institutions, specifically, schools participating in the PxP initiative.
    - iii. Credit/No-credit policies
      - Assess equity gaps and impacts on time to degree while CR/NC and other temporary academic policy modifications were employed in Spring 2020, Fall 2020, Spring 2021 due to the COVID 19 pandemic.
    - iv. Academic Calendar: fall/spring semesters

- Assess the effectiveness and consider adjusting the timing of Fall and Spring breaks as they present limitations on student's mental well-being
- Assess the effectiveness of the mid-week wellness breaks during the COVID-19 pandemic modification on the academic calendar
- v. Grade replacement policy as it pertains to gateway grades data
  - 1. Courses in the PxP data are worth a range of 3-5 credit hours. Consider the impact of students retaking these courses as it pertains to maximum hours allowed in the grade replacement policy.
  - 2. Consider mid-semester deadline for submitting grade replacement as a limiting factor and administrative barrier for marginalized groups
- vi. Assess equity in individual college/department/unit course retake policies
- b. Financial aid policies such as Satisfactory Academic Progress (SAP) as it pertains to the impact of students receiving DFWs in the PxP data.
  - Consider the impact on a student's ability to maintain good financial aid standing
  - ii. Identify if equity gaps exist for the awarding of Merit scholarships, consider impact of D's and F's in overall GPAs
- c. Considering the equity gaps that exist in gateway classes, identify if there are gaps that exist in other metrics of student performance like the ability for students to move inbetween majors and colleges, student retention at UIUC and in a specific colleges/programs, and other factors that may influence 4- and 6- year graduation rates
  - i. Assess equity gaps that may be present as it relates to student's ability to change their academic programs
  - ii. Consider the impact on 4- year/6-year graduation rates as it relates to academic progress made by students when courses were taken for CR/NC in Spring 2020, Fall 2020, Spring 2021 as credit in these courses may have counted toward major/minor/general education requirements.
    - 1. How did this temporary change affect time to degree?
- Implement recommended changes to move toward closing any equity gaps found in academic
  policies that directly affect the student experience. Careful consideration of how changing
  policies may affect UIUC regional, national, and global rankings, accreditations, and ability to
  attract future faculty members is warranted
  - a. Include transparency of equity gaps available online
  - b. This committee recognizes the need for administrative academic staff to implement complex academic policy adjustments and changes in a decentralized institution. We recommend that staffing resources are allocated to facilitate any changes and we further recommend that ongoing review and assessment of equity gaps be written as part of the job description.
  - c. Develop a communication and marketing strategy for any changes to student code, academic policy.
  - d. Any changes to academic policy will not only impact the student experience but could likely impact in-the-classroom policies, syllabus content, and other unknown factors. We recommend that outreach regarding any policy changes be made clear and widespread to all instructional faculty, staff, academic professionals, administration, and students.

- 1. Participation of representative members of the committee
- 2. Survey and other data collection measures/practices
- 3. Release time, SIE, or additional pay for members of the committee
- 4. Commitment of funding for implementation of recommendations including resources for hiring additional faculty/staff

#### Possible metrics/outcomes:

- 1. Identify and illuminate equity gaps that exist with current academic and financial aid policies, the academic calendar, and graduation timelines
- 2. A deeper understanding of the student experience as it pertains to policies
- 3. Better understanding of the academic calendar, how it operates, its impact on student performance, and impact on mental well-being
- 4. Commitment to updating and maintaining equitable academic policies and practices

#### Likely result of taking action on this recommendation:

- UIUC will lead in identifying and closing equity gaps resulting from academic/financial aid policies
- 2. Academic calendar adjustments may allow students to have a more balanced semester experience leading to improved student wellness.
- 3. A decrease in W's or more flexible academic policies could increase student progress to degree, retention rates, and create more student satisfaction

#### Likely result of not taking action on this recommendation:

- 1. Continue to have arbitrary and potentially archaic policies that may widen equity gaps for marginalized groups, especially as courses in PxP data set are largely taken by many students at UIUC.
- 2. DFW gaps will continue to impact student GPA and progress ratios in relation to financial aid.
- 3. Equity gaps that exist in policies that directly influence student GPAs impact their ability to participate in honors, distinction, and academic recognition programs.
- 4. Equity gaps will continue to impact the undergraduate student experience for marginalized groups

#### How does this recommendation impact and interact with other SSI initiatives?

- 1. VCDEI's Call to Action working groups <u>1: Teaching and Scholarship</u> and <u>2: Diversity and a Culture of Inclusion</u>
- 2. Next 150 years Strategic Plan: D&I initiatives, Goal 2B
- 3. SSI: Academic Support task group

# RECOMMENDATION #5: IMPROVE AND EXPAND CAMPUS INVENTORY OF PHYSICAL/ONLINE ACADEMIC SUPPORT CENTERS, CREATE A CENTRALIZED WEBSITE TO INCREASE VISIBILITY OF SUCH CENTERS

Academic support resources outside of the classroom are critically important for student success. While many such resources already exist on this campus, student awareness remains piecemeal. This committee recommends that such resources be highlighted and advertised via a centralized tutoring/academic support website. Such a website, maintained and kept up-to-date by a management committee, would condense and organize information about diverse learning centers and learning resources available at Illinois (examples from other institutions can be found in appendix items 2e). Currently, a wide-variety of academic support resources are offered at Campus level, at College or Unit level, or by auxiliary centers like Division of Intercollegiate Athletics and the Office for Minority Student Affairs. Academic support staffing can vary to include undergraduate tutors, graduate teaching assistant staff, instructional faculty/staff, and third-party service providers. Analytics about student usage and satisfaction can serve as the basis for ongoing decisions about the allocation of financial resources to expand the availability of such resources, both physical and online.

Responsible units: Management committee housed in the Office of the Provost with appropriate staff support, Tech Services for website design and maintenance, contact personnel within individual units to guarantee that information is up-to-date and accurate, commitment of resources to develop new academic support centers in units currently lacking such a resource.

#### Actions to be taken:

- 1. Charge a management committee to oversee creation and maintenance of new online resources and to serve in an advisory capacity for units wishing to open their own academic resource center, provide suitable staff support. Members of the current *Illinois Learning Support Professionals* working group may be natural choices for this management committee.
- 2. Create an online directory of campus tutoring and academic support resources (preferably housed within the website of the Office of the Provost). Mirror this site in Canvas on the dashboard (<a href="https://illinois.edu/students/index.html">https://illinois.edu/students/index.html</a>) and link on the main University site (<a href="https://www.illinois.edu">www.illinois.edu</a>) under 'Student Resources'.

While the granularity of the following recommendation may seem out of character with the remainder of this report, this committee strongly advocates for the use of the word "tutoring" in the URL for this website, and notes that <u>tutoring.illinois.edu</u> is currently not in use. Similar URLs are used for analogous sites at several peer institutions; see the appendix for more information.

This committee notes that DGS already maintains a comprehensive and valuable list of tutoring resources (<a href="https://dgs.illinois.edu/tutoring-resources">https://dgs.illinois.edu/tutoring-resources</a>), however, this committee believes that greater visibility for such a directory, both at the level of the main campus website and directly within the Canvas landing page, will be a tremendous benefit for students.

#### Key features of such a site:

a. "One-stop shop" for students to access tutoring and academic resources across campus

- b. Site should have convenient and effective search capability to allow for assistance by course, by subject, by unit, etc.
- c. Site should be mobile friendly.
- d. Information must be kept up-to-date with schedules, locations, policies, modality of assistance (in-person vs. online)
- e. Directory of tutoring and academic support resources
- f. Identify if resource is free or if a fee is required
- g. Include links to additional online resources as appropriate, including freely available academic support resources at other institutions, online help videos developed by UIUC staff for immediate, unproctored student support
- h. Incorporate analytics features to track interest in specific units, including units which currently lack such a support center. Partner with individual units to gather analytics on usage of academic support resources campus-wide.
- 3. Marketing and outreach to units, instructors, and students to ensure awareness of this new resource
- 4. Ensure that the information is maintained and kept up-to-date
- 5. Use the information gathered in 2(g) to identify top-priority locations (new units and programs) for additional academic support centers. Partner with individual units to ensure access to space and resources for implementation. Facilitate knowledge transfer from supervisors of existing academic support centers.

- 1. Release time or other compensation for management committee members and administrator of the proposed centralized website.
  - a. The committee recommends that a dedicated administrative staff member be hired to manage the various electronic resources proposed here, including the gateway course tableau reports, Canvas functionality, and centralized online academic support website, and also to serve as a liaison to academic support personnel and offices across campus.
- 2. Tech Services (or ATLAS) for website design (see <a href="https://tutor.uiowa.edu">https://tutor.uiowa.edu</a> for one example)
- 3. Website maintenance ensure that information is up-to-date as hours of operation/DOTW will change from semester to semester
- 4. Funding commitment to help to expand the availability of both in-person and online academic support resources. One possibility is to advertise a competitive grant program for units to propose new initiatives in this sector.
- 5. Liaison between course instructors / TAs and supervisors of academic support centers to ensure effective communication and interaction in the design of course material and assessments.

#### *Possible metrics/outcomes:*

- Assist students in locating multiple resources quickly and efficiently to allow for earlier intervention/help
- 2. Analytics to give a deep dive into most used resources, to inform future website updates & redesign, allocation of resources towards additional academic support initiatives across campus

*Likely result of taking action on this recommendation:* 

- 1. Increased student on-campus engagement and academic success in critical gateway courses
- 2. Greater student satisfaction with the academic experience in core gateway courses
- 3. Strengthen institutional knowledge base for longitudinal understanding and evaluation of student performance
- 4. Improve cross-disciplinary conversation by providing a common venue for instructors from different units to interact.

Likely result of not taking action on this recommendation:

- Individual units and courses remain siloed; instructors fail to benefit from new knowledge
  available from large-scale data analytics and interaction with peer instructors teaching similar
  gateway courses in other units.
- 2. Persistent lack of clarity and transparency regarding availability of outside-of-classroom academic support opportunities.

How does this recommendation impact and interact with other SSI initiatives?

- Academic Support Task Group Final Report (8/20). Our suggestion overlaps with
  Recommendation #1 of that report: "Creation of a one-stop shop" success center. Item 3 in the
  report suggests a new website centrally locating commonly used student forms (3a) as well as
  campus resources such as tutoring options, mentoring programs, career centers, etc (3b). Our
  recommendation is more modest: we focus on academic support and tutoring only.
- FYE Final Report Recommendation Category 3, Item 3: Develop a coordinated, centralized approach to tutoring and supplemental instructional support across campus for all students.
   (See the Academic Success Center at the University of Tennessee Knoxville, <a href="https://studentsuccess.utk.edu/academicsuccess/">https://studentsuccess.utk.edu/academicsuccess/</a>, for one example.)
- 3. **Ask Alma Implementation Team:** The Ask Alma team is already working on a centralized website, which could incorporate the centralized academic support website which this committee is proposing.

## **Appendix**

This appendix provides links to resources with background contextual information relevant to the implementation team's charge, as well as other resources consulted by the team at various points. These resources assisted the committee members in formulating the recommendations in this report.

- 1. APLU PxP information and the BTAA Cluster 2021 memo
  - https://www.aplu.org/projects-and-initiatives/center-for-public-universitytransformation/powered-by-publics/overview/
  - <a href="https://www.aplu.org/library/powered-by-publics-learning-memo-the-big-ten-academic-alliance-cluster/file">https://www.aplu.org/library/powered-by-publics-learning-memo-the-big-ten-academic-alliance-cluster/file</a>
  - https://uofi.box.com/s/s7akq552chrvzb62hav3ck57e56iirfz (access restricted)
- 2. Additional external resources:
  - a. The Student Experience Project
    - https://www.science.org/doi/10.1126/sciadv.aau4734
    - https://www.chronicle.com/article/how-to-make-your-teaching-more-inclusive/?utm\_source=at&utm\_medium=en&cid=at&source=ams&sourceId=52
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    - https://static1.squarespace.com/static/5b7311d612b13fd50809ea3e/t/5f8dccd cf3115e2710904526/1603128541759/SEP+Research+Evidence+Overview.pdf
    - https://www.inclusivestemteaching.org/
    - Town Hall with Dr. Claude Steele, featuring Dr. Mary Murphy and the Student Experience Project
    - https://www.insidehighered.com/advice/2021/09/15/how-stem-instructors-can-build-more-inclusive-classrooms-opinion?utm\_source=Inside+Higher+Ed&utm\_campaign=b4d550cf60-DNU\_2021\_COPY\_02&utm\_medium=email&utm\_term=0\_1fcbc04421-b4d550cf60-199981401&mc\_cid=b4d550cf60&mc\_eid=6604795108
  - b. Research article examining the effect of assessment choices on equity gaps
    - https://www.rpajournal.com/dev/wp-content/uploads/2021/05/Considering-the-Effects-of-Assignment-Choices-on-Equity Gaps.pdf?utm\_source=mailpoet&utm\_medium=email&utm\_campaign=researc h-and-practice-in-assessment-considering-the-effects-of-assignment-choices-on-equity-gaps\_11
  - c. University of Nebraska's *Deep Dive into Course Data*; workshops for instructional teams:
    - https://uofi.box.com/s/xyg5c0c289toptcwl6ml10hljff30f18 (access restricted)
  - d. Tableau summaries and dashboards from other Big Ten institutions:
    - i. University of Wisconsin (Madison) Tableau Summary:

https://search.data.wisc.edu/radar.php

ii. University of Michigan Tableau Dashboards:

https://www.blackboard.com/sites/default/files/2019-11/report-student-facingdashboards-finalhq\_tcm223-73203.pdf

- e. Sample centralized academic support websites from peer institutions
  - i. University of Iowa, <u>tutor.uiowa.edu</u>
    - Prominent search functionality
    - Incorporates additional information for student success, including academic tips videos/worksheets and links to lowa's private tutor network
  - ii. University of Illinois at Chicago, tutoring.uic.edu
    - Clear delineation of help by course, area and unit
    - Search function available for "help by course"
  - iii. University of Maryland, tutoring.umd.edu
    - Classification of campus resources by department, program, or specific course
    - Complete compilation of resources into single website
- f. Canvas functionality document related to observer access features and instructions: <a href="https://s3.amazonaws.com/trlearncanvas/docs/CanvasObserverVisibilityandParticipation.pdf">https://s3.amazonaws.com/trlearncanvas/docs/CanvasObserverVisibilityandParticipation.pdf</a>