Flexible Learning Task Force Interim Report April 15, 2021

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A full listing of all Task Force members is in <u>Appendix F</u>.

Introduction

In December 2018—well before the COVID-19 pandemic—Chancellor Kumble R. Subbaswamy announced a strategic expansion of our University Without Walls, noting that:

"[W]e are beginning to see higher education evolving into different, co-existing modalities of acquiring education, skills and credentials. As befits our university's history of invention and innovation, we intend to embrace this upcoming revolution and become leaders."

With this vision, our campus began taking steps to strengthen our online infrastructure, and to bridge and integrate our two traditional educational experiences that are the endpoints of a spectrum—the residential program (which is primarily based on face-to-face courses) and the University Without Walls (which is primarily based on remote courses). The ability of our campus to provide high-quality education anywhere and at any time is critical to providing a richer array of educational opportunities to our students, to extending the mission of the university, and to meeting today's and tomorrow's challenges in the educational marketplace.

What is Flexible Learning?

For more than 150 years and continuing today, the UMass Amherst educational experience has been tightly tied to its identity as a residential campus with students and faculty being engaged primarily in in-person, face-to-face, teaching and learning on the Amherst campus. Over the past 50 years, the campus has also been innovating in ways to extend its excellence in on-campus teaching and learning to include students at a distance.

Flexible Learning *augments* traditional in-person, classroom-based teaching and learning with modalities that enable student participation beyond current limits: that allow for more flexibility in the student learning experience, including the ability to engage students who are not physically present in the campus classroom during the regular semester. It is *additive* and *extends* our campus's excellence in traditional face-to-face teaching. Flexible Learning courses may mix both synchronous and asynchronous modes of teaching and learning engaging students both on and off campus; some flexible learning courses may be completely online. These courses, sometimes known as "hybrid" courses, can thus take many forms¹. Students in Flexible Learning courses can learn together, interact together, discuss together, and collaborate together synchronously and asynchronously, as best fitting the students and the course. Flexible Learning at UMass Amherst will extend beyond individual courses to include the breadth of student activity (co-curricular activities, various student services) that define the UMass Amherst educational experience. We can look at all factors that currently limit student participation to find ways to transcend these limits to enable opportunity.

In this context, Flexible Learning is the didactic process through which students can acquire their educational experience through a suite of choices in terms of *mode*, *place*, and *pace*. Choice of *mode* can be face-to-face or online, *place* can be on or off campus, and *pace* can be time-bound or self-paced. Time-bound implies students taking courses in a common, predetermined time frame for a degree/certificate program. Self-paced refers to taking individual courses with others, but taking a course sequence over a time frame that suits a student's particular circumstances. With Flexible Learning, we can provide flexible access to a UMass Amherst education not only to the residential on-campus student, but also to a larger and more diverse set of students who can participate at a distance.

¹ There is no widely accepted terminology for "hybrid" (or "blended" or "hyflex") courses. A recent <u>white paper</u> from the Center for Teaching, Learning, and Technology at the University of British Columbia nicely distinguishes five forms of "hybrid" teaching and learning.

There are significant benefits and opportunities in providing this flexibility. Those who would benefit include students who have work, family commitments, or internships might need to take some courses at a distance, synchronously or asynchronously; students who want to accelerate their education to join the workforce faster might want to take courses at times other than the current fall and spring semesters; students may want to combine the convenience of remote semesters with the residential experience of face-to-face semesters (e.g., for lab courses). Our alumni, most of whom live far from our main campus, can become lifelong UMass Amherst students by "upskilling" to meet the challenges in their fields throughout their careers. Flexible Learning can provide access to a high-quality UMass Amherst educational experience to students—traditional and nontraditional—who might not otherwise have the chance to do so, thus inclusively expanding the reach and impact of our historic mission as a public institution of higher education.

Task Force on Flexible Learning

Chancellor Subbaswamy laid out his vision for a flexible university in a January 2021 <u>white paper</u> and challenged the UMass Amherst community to think critically about the future of our campus and what role flexible instruction and Flexible Learning should play. In February 2021, the Chancellor then created a <u>Task Force on Flexible Learning</u>, as outlined in the white paper, and charged it with drafting a strategic plan that will articulate a vision for Flexible Learning for our campus. His charge to the Task Force is to develop guiding principles and goals; to conduct an analysis of our campus' strengths, weaknesses, opportunities, and threats with respect to Flexible Learning; to recommend action and implementation steps and possible timelines; and to identify success indicators:

"I charge this committee with drafting a strategic plan that will articulate a vision of future flexible learning for our campus; guiding principles and goals; and analysis of our campus's strengths, weaknesses, opportunities, and threats with respect to flexible learning; recommended action/implementation steps and possible timelines; and success indicators. ... I anticipate that the Task Force's work will be limited to this academic semester."

Membership on the Flexible Learning Task Force is expansive, with more than 50 members from the campus community including undergraduate and graduate students, faculty from all academic colleges, staff, and representatives from the Faculty Senate and Massachusetts Society of Professors; see Appendix F. The Task Force is guided by the work of five subgroups:

- Instruction, Pedagogy, and Technology. This subgroup is exploring the faculty-student teaching-learning experience: the pedagogy and student learning processes in flexible classes; technology needs (both within the classroom and beyond) and limitations; best practices and support for adapting existing course offerings to Flexible Learning.
- **Student Experience and Equity.** This subgroup is exploring out-of-classroom needs for flexible learners: How student support services that are primarily on campus can be made accessible to those off campus; steps that can be taken to ensure equity in access to technology in Flexible

Learning models; and ways whereby the campus can achieve equitable access to virtual resources similar to the access granted to physical resources on campus.

- Workload and Support. This subgroup is exploring workload and course load models for Flexible Learning: how faculty workloads are to be determined in Flexible Learning course offerings, identifying possible incentives and support needs, and examining implications for faculty and class sizes. This subgroup is asking what can be learned from past UMass Amherst Flexible Learning programs and exploring what other schools have adopted as workload models.
- **Finances.** This subgroup is examining the viability of revised tuition models; possible expansion of the student body enabled by Flexible Learning; and the financial implications of instructional technology resources and faculty training, as well as providing high-quality student support services to off-campus students.
- Academic Calendar, Registration, and Facilities. This subgroup is examining possible changes to academic calendars, including summer course offerings, changes to add/drop timelines, and final exam schedules; admissions processes; and registration capacities. It is also investigating and making recommendations for ways of adapting registration capabilities to Flexible Learning, such that students can register for classes in any of several different modes (e.g., in-person always, mixed in-person/online, and online-only).

Flexible Learning: an Interim Report

This is an Interim Report of the Task Force on Flexible Learning, six weeks into its work. Task Force subgroups have met weekly, coordinated through the Steering Committee. The Task Force is issuing this Interim Report in order to transparently:

- 1. Share the topics being explored by the Task Force with the campus community.
- 2. Review any initial findings to date, including an assessment of the campus's strengths and weaknesses with respect to Flexible Learning, the opportunities presented, and challenges faced.
- 3. To the extent that deliberations to date warrant, identify possible paths forward or ongoing discussions for addressing these challenges and opportunities, based on our own experience and/or the experience/practice of other universities.
- 4. Solicit community feedback on these initial findings, on areas not being considered by the Task Force, and on possible paths forward that have been identified to date.

Additionally, the Task Force plans to overview and discuss the Interim Report at two online Town Hall meetings (April 26, 2021 at 11 a.m. and April 28, 2021 at 2 p.m.), and would be pleased to do so, as invited, in smaller unit meetings as well. Comments and input are also welcome via email at <u>FlexLearning@umass.edu</u>. We particularly appreciate comments, given the ongoing "all-hands" effort already required during the pandemic.

We begin this Interim Report with statements on the overall vision, guiding principles, and goals of Flexible Learning on our campus.

Flexible Learning Vision

The University of Massachusetts Amherst's vision for Flexible Learning is to become the destination of choice for learners seeking an outstanding educational experience anchored in world-class research and pedagogy, offered in a seamless suite of student-centered flexible learning choices available anywhere and anytime, and designed to increase diversity, access, and inclusion.

Guiding Principles

Flexible Learning at UMass Amherst is built upon, and informed by, the same set of guiding principles articulated in the University's Strategic Plan. These guiding principles are: excellence; diversity, equity, and inclusiveness; transparency and openness; integrity and stewardship; innovation; and impact. They articulate the core values that serve as "guardrails" in the way we plan to achieve the goals of Flexible Learning at UMass Amherst.

Our campus approach to Flexible Learning will be grounded in our identity as a residential campus; will build on, and be informed by, our excellence in on-campus teaching; and will be consistent with our multifaceted campus mission of teaching, research, and service.

Goals

"Goals" are the specific objectives that we set out to achieve within the three- to five-year planning horizon of our charge. Some goals may be easier to accomplish (the so-called "low-hanging fruit") while others (the "stretch goals") may seem difficult at first, but may be achievable with concerted effort. Within our window of planning, the Task Force has identified the following goals for Flexible Learning at UMass Amherst:

- Provide students with the flexibility necessary to complete their degrees, certificates or other educational goal. One way to do so is to increase the number of courses that shift from being offered strictly via synchronous face-to-face delivery to a hybrid, multimodal delivery. This includes further enabling/investing in courses that already fall under the rubric of "Flexible Learning."
- 2. Facilitate the ability of students to access courses delivered in any Flexible Learning modality, and to allow seamless transition between these forms of learning.
- 3. Provide opportunities and resources for faculty and departments that choose to opt-in to developing flexible learning course offerings, with approaches and technology that they determine to be most well-suited for those courses and for student needs.

- 4. Provide an infrastructure that will maximize participation in the full UMass Amherst academic experience and services, independent of physical location, with a high degree of flexibility.
- 5. Enable the campus to continuously respond to changing student needs and opportunities, as we learn and gain ever more experience with Flexible Learning.

These goals must be achieved through an inclusive and transparent process, in a financially sustainable manner, and while providing a high-quality educational experience for *all* students

Each of the five subgroups has conducted a Flexible Learning situational assessment (in the form of a SWOT analysis) in its charge area, and have begun identifying possible paths forward. The subgroup reports are attached as Appendices A-E of this Interim Report. We encourage the campus to read these informative and insightful reports.

The subgroup reports reflect a number of common emerging themes:

- 1. We are in a good place, as we move forward. As evidenced throughout the subgroup reports, we have considerable experience and existing programmatics in many aspects of online learning: in The University With Walls (UWW) program and its Instructional Design, Engagement, & Support (IDEAS) group; in the Center for Learning (CTL); in Information Technology services; and in the University Libraries. We have degree programs that in some cases are already leaders in the online space. For the past three years running, Isenberg's Online MBA has been ranked #1 nationally and #3 globally by the *Financial Times*, while *U.S. News & World Report* has ranked the College of Nursing's online MS program and the joint College of Education and College of Natural Sciences MEd Science Education Online among the best in the nation. Many colleges have piloted or established courses for off-campus students. And, of course, the COVID-19 pandemic has engaged the entire campus community in teaching and learning at a distance for the past year. We will need to build on and leverage this experience, and also learn from what others are doing. And it is clear that we can't wait, as students demand more flexibility and competitors launch attractive Flexible Learning options.
- 2. Supporting the student experience beyond the class (room). For residential students, the UMass Amherst experience extends far beyond the classroom, and far beyond courses. Myriad services are accessed in-person by on-campus students including advising, counseling, and health services; student activities; facilities, and more. In the appendices it is noted that, "The student experience related to both academic learning and student support services should be seamless regardless of whether in a virtual or an in-person learning environment (B2)." With respect to advising that, "The further a learner is from the classic four-year full-time model, the more sophisticated and responsive advising must be (B2)." Off-campus students currently have only limited support for these services, and in cases where certain advising services are perhaps the most developed (UWW), they are relatively siloed from departmental academic programs.
- 3. Flexible Learning: Enabling *multiple* ways to learn. Flexible Learning will provide multiple ways in which a student can learn, with "the opportunity to engage students in a wide variety of course formats, including synchronously, asynchronously, face-to-face, fully remote, and hybrid"

(A2). This means there is no one-size-fits-all model: " ... some courses may best be conducted in a fully synchronous mode with both face-to-face and remote learners participating. Others may be better suited to a hybrid model where learning takes place synchronously half of the time and asynchronously the other half. *The specific Flexible Learning mode will differ by course and instructor, not* by course type." Flexible Learning also offers an opportunity to innovate pedagogically. The Instruction, Pedagogy and Technology Subgroup (A2) notes, "A thoughtful reimagining of how some courses are taught will be of great value and may prove to improve educational opportunities." These considerations speak to the different forms that Flexible Learning can take, and the need for a student-centered, bottom up, faculty and departmental driven approach to Flexible Learning. *Decisions about which courses and programs are best suited to a flexible learning approach are key decisions to be made by a department and its faculty.*

- 4. "A student is a student." Equal access to the high-quality education, services, and co-curricular activities that define the UMass Amherst experience must be provided to all students, whether they are on-campus residential students or off-campus students. This means that both on-campus and off-campus students have equivalent educational experiences—a pedagogical and a student-services challenge. Students should be able to seamlessly move between on- and off-campus classes and programs, including registration and tuition models. Equal access and seamless movement among courses and programs break down the traditional barriers between residential and "online" students, making the campus a true "University Without Walls." New staff resources will be required to provide seamless services to students (B2).
- 5. A critical role for CTL and UWW. All of the subgroup reports reference the importance of leveraging the experience that we have in CTL, UWW, and IDEAS. Bottom-up pedagogical innovation is the core mission of the CTL; technology-enhanced and -enabled course design is the "bread and butter" of IDEAS; UWW has broad and long-term experience in almost every aspect of working with students at a distance. As Flexible Learning activities scale up, more demands will be put on these offices to partner and share their expertise, requiring new resources.
- 6. Developing and supporting Flexible Learning courses. To develop Flexible Learning courses, it will be critical that faculty and departments work together with CTL and IDEAS, which can together provide new programs in support of developing new pedagogically-sound Flexible Learning courses. One possibility might be a "seed cohort" model (A2) for developing the Flexible Learning courses. This would provide a learning community to support professional development in Flexible Learning methods and approaches. In this model, faculty who are currently most interested and engaged in Flexible Learning provide leadership within their departments. This faculty cohort might be modeled after other successful programs on campus (e.g., Lilly Teaching Fellows, TEACHnology Fellows) and could include seminars, fellowships, and guided instruction on how to build robust flexible courses.
- 7. Financial resources, incentives, and sustainable finances. Resources and incentives will be needed to provide the "<u>activation energy</u>" to transition courses to Flexible Learning in the near term. In the longer term, issues of faculty workload (e.g., the extent to which a Flexible Learning course requires higher workload than a traditional in-person-only course); faculty/departmental

incentives; the need to not disrupt the operations of programs that have already adopted (and come to rely on) forms of Flexible Learning; new resources needed for Flexible Learning classes (e.g., possibly undergraduate course assistants); tuition models; student demand; and the academic calendar will all be key components of a needed long-term, sustainable financial plan. As always, workload considerations are subject to collective bargaining agreements, and changes to academic programmatics are accomplished through established governance procedures.

- 8. Expanded access and equity. Appendix B1 (B1) notes, "In many units across campus, the principles of equity, diversity and inclusion currently guide co-curricular programming and student services, and thus expanding these values to an online context is a strength that can be capitalized." Flexible Learning "opens access to a number of students and populations that could not be part of UMass in-person" due to financial resources, geography, family needs, and more. As noted above (in 5.), equal access to the high-quality education, services, and co-curricular activities must be provided to all students, whether they are on campus or not. Yet online learning has shown dramatic racial and socio-economic inequities in access to, and utilization of, technology. Family, income, rural/urban, and other considerations may limit access to equipment, such as laptops, and access to the high-speed broadband necessary to use the laptops in productive ways. We must ensure that equal access to technology is available for all students and that remote students don't feel like outliers or require extraordinary accommodations to participate. This can be accomplished by making both in-person and remote participation the new norm and by utilizing universal design principles that can foster a sense of inclusion. Appendix A2 (A2) notes, "A particular concern is equity. If Flexible Learning offers a less expensive way to get a UMass education, low income students and those who are struggling to afford their education may opt for Flexible Learning for purely financial reasons. In this case, the residential student body could become less socioeconomically, racially and ethnically diverse. This would both be inequitable and would diminish the value of the residential experience. To avoid this undesirable unintended consequence, reconsideration or restructuring of financial aid may be needed." We must also ensure that ADA and counseling access exists and that students with disabilities (visible and not visible) are being successfully served. An equitable Flexible Learning model needs to also ensure federal restrictions (e.g., residency requirements, internship restrictions) do not prohibit participation by international students.
- 9. Technology considerations. Appendix A2 (A2) notes that, "Significant technological improvements are needed for faculty and students both inside...and outside of the classroom." More broadly, Flexible Learning facilities (e.g., similar to buildings designed for Team-Based Learning) may be possible (E2). Training (of faculty, students, and staff alike) will be required to effectively use technology. Throughout the subgroup reports, equity in access and use of technology resources is raised as a critical concern. And the campus will need to standardize a small set of needed and supported tools (e.g., a Learning Management System, classroom capture, and media storage/distribution) so as to not overwhelm faculty and students with an inefficient array of redundant technologies (A2).
- 10. A long-term process with continuing refinement. Our campus's move towards Flexible Learning will not happen overnight; indeed (as noted in 1. above), we have been on a path towards Flexible Learning for decades, with experimentation and program implementation in a number

of departments across campus. As we accelerate to develop capacity, pilot, and learn, we will now do so more broadly and more intentionally. This continuous process suggests the need to continuously adapt our approach to Flexible Learning itself, as we learn the forms of Flexible Learning that are of most interest to students, as we assess the learning outcomes (itself an area of possible research, as noted in <u>A1</u>), and as we understand the financial consequences of different forms of Flexible Learning. We will need to continuously understand workload impact on faculty, staff, and students (both initially and in the steady state) and adapt accordingly. We will need to share learned best practices. And we will need forms of continued coordination, pedagogically through CTL and administratively campuswide—just as this Flexible Learning Task Force draws members broadly from across the campus community.

Summary

Flexible Learning, as envisioned in Chancellor Subbaswamy's January 2021 white paper, is an all-inclusive campuswide strategic undertaking that will enable us to provide high-quality education to students anywhere and at any time. Flexible Learning is well aligned with the UMass Amherst <u>mission</u> "to provide an affordable and accessible education of high quality and...advance knowledge and improve the lives of the people of the Commonwealth, the nation, and the world," and will position us to meet tomorrow's challenges in the educational marketplace.

This Interim Report of Flexible Learning Task Force helps promote an open and transparent campuswide discussion of Flexible Learning by previewing initial findings to date from SWOT analyses, sharing topics being explored by the Task Force subgroups with the campus community, identifying possible paths forward for addressing these challenges and opportunities, and (as always) soliciting and welcoming community input and feedback.

Subgroup Analyses (Appendices)

Appendix A. Interim Report on Instruction, Pedagogy, and Technology

A.1 Strengths, Weaknesses, Opportunities, and Threats

The SWOT analysis conducted by the Instruction Pedagogy and Technology subgroup identified the following strengths, weaknesses, opportunities, and threats regarding the implementation of Flexible Learning. The numerous items that were identified during this process are grouped into related ideas.

Strengths

- Faculty quality: Students rate our instructors as very knowledgeable in their discipline.
- Research quality: UMass Amherst is strong in research.
- Faculty preparation: UMass Amherst has a history of being innovative in instructional technology. COVID has provided practice with some instructional technology and remote teaching across the entire faculty.
- Campus support: UMass Amherst has robust support structures for teaching and learning (CTL, IDEAS, IT, Libraries).

Weaknesses

Note: These weaknesses are not necessarily current weaknesses at UMass Amherst. They are weaknesses that may arise if implementing Flexible Learning directly without considering and addressing the issues listed.

- Need for instructional support: Faculty need support in preparation for and during flexible instruction (training in teaching methods and technology, as well as TAs and technology support in the classroom).
- Inequitable access and support for students: Access to technology (computing and networking) is not equitable. It will be difficult to ensure equivalent support to in-person and distant students (LRC, SI, Writing Center, SACL/well-being, etc.).
- Lack of opportunities for social connections and extracurricular activities: How can equivalent social relationships be enabled among all students and faculty? How can remote students engage in student clubs/student governance/etc. to make connections and gain skills?
- Need to improve, reconcile, or update many systems, including but not limited to registration, LMS, course scheduling, and legacy business practices: Maintaining current (sometimes duplicative) systems would cause (or increase) confusion for faculty and students in myriad ways.

Opportunities

- Leverage existing expertise: We have experienced, innovative faculty members with expertise in Flexible Learning in the College of Education, UWW, and elsewhere who can help design Flexible Learning courses.
- Research: Potential to study changes related to this model of teaching and learning.
- Enable new programs: Potential new offerings include MS degrees for working students, more robust 4+1 programs.
- Attract students: Flexible Learning might attract more students and create a more diverse student body.
- Improve existing programs: More flexibility could enable students to pursue more experiential learning opportunities (e.g., practicums). The existing integrative experience in our curriculum could be leveraged.
- Mount Ida and Springfield: Flexible Learning could unlock additional opportunities at Mount Ida and Springfield (as Nursing and ISOM have successfully demonstrated already).
- Increased programmatic flexibility: Teaching during "off terms" may allow faculty to align their teaching schedules to better support their other academic endeavors.
- Flexible Learning could increase the adoption and use of open educational materials, like open textbooks, by faculty and students.

Threats

- Reputation: Will UMass Amherst be perceived as an "online school"? Will this hurt our high-quality residential program?
- Student experience: Will Flexible Learning create inequitable student experiences? How will marginalized students (e.g., first-generation students, students with disabilities) fare in this model? Might students or alumni resist this effort?
- Labor: Faculty/TA/TO reluctance and workload issues.

A.2 Possible Paths Forward

Faculty and Student Experiences in the Classroom

The committee emphasized the importance of creating remote learning experiences that are as rich and engaging as in-person experiences. We also welcomed the opportunity to engage students in a wide variety of course formats, including synchronously, asynchronously, face-to-face, fully remote, and hybrid. The committee raised numerous important issues that will require careful consideration as we move forward.

Courses and Faculty Perspective

We offer a large and diverse course selection to our residential learners, including large lectures, small seminars, lab courses, performance courses, art/studio classes, and hands-on courses that require high-tech equipment (e.g., video production, broadcasting, labs, nursing simulations). It may not be feasible to offer all these courses to remote learners. A thoughtful reimagining of how some courses are taught will be of great value and may prove to improve educational opportunities. For example, it is possible that UMass Amherst may be able to partner with other institutions to provide students with access to resources (e.g., labs). Support for redesigning courses will be essential, particularly for courses that do not easily lend themselves to remote modes. These courses may be adapted to Flexible Learning after anticipated early successes with lecture and seminar courses.

Faculty need flexibility in how to integrate Flexible Learning for their courses based on their specific courses. For example, some courses may best be conducted in a fully synchronous mode with both face-to-face and remote learners participating. Others may be better suited to a hybrid model where learning takes place synchronously half of the time and asynchronously the other half. The specific Flexible Learning mode will differ by course and instructor, not by course type. Not all lectures will be taught in a particular mode, it will depend on the specific course and the specific instructor.

When faculty list their courses, and when the Faculty Senate approves the course, the modes of instruction offered will have to be specified. When students enroll in a Flexible Learning course, they should choose the mode in which they will take the course (e.g., face-to-face or remote). We expect that most faculty will allow only one mode of participation per student per course, but faculty may choose whether to allow students to switch modes and how often. Under some circumstances (e.g., illness, disability, childcare, work responsibilities) students may need a change to a different format.

There is considerable training needed for the Flexible Learning model to realize its full potential. The design aspects of remote teaching are more complex than simply learning technology. Extensive training and support of faculty and graduate TAs will be necessary to ensure the Flexible Learning courses are of the highest quality. Established pedagogical frameworks should be used to evaluate and ensure that faculty, TA, and student needs are met. Current optional training courses are unlikely to be sufficient for this purpose.

Faculty teaching classes with remote learners may also need additional classroom support (e.g., TAs, undergraduate course assistants, and/or IT assistants). For example, faculty would be unable to monitor remote students' text questions and the discussion while also engaging with face-to-face students. A course assistant might fill this need in some courses; however, in upper-level courses content knowledge might be needed, requiring a graduate student.

Since asynchronous learning will likely require faculty to record lectures, questions about intellectual property and copyright will also need to be addressed.

Student Perspective

The options offered through Flexible Learning are likely to be highly desirable to students. However, numerous important issues emerged that demand careful consideration. We will need to develop ways to support students and help them to make choices about course formats that best suit their needs, as well as clearly communicate expectations and the experience of different formats. We learned during the pandemic that remote learning has presented real challenges to many students. Remote learning is not an ideal option for some students, and we should provide the best guidance for students who are considering different options.

A particular concern is equity. If Flexible Learning offers a less expensive way to get a UMass Amherst education, low income students and those who are struggling to afford their education may opt for Flexible Learning for purely financial reasons. In this case, the residential student body could become less socioeconomically, racially and ethnically diverse. This would both be inequitable and would diminish the value of the residential experience. To avoid this undesirable unintended consequence, reconsideration or restructuring of financial aid may be needed. Additional aid to cover the cost of residence on campus might have to take the form of grants rather than loans, for example. A related concern is the lack of availability of work-study and on-campus employment for students who are not on campus.

When students participate in classes remotely, there are many factors that can interfere with their experience. Students who are living abroad will have significant time differences from those on campus. Students may have variable internet reliability, challenges with accessing technology and class materials (e.g., software, textbooks). They may also have living situations that make focusing on classes difficult. These problems are sometimes encountered in UWW courses. We need to ensure that we reach all our students equally and provide consistent educational opportunities and support regardless of where students are located. Support systems built into the residential system will be absent for non-residential students and replacing them should be a priority.

A concern with synchronous classes that include both in-person and remote learners is the task of attending to both groups; this could be distracting for everyone (faculty and all students). We need to preserve, not reduce, the quality of the learning experience, especially if remote students have the experience of watching a broadcast. As noted earlier, additional TA support might help to address this concern.

Providing equivalent on- and off-campus experiences means providing rich student-to-student and faculty-to-student interactions across learning modalities both inside and outside of class. One important benefit of a residential college experience is the ability for students to grow and learn in their on-campus communities. We need to find ways to create and nurture these communities for students who are learning remotely. Office hours, group projects, discussion sections, online "hangouts" with remote and residential students together can help to facilitate this, but are probably not a replacement.

We also need to consider the broad range of resources that students will need when studying remotely and ensure that these and all other on-campus resources are easily accessible to students. Library resources, tutoring, the Writing Center, disability services, mental health services, etc., should also be built into the LMS and linked within each course. The possibility that remote learners may need new or different support than residential learners should be considered.

Faculty Engagement

Faculty will need considerable support to adopt the Flexible Learning model of education and significant efforts to motivate and engage faculty are essential. The Center for Teaching and Learning (CTL), IDEAs, and other resources on campus can help provide support.

Importantly, faculty will need incentives to overcome the activation energy required to engage in new learning modes. They will also need thoughtful support and resources over the long term. Redesigning and modifying courses to achieve UMass-standard learning experiences will require a considerable commitment of time and energy on the part of faculty. Furthermore, the teaching and administration of such a course add to the overall workload compared to a course that is either entirely face-to-face or entirely remote. Additional financial compensation or release time may be needed as we are transitioning to a Flexible Learning model. Additional classroom support may also be needed in many courses, as noted earlier.

The committee discussed a "seed cohort" model for rolling out the Flexible Learning model. This would provide a learning community to support professional development in Flexible Learning methods and approaches. In this model, faculty who are currently most interested and engaged in teaching in this way will provide Flexible Learning leadership within their departments. This faculty cohort might be modeled after other programs on campus (e.g., Lilly Teaching Fellows, TEACHnology Fellows) and could include seminars, fellowships, and guided instruction on how to build robust flexible courses. Another, possibly overlapping, option is to transition a whole department to Flexible Learning as a pilot program. More generally, building and supporting a community of practice is essential for faculty who teach in the Flexible Learning mode so that they can share resources/best practices and learn together. Additional incentives should be provided for participating in this early-adopting community. Members of this community should also be supported to serve as mentors/consultants to faculty who are new to teaching a Flexible Learning course. This will be particularly important as we expand the available Flexible Learning course offerings over time. Finally, pre-tenure faculty who opt to join the Flexible Learning courses.

Technology

Significant technological improvements are needed for faculty and students both inside classrooms at UMass Amherst (and our satellite campuses Mount Ida and Springfield) and outside of the classroom.

Sound systems in many rooms on campus are not sufficiently sensitive to pick up in-person student contributions. Remote learners need to be able to hear the class clearly without excessive repeating of material. Not all classrooms have cameras, and multiple cameras will be helpful for capturing course content, instructor, and classroom participants. An additional projector will be needed to display remote students. A strong consensus exists that synchronous classes must provide a way for all students to see one another regardless of student location. (At the same time, cameras and recordings may affect student behavior and participation.) All students, regardless of location, may need a laptop or other device so that they can engage in digital activities with remote peers. We may consider requiring all students to have laptop computers. Remote students may need training and support to learn the norms, expectations, and culture of effective and responsible online engagement.

Situations beyond the control of the university may emerge for remote learners at times (e.g., bandwidth problems, power outage). All Flexible Learning courses must include strategies and plans for managing these unexpected situations and outline them in their syllabi and in LMS. Assistance for developing effective strategies will be needed.

Numerous LMS packages exist (e.g., Moodle, Blackboard) and faculty generally have preferences for a specific LMS; however, support for faculty and students is likely to be best if all faculty use the same LMS across all courses. This would also help students to have a sense of continuity across all their courses and prevent confusion by bouncing from one LMS to another. In selecting a common LMS, careful consideration should be given to how other resources can be integrated into the LMS (e.g., Zoom, Gradescope, VoiceThread, etc.). Furthermore, while several technologies seem to be liked by students, setting up some of these resources for our students is difficult for faculty. More generally, careful consideration is needed to determine which technologies will be most effective for different types of Flexible Learning classes (Echo360 for lecture capture, Zoom, etc.).

Different ways to assess student performance are needed and IT should adopt and support a preferred technology that will allow for this. Using online proctoring of exams has been shown to be <u>ineffective at preventing academic dishonesty</u> and may <u>create inequities</u> for certain student populations, e.g., students of color, disabled students. Some committee members suggest using frequent low-stakes assessments or alternative forms of assessment that demonstrate deep learning of the material. Others are concerned about how such assessments can show mastery of complex concepts and critical thinking. Tools such as PollEverywhere, Google Forms, or similar may prove useful both for assessment and for increasing the active engagement of students across learning modalities. Financial and privacy-related costs associated with different tools should be considered, and potential savings of site licenses pursued.

Issues for Discussion

Flexibility everywhere for everyone at any time seems overwhelming. What are reasonable constraints we can put in place to make this manageable?

- Can students be required to sign up for in-person or remote for each course? I.e., students should not just decide each morning whether or not to go to class in-person.
- Should students go through "training" before signing up for remote courses? Remote courses may seem easier to students, but they require considerable commitment, which students may underestimate.
- Can some courses only be offered in one format or the other? Examples: lab or studio art courses. How will all students be able to make progress in their program with the choices available?
- Can degree programs make constraints on the amount of flexibility available? E.g., can a program require, say, two semesters on campus for required hands-on labs/studio courses?
- How can we communicate clearly with students to make sure they know expectations (for their degree programs)?
- Departments and colleges should put forward specific packages of courses for a flexible degree program, instead of (or in addition to) a "free for all."
- Will programs compete with each other to offer similar degrees with less required campus time?

Appendix B: Interim Report on Student Experience and Equity

B.1 Strengths, Weaknesses, Opportunities, and Threats

The subgroup focused on five areas of greatest concern in order to examine current strengths, weaknesses, opportunities, and threats. Brief summaries are provided below:

- Student Support Services
- Academic Advising
- Community Building
- Careers Development
- ADA and Counseling Access

Strengths

UMass Amherst has many strengths in the above areas. It is especially strong in providing access to varied technology to provide learning and engagement; connecting students to efforts in student affairs; developing campaigns like UMatter; recognizing student governance; embracing social justice across units; empowering people with disabilities and fostering their full integration into campus life and the community; and mentoring students through careers and alumni networking. In many units across campus, the principles of equity, diversity, and inclusion currently guide co-curricular programming and student services, and thus expanding these values to an online context is a strength that can be capitalized. The training provided to faculty and staff in the use of educational technologies was a positive aspect of the pivot to remote learning this academic year and helped make UMass Amherst accessible to all students.

Weaknesses

The university has several weaknesses that need to be addressed and improved in order for the student experience to be deeply satisfying and equitable in an online context. For instance, the capacity, human resources, and licensing rules for the Center for Counseling and Psychological Health must be considered. UWW advising operates in somewhat of a silo and is separated from the other advising units across campus. UWW students have few co-curricular student experiences and events, and participation in student governance is not currently permissible for these students since they do not pay the student activity fee. Career Centers are also presently at capacity and recruitment events that take place on-campus are often occurring during normal business hours, and thus exclude online students. Regarding accommodations for students with disabilities, the faculty are most experienced with traditional, residential students, but some "disabilities" are not obvious in an online context, so students face skepticism from faculty and classmates. Additionally, due to technological imbalances, there are uneven student experiences and this may exacerbate educational inequities.

Opportunities

Yet there are great opportunities for our university and we strongly believe that UMass Amherst can become a leader in creating Flexible Learning environments that center equity and social justice. For both academic advising and community building efforts, online technologies make it possible to connect students across instructional formats as well as activities/groups/resources in student affairs. Flexible Learning opens access to a number of students and populations that could not be part of UMass Amherst in-person (due to financial resources, geography, family needs, climate, etc.) and opens access to scholars/educators who want to be creative with virtual resources. Additionally, access to online learning would allow matriculated students to participate in off-campus experiential learning (internship/co-op) while staying on track for graduation, and the development of networking events between the online students and in-person students could provide value to both sets of students. Lastly, the vast experience of the Disabilities Office can provide best practices to the rest of campus regarding accessibility possibilities and how online learning environments can provide a level of control and productive engagement to people with disabilities, which benefits everyone as well.

Threats

Threats do exist for UMass Amherst in the area of student experience and equity in the context of Flexible Learning. For example, aside from Isenberg, our university is not widely known as a provider of excellent online academic programs, wide-ranging online courses, and meaningful online student engagement. Also, with regards to co-op or internship experiences, international students have federal restrictions related to gaining practical training regarding when they participate in these experiences and how many hours they are allowed to work. We need to be aware of these restrictions when designing programs that would prohibit participation for our international students. As technology changes, there will be a need to provide continued, up-to-date resources for online students. Both cost and training should be taken into consideration for technology enhancement. Some hiring employers view online

degrees at "less than" in-person degrees. Lastly, disability accommodations that require physical set up may be difficult to do in an online context.

B.2 Possible Paths Forward

Student Support Services

The student experience related to both academic learning and student support services should be seamless regardless of whether in a virtual or an in-person learning environment. One of the next steps in developing a robust Flexible Learning initiative is to explore ways to continue leveraging digital platforms (i.e. learning management systems) to provide students with access to both course resources and support services. Another step is to explore the creation of a one-stop center or office exclusively supporting students who have elected to learn in a virtual space. Providing access to independent and group (online or in person) learning spaces on all campus locations is a next step for the group to explore. For instance, UMass Amherst has the Off Campus Student Support office. They focus mostly on students living locally, but its staff could provide a good foundation from which to grow. The university as a whole will need additional staffing to support students living remotely (not locally) and enhance virtual programming to address student wellbeing, mental health, and health (Center for Health Promotion, CCPH, Campus Recreation, University Health Services), while abiding by applicable licensing regulations. It is important to note that clinical mental health services (i.e., psychotherapy, psychiatry) cannot be provided across state lines due to state licensing regulations. However, workshops, outreach, and other non-clinical services can be provided regardless of student location.

Academic Advising

Another area that warrants further consideration is academic advising, which requires nimble and skilled advising personnel, robust technologies, and accessible and clear administrative systems in order to successfully serve remote and nontraditional learners. Currently at UMass Amherst, we have full-time professional academic advisors and faculty advisors dedicated to traditional full-time students, some of whom also serve transfer students, and then a separate cadre of UWW advisors. The further a learner is from the classic four-year full-time model, the more sophisticated and responsive advising must be. Every student's varied path results in new questions about successful progress toward degree, course progression, credit transfer, credential options, and the incorporation of personal goals and resources.

Community Building

It is clear from national data that success in online educational environments is also rooted in a university's ability to center and expand community building in a virtual world. Universal design will be important to foster a sense of inclusion and we should make as many meetings, events, etc. as possible accessible remotely so that remote students don't feel like they stick out or need special accommodations to attend, which can be done by making remote participation the new norm (even students on campus or local might choose to attend events and meetings remotely). We should also

make sure any swag/giveaways are also available to remote students. School spirit and a sense of community can be fostered by clothing, water bottles, key rings, etc.; making sure remote students aren't missing out on this. Departments can consider a buddy system—matching a remote student with an on-campus student—as a way to foster connection and also provide a resource or point person. This can also be created by providing departments and students support units across campus the ability to access Discord or Slack type technologies for community building. One study found that the eight factors limiting community building and deep learning in online academic environments were (a) administrative issues, (b) social interaction, (c) academic skills, (d) technical skills, (e) learner motivation, (f) time and support for studies, (g) cost and access to the internet, and (h) technical problems. Lastly, the university should also amend student activities fee policies to be inclusive of online students. The \$37 Graduate Senate tax and \$124 fee for undergraduate students would give UWW students full access to all student services, including representation in student government.

Career Development

Effective Career services is multilayered, requiring both student career development (exploration, skills development and relationship building), employer engagement and recruitment. In addition to these foundational components, successful online Career Services also includes modern technology, tools and programs that are available 24/7 and targeted resources for students who differ in their career journey. Based on Best Practices from national organizations such as the National Association of Colleges and Employers (NACE) and the National Association of Student Professional Administrators (NASPA), key components for career services for remote learning should include:

- Interactive, up-to-date technology such as virtual career fair platforms, virtual networking events, online webinars, etc.
- Job boards that provide equal access and opportunities for all students
- Virtual advising appointments
- Online career resources that students can access any time
- Career goal-setting

Some important considerations for these resources include time zone challenges, inability for employers to host multiple recruitment events, learning curve for new technologies, and differing career-related content for students with different levels of experience. Based on Peer Institutions, key virtual career resources should also include: clear communication of career resources that are specific to online learners, and links for special populations such as those with disabilities or international students.

ADA and Counseling Access

Most crucially, any flexible learning initiative at UMass Amherst must seriously consider how ADA and counseling access is taking place and how students with (visible and not visible) disabilities are being successfully served. Currently, our campus provides access to the Clockwork Online Services website, which allows students to request proctored exams, download notes, obtain copies of accommodation

forms and check scheduled exams and appointments. Clockwork Online Services also allow faculty to view accommodations for students in courses and to schedule exams through the Exam Proctoring Center. We can learn from other universities that are currently providing the most affordable and supportive online schools for students with learning disabilities. These schools provide accommodations for students with learning disabilities, such as alternative testing formats as well as waived or altered course requirements when appropriate.

Appendix C: Interim Report on Workload and Support

Our subgroup has been focusing its efforts on the following questions:

- What long-term faculty workload models are possible going forward?
- What have other schools adopted as workload models?
- What do we recommend in the near-, medium-, and longer-term?
- What support can be put in place to maintain/advance the quality of teaching and learning?
- What financial or other incentives can be put in place to drive participation at the faculty, department, and school levels?
- How is or should IP (be) handled? Is the current approach working?

While we have not fully completed our benchmarking/data collection, in order to address the above questions, we have connected with a number of other schools about their efforts and experiences (e.g., UCONN, Wisconsin, Purdue, IU, ASU, Oregon State, Cincinnati, Washington State, Columbia, Harvard, George Mason, FSU). We have also reviewed a number of resources, including those available through Educause, Chronicle of Higher Education, and Inside Higher Education, among others. Lastly, we have begun to examine academic and practitioner research on workload, as well as related topics (e.g., bias in student evaluations).

C.1 Strengths, Weaknesses, Opportunities, and Threats

Strengths

Many of our strengths center on the assets currently available at UMass Amherst.

The first key asset is our faculty. Specifically, as subject matter experts (SMEs), our faculty possesses the knowledge, education, skills, and reputation that set us apart. Faculty members are deeply committed to advancing learning (at all levels) and knowledge within their respective disciplines.

Another key asset are current T&L services and support provided via the Center for Teaching & Learning (CTL), Instructional Design, Engagement, and Support (IDEAS; within UWW), campus IT (umass.edu/it/), as well as more local services within some of our schools.

UMass Amherst also possesses a robust technology environment, including pervasive network connectivity (wired and wireless); file storage and collaboration tools; a wide range of classroom and instructional technologies; learning management systems (LMS); and assistive hardware and software technologies. Computing and technology support are also a strength, with services provided centrally with additional support (to varying degrees) within each school.

We have a competitive advantage over some of our competition due to the experience we already had in online education (UWW, Isenberg School of Management, etc.). These existing programs demonstrate how expanding access to learners can enhance revenues which, in turn, can be funneled to other areas of need within schools and departments.

Moreover, we now have more than a year of experience across the campus in teaching remotely. We should be able to leverage that experience and the digital-teaching competences faculty have developed as we move forward, across the full spectrum of course modalities from face-to-face (F2F) to online.

Weaknesses

CTL and IDEAS have limited human resources, and few schools and departments have instructional design experts in-house. A lack of funding poses a significant barrier. It is not totally clear to faculty the role(s) that UWW, CTL, and IDEAS play, e.g., how they are integrated (or not) and/or what support can be provided.

Despite our efforts over the last year, faculty may still be at very different places with regard to digital competencies and the use of technology in and out of the classroom. And, some faculty members remain less interested in using technology, particularly in F2F settings. There is also a lack of understanding/knowledge among the faculty regarding online pedagogies, or how even F2F pedagogy can be enhanced with technology. The variation in the quality of instruction and in assessment is a weakness. As a residential campus, UMass Amherst students and faculty expect to build relationships and engage in rich interactions—the technology poses potential limits to this culture.

Regarding incentives, a research-focused faculty is less likely to be incentivized by additional compensation to teach overloads or develop digital competencies. Tenure and promotion guidelines (and career progression) place more weight on research than teaching or service. In addition, some faculty (tenure track and non-tenure track alike) are stretched too thin, particularly with other teaching and/or service commitments and growing student demand. Career progression and work-life balance is an increasing concern among all the faculty. Inequities in workloads of faculty (tenure track, NTT), teaching assistants, and adjuncts could be exacerbated.

While we possess a robust technology environment, multiple LMS are problematic as it is confusing to students and faculty, and a waste of human and financial resources (e.g., support for multiple systems). Moreover, student access to technology, particularly off campus, can be highly variable (e.g., quality of laptops/desktops, internet access, etc.).

Opportunities

With a desire for more access and flexibility, expectations of learners are evolving. Universities that can respond to this trend can help learners achieve their goals, while simultaneously growing revenues. UMass Amherst may be able to expand higher learning for unconventional students and access more diverse and talented students, faculty, and staff.

UMass Amherst is also ranked among the best universities overall, with many schools and programs highly regarded. Thus, new programs and offerings, with expanded means of delivery have the potential to be well received. This may also provide a way to more fully leverage the Mount Ida Campus.

Digital teaching competencies will become more recognized, and faculty members who demonstrate dexterity to teach well in any mode will be prized and in high demand. There may be a real opportunity here to incent faculty, doctoral students, and staff via professional development activities. The outcomes may create opportunities to rethink tenure and non-tenure track review systems, with more weight to non-research candidates and faculty members who develop effective teaching methods (across all modes of delivery). Doctoral students with these competencies may be, in some cases, more competitive on the market.

As UMass Amherst invests in T&L, emphasis on the quality of teaching will increase along with the sharing of best practices among the faculty, particularly with regard to the testing of new pedagogies, and ways to engage students under different modes. Some faculty may find publication and/or presentation outlets to share their experiences and findings.

Threats

Other universities over the last year have advanced their online capabilities, and are also looking to open new markets with expanded flexibility–allowing anytime, anywhere access–with changes to the academic calendar and workday. Some of these have been long-standing competitors, while others represent new entrants. Many of these are already ahead of us in executing new plans, and many have more human and financial resources available to them. Many of these universities have significantly more robust alumni/donor foundations that they are tapping into to support innovations in T&L.

Just as developing the digital competencies of our faculty presents an opportunity, it also is a threat as those faculty (and staff) will be in high demand and could be recruited away. Some universities are also rethinking tenure systems to create more balance with regard to work-life and investment in teaching. Moreover, research shows biases in student-based teaching evaluations, particularly as related to gender, race, ethnicity; potentially threatening reviews and T&P/promotion and retention decisions.

Concerns remain as to higher dropout rates in online programs, and assessment of learning outcomes with non-residential students. As other universities respond to these issues, so too must UMass Amherst.

C.2 Possible Paths Forward

With a focus on the questions we posed earlier, the following reflect some key takeaways from our conversations with other universities, along with our review of related practitioner and academic research.

In-load or overload teaching for online courses?

When starting online programs (i.e., targeting non-residential/local learners), schools generally have faculty deliver courses on an overload (additional compensation). Once sufficient and sustained demand is demonstrated, and more faculty are hired, some schools allow faculty to teach online as part of their regular load. In this case, online is considered just another type of program offering. Added revenues are used to pay for both overload teaching and new hiring.

What's the efficacy of the "HyFlex" design and delivery?

While some schools are testing HyFlex courses, three observations were shared: (a) a high-end HyFlex course requires classroom outfitted with video cameras and distributed microphones etc.; generally, each course has technology support personnel readily available; and, has a dedicated TA to assist during the class session to lessen the load on the instructor, (b) most are, at best, piloting this approach, while (c) many have pulled back and warned against this approach. The key reason against this approach is that, while students have flexibility on a session-to-session basis, it puts undue burden on the faculty member. Student flexibility may be better served at the course enrollment level (i.e., choose between F2F, hybrid, and online), rather than the session level.

How can incentives work?

Top-down vs. bottom-up approaches: Many universities incentivize by flowing shares of revenues to participating schools. In turn, schools may share revenues with departments. This model is more top-down, allowing schools to make decisions on where the revenues go (e.g., additional compensation, support for doctoral students, travel, etc.). This seems particularly attractive in contexts where (some) faculty members may be less interested in additional compensation, and it allows schools to direct support to participating departments.

A more bottom-up approach focuses on the instructor (tenure track and NTT, doctoral students, adjuncts). Increasingly, models are focused on incentivizing professional development/training, rather than specific courses. This allows for developed competencies to be reusable. This model may involve some monetary incentive and/or micro-credentialing. Incentivizing professional development may be

particularly attractive to doctoral students (making them ultimately more competitive when they are seeking jobs), non-tenure track faculty as it expands their value and may contribute to promotions/contract renewal, as well as interested tenure-track faculty as they develop their teaching portfolio. The general practice that is emerging is to offer (e.g., via CTLs) a set of courses that line up with different levels of course design and development. For example, Level 1 might involve foundational tools and online pedagogical approaches; here, faculty would take an introductory course and apply the learnings to what they teach. This might be the first step towards a micro-credential. Level 1 would require the least amount to support. In contrast, Level 3 might be the highest level of design and development, (e.g., a fully asynchronous course) that requires more direct support and work with instructional experts. Overall, the degree of needed incentives would be tied the Levels of work/competencies needed.

The bottom-up and top-down approaches can intersect with the schools prioritizing where efforts or which courses should be focused on to start.

The need for support will vary across three phases of any course's lifecycle: *(re)design and development, delivery and assessment, and refresh and renewal.* As noted above, the "level" any given course is being designed towards (as well as the very nature of the course, i.e., F2F, hybrid etc.) will help shape the support needed. During delivery, support may involve TAs, technology support etc. We expect that the need for support will ebb and flow over the lifecycle.

Regardless of model or incentive, other universities are working to clearly define quality rubrics for different delivery modes and levels.

Appendix D: Interim Report on Finances

This subgroup identified three key areas of examination: the tuition model, enrollment and student support.

D.1 Strengths, Weaknesses, Opportunities, and Threats

Strengths

The campus has been exploring new tuition models since its announcement to expand UWW and is therefore well prepared for these discussions.

The campus has experienced strong undergraduate enrollment growth. On-campus undergraduate enrollment has grown by 5% over the past five years, and there is high in-state demand from high-quality applicants for admission in fields such as Computer Science, Biology, Psychology, Nursing, and Finance. Thanks to a focus on student success and experience, internationally respected academic programs, and a high-quality high-attachment teaching faculty, the campus has increased its regional, national, and international reputation. The attention to improved advising and increased availability of Gen Ed and

major program courses has allowed UMass Amherst to largely meet its commitment to four-year graduation.

In addition to growing on-campus enrollment, there has been strong growth in the UWW summer and winter terms, with 22% of on-campus students already taking UWW classes. UWW provides an established high-quality infrastructure for course design and real-time support of distance learning.

Weaknesses

Our current tuition model does not support Flexible Learning. UWW and on-campus students face different baseline tuition. While full-time tuition is calculated based on 12 credits with no cap on credits taken in a semester, full-time on-campus students face a high, à *la carte* charge for any UWW course (approximately \$500/credit). Universities with strong integration between on-campus and online offerings trend towards an unbundled tuition model, charging a baseline tuition (often by the credit) applicable to any set of courses with additional fees that account for differences in service, student, or at times, area of study. In addition to baseline tuition typically based on a full-time course load ranging from 7 to 12 credits, surcharges may include fees for residence halls and dining, for on-campus face-to-face instruction, and for international student services.

While we have strong enrollment demand in several majors, admissions are currently limited by our housing stock, instructional capacity (both instructors and classroom space), and support capacity (advising, career services). Our classrooms are not well equipped with technology to support remote learning. We do not have the ability to offer synchronous instruction or student support outside of traditional business hours, e.g., for students in different time zones.

The historic silo that exists between the UWW unit and on-campus instruction creates challenges beyond tuition. Faculty are limited in their ability to do UWW instruction "on-load."

Opportunities

We see an opportunity to explore a flexible, unbundled tuition model for UMass Amherst that will provide students with greater transparency of the cost of their education. Under such a tuition model, tuition rates will vary based on whether students engage in the residential campus experience as well as the degree/credential they are pursuing. This structure would eliminate the problem of additional charges and allow students to move smoothly between on-campus, hybrid, and remote courses.

Under the right circumstances the campus is poised to benefit from additional enrollment with the implementation of Flexible Learning. Flexible Learning can shift some on-campus students to partial remote coursework (freeing up classroom space), expand opportunities for some students to attend entirely remotely (conserving both residential and classroom space), and enable the use of available housing at the Mount Ida Campus with students having access to a wide range of courses.

Greater demand for graduate education, potential reduction in time to degree, and the opening of new modalities that can accommodate work schedules could open opportunities for new "plus one" master's degree programs.

We also see an opportunity to consider strategies for ensuring sufficient instructional capacity both in terms of hires and incentives to participate in multimodal instruction.

The financial success of a flexible learning program requires sufficient support for student success. As mentioned above, the campus has the initial building blocks necessary to support success. However, based on conversations with colleagues at other universities and our experience in this past year, we expect student support for remote learning will require additional resources. We see an opportunity to build upon our existing structures.

Threats

The tuition structure needs to be considered with respect to the total effect on campus revenue and with attention to potentially offsetting effects across several revenue streams or activity areas. At a minimum, the structure will need to allow us to maintain the existing revenue levels.

The model also must be sensitive to the legacy model of revenue allocation, especially if online and on-campus instruction are offered as part of the same tuition package. Currently, tuition dollars flow into college budgets differently depending on session. Tuition dollars from a regularly-matriculated undergraduate student go into the campus general funds budget, which is composed largely of tuition revenue and the state appropriation. These monies are allocated to colleges via a centralized annual budget process—an incremental budget typically equal to the prior year's budget plus any new strategic funds. In contrast, net margin from UWW tuition revenue (after subtraction of the direct cost of delivering the course and a campus assessment to cover administrative costs) is allocated directly to the college delivering the course. UWW revenues have grown on average by 7.4% per year since 2011. UWW revenue has become essential for many college and departmental budgets and remains a key incentive to colleges and departments for developing online courses. Changes to the tuition structure could alter the revenue-sharing model and both the incentives and needs facing colleges and departments.

Finally, any change in the tuition model will have to be viewed in the context of our reputation and the market. There may be a public perception that a new tuition model is disadvantageous, confusing, or undermines reputational strength as a flagship research university with a strong residential college experience. We also have the potential either to price ourselves out of the market or to undercharge for high-cost programs if changes to tuition are not thoroughly considered and responsive to market conditions.

The typical advising load for on-campus undergraduate students is 350-700 students per advisor. In a remote setting, the loss of the informal information sharing that happens organically among

students means that students need more formal advising and advisors are spending more time with each student. This will put a strain on advising resources and generate a need to hire more advisors.

Since a material up-front investment will be needed in technology and creation of quality courses we need to ensure that this investment is in line with both faculty and departmental commitment for distance learning courses. We will need both in order to be successful.

D.2 Possible Paths Forward

Tuition Model

The Flexible Learning approach necessitates careful examination of the tuition model, with potential variation in tuition and fees by service (residence, instructional modality, part-time/full-time, area of study), and by type of student (in-state, out-of-state, international).

Moving forward, key tuition issues to consider will be:

- The base rate for tuition (regardless of location or learning modality).
- Setting appropriate fees for campus students (both in-state and out-of-state).
- Setting differential tuition rates for different subject matter areas (e.g., STEM, Management, Health Care, etc.) if warranted.
- Unified tuition model. Credits taken in either the university or UWW session should count towards full-time tuition.
- Revenue impact on the university resulting from shortened time to degree, per credit charges, and potential enrollment growth.
- Effect on school/college budgets and incentives.

Enrollment

Under the right circumstances the campus is poised to benefit from additional enrollment with the implementation of Flexible Learning. In order to support that enrollment we will need to consider strategies for ensuring sufficient instructional capacity both in terms of hires and incentives to participate in multimodal instruction. Some universities use graduate and postdoctoral teaching fellowships in high-demand majors. This is an opportunity we should explore. Other options to investigate include financial and intellectual incentives to faculty and departments to develop online capacity, as well as incentives in the form of support for graduate students.

Exploring the connection to plus one programs presents an opportunity to inventory our existing programs and to develop a systematic way of tracking them, a coordinated approach to establishing the programs, and a unified way to market them. All analyses could help in possible expansion.

Student Support

Examining our Flexible Learning capacity provides an opportunity for the campus to conduct a realistic assessment of current faculty capacity with the understanding that we may need to add faculty and TA support where necessary.

We see an opportunity for the campus to explore investment in effective and efficient operational assistance for creating high-quality online courses. A short-term, more time-critical need is to determine how to best support international students including the ability to offer synchronous instruction and student support outside traditional university service hours.

In order to provide sufficient classroom support in a remote or hybrid setting, we see an opportunity to examine campus investments in TA's and technology. Hybrid or online courses may require TA support (one 10-hour/week TA per 25 students is a plausible estimate). Classrooms may require improved technology, and students may need increased technological support that is available at nontraditional times (to accommodate time zones and work or family schedules).

Appendix E: Interim Report on Academic Calendar, Registration, and Facilities

Mission

To provide students/faculty/staff at UMass Amherst with an academic calendar, course registration process, and facility infrastructure that will maximize the ability to engage in the UMass Amherst academic experience with a high degree of flexibility.

Vision

Academic Calendar:

To provide an academic calendar with a high degree of flexibility in terms of how and when students can begin, pursue, and complete an academic experience at UMass Amherst. Such a calendar would provide students with multiple start dates throughout the year. It would also offer some integrated flexibility in term duration with options ranging from six-week terms to full academic terms and any combination of these–without compromising on the quality of the UMass Amherst education experience. Such a flexible and dynamic academic calendar would not only increase access for more off-campus/nontraditional students, but also provide ALL students with more control on the pace through which they proceed in a given academic program.

Course Registration:

To provide a wide array of course registration options ranging from the traditional face-to-face courses to asynchronous, online courses with flexible options in between where students experience a blend of synchronous and asynchronous learning modalities. Students will be given the option to self-select their learning modality at the course level; resulting in a more flexible course schedule that enables students to maximize the UMass Amherst academic experience (e.g., extracurricular activities, study abroad, student organizations, athletics, etc.).

Facilities:

To provide an on-campus operating infrastructure that supports the emerging transient nature of commuter stakeholders— i.e., off-campus students, faculty, and staff. These stakeholders will be able to efficiently and seamlessly access campus via innovative parking and transportation capabilities, on-demand, short-term housing/accommodation options, telecommuting office infrastructure, and academic operating infrastructure for commuter students (e.g., assessment center).

E.1 Strengths, Weaknesses, Opportunities, and Threats

Strengths

- Well defined Fall/Spring/Summer terms.
- Ability to fit six-week terms into traditional terms (primarily summer).
- SPIRE can code courses using a number of different instructional modalities.
- Recent investment in facilities with high degree of experiential value.
- Nearly 100% of current UMass Amherst students and current Massachusetts K-12 students now have personal experience with remote learning and/or alternative learning modalities.
- Access to secondary instructional site in Springfield and secondary instructional and residential site at Mount Ida.

Weaknesses

- Current process does not give robust remote options to students without additional costs through UWW.
- Current academic calendar is not conducive to year-round learning/engagement, particularly fall start and spring end dates make it challenging to fit in a six-week winter session.
- SPIRE is limited with respect to how different learning modalities and requirements are communicated to students.
- The two sessions (UWW and university) creates siloed confusion for students.
- Some gaps in facility infrastructure that are designed to support the off-campus/nontraditional student experience.
- Lack of a commonly used and accepted vernacular related to Flexible Learning increases difficulty of student, staff and faculty messaging.

Opportunities

- Integrating six-week sessions in fall and spring terms (in addition to summer).
- Flex Days and Snow Flex Days: Ability for faculty to provide virtual, off-campus access to courses when students are likely not to be engaging in the residential experience (e.g., Thanksgiving break, campus closure due to inclement weather).
- Providing students with a wide range of course modalities that provide more scheduling flexibility.
- Making more efficient use of on-campus facility infrastructure (e.g., labs, dormitories, dining facilities) during off-months (January, June-August).
- Providing office infrastructure that would encourage and facilitate more flexible work arrangements; for example, providing faculty/staff with mobile technologies and access to flexible work space.
- Flexible cost structure
- Utilizing available space on the Mount Ida Campus to pilot new modalities and technologies.
- Utilizing the Springfield and Mount Ida sites for remote synchronous cohorts, proctored testing and other off-site opportunities.
- Increased seat opportunities due to less constraints due to facility size.
- More robust opportunities to connect the Newton campus with Amherst (e.g., executive education) refer to Mount Ida strategic plan.
- Engage alumni in lifelong learning assuming we leverage the experience correctly leverage our CRM strategy.

Threats

- A flexible, all-year academic calendar could create issues for faculty/staff workload support (e.g., MSP CBA).
- The various learning modalities in SPIRE could create significant student confusion and dissatisfaction.
- More year-round utilization of campus infrastructure could create maintenance cycle challenges.
- More flexible course modality choices could create under-utilization of classrooms.
- Student retention risks
- Peer first movers (e.g., NUFlex)
- Risks to alumni engagement (Online teaching and learning may reduce the number of future alumni who engaged in a traditional on-campus experience.).
- Opportunity costs (e.g., summer conferences, camps, etc.)

E.2 Possible Paths Forward

Academic Calendar

During the COVID-19 crisis, we have been able to observe how some changes to the academic calendar could support some of our broader Flexible Learning goals. More specifically, we were able to offer a

six-week winter session during the 2020-21 AY. Based on survey responses from faculty in the SPHHS and CNS, the feedback from the faculty was extremely positive. Additional feedback has expressed a desire to identify an academic calendar that can support both traditional (i.e., 13 weeks of instruction plus finals week) as well as nontraditional (i.e., six weeks) terms across all 12 months. Lastly, the recently approved academic calendar for the 2021-22 AY includes an expanded winter session, indicating campus support for a more viable winter session.

Next Steps: Based on this feedback and initial analysis, we see an opportunity to explore a flexible, year-long academic calendar that effectively supports the needs of both the traditional (e.g., on-campus) and nontraditional (e.g., off-campus) student populations. Such an academic calendar will provide for multiple start dates, more flexible options for course duration, and greater control in managing degree time-to-completion. Key issues to consider will be:

- Include three 13-week terms (plus finals week) Fall, Spring, and Summer.
- Offer a stand-alone six-week term outside of the three 13-week terms.
- Explore the concept of Flex Days and Snow Flex Days in the academic calendar.
- Staffing to support multiple admission cycles.
- Any proposed academic calendar is consistent with contract timelines in union CBAs.

Course Registration

Offering a variety of course modalities that span the range from face-to-face to online presents a number of challenges in terms of how these courses are registered and presented to students. We identified three primary learning modalities that students can opt for when registering for a course: face-to-face(F2F)/synchronous, online/synchronous, and online/asynchronous. Based on these three modalities, we identified three key questions that define the fundamental characteristics of a course modality, which are as follows:

- Is synchronous interaction required?
- Are the interactions primarily or partially synchronous?
- Is there a F2F modality or is it entirely online?

Depending on the answer to these questions, courses can fall into one of five categories: F2F Primarily Synchronous, Online Primarily Synchronous, F2F Partially Synchronous, Online Partially Synchronous, and Asynchronous. These categories are not student facing, but rather can be used to define courses codes that can facilitate room scheduling, billing rates, etc.

Next Steps: Based on this analysis, we see an opportunity to identify a parsimonious set of course codes that clearly communicate to the student the primary learning modality, which will be F2F synchronous, online synchronous, or asynchronous. Further, the more detailed course categories should be used to create course codes that facilitate backend administrative functions such as room scheduling and course pricing. Key issues to consider will be:

• There will be a need to define a threshold that clearly distinguishes between primary and partially synchronous courses.

- Identify both graphical and textual explanations for the student-facing course codes that will clearly communicate the primary learning modality and be ADA compliant (articulate both faculty and student expectations).
- Course code changes must effectively integrate with other administrative systems (e.g, Bursar).
- Ability to schedule courses to split/flip into 2 or more discussion sections as a means to more effectively manage course capacity.
- For split/flipped courses, is the online synchronous position required? How do we code that?

Facilities

From a flexible learning perspective, we observed a very encouraging trajectory in terms of the facility projects that have recently been completed/currently being planned. Recent investments in campus infrastructure that enhances the students experience is something that can be leveraged when providing off-campus students with access to the campus experience. In particular, the renovation of the Student Union (provides students with a homebase between courses/meetings) and plans to invest in instructional facilities that will provide students with added flexibility, such as the DCAMM proposal for transforming Flint into a multimodal instructional facility.

Next Steps: Look for opportunities for how facilities could support the campus Flexible Learning initiative, more specifically looking for both near- and long-term projects that would make accessing the UMass Amherst campus experience easier for nontraditional/off-campus students. An example of a near-term need is establishing assessment centers at campus locations (Amherst, Springfield, and Mount Ida) where exams/assessments could be administered to the off-campus student population. An example of a long-term need is to invest in infrastructure that would facilitate transformation logistics (e.g., parking, short-term overnight accommodations, etc.) for off-campus/commuter students. Key issues to consider will be:

- Need to prioritize such projects with current capital project plans.
- Opportunity to integrate Flexible Learning initiatives (including remote students for synchronous engagement) with upcoming auditorium renovation projects.
- Flexible work infrastructure for faculty/staff who are supporting off-campus students.
- Look for opportunities to get funding support from the state, particulty for transformation infrastructure.
- HVAC needs to be modernized for year-round operation.
- Consider public/private partnerships to mitigate financial risk and move faster.

Appendix F: Flexible Learning Task Force

Task Force Steering Committee

The steering committee is charged with drafting a strategic plan that will articulate 1.) a vision of future Flexible Learning for our campus; 2.) guiding principles and goals; 3.) analysis of our campus's strengths, weaknesses, opportunities, and threats with respect to Flexible Learning; 4.) recommended action/implementation steps and possible timelines; and 5.) success indicators.

- Jim Kurose, Associate Chancellor, Partnerships and Innovation and Distinguished University Professor, College of Information and Computer Sciences (co-chair, Steering Committee)
- Mzamo Mangaliso, Associate Professor, Isenberg School of Management (co-chair, Steering Committee)
- Steven Brewer, Senior Lecturer, Biology
- Rolanda Burney, Chief of Staff, Chancellor
- Mari Castañeda, Dean, Commonwealth Honors College and Professor, Communication (chair, Student Experience and Equity subgroup)
- Deb Gould, Associate Provost for Administration and Finance (chair, Finance subgroup)
- Kate Hudson, Director, Online Education/Digital Learning and Senior Lecturer, College of Education
- Linda Isbell, Professor, Psychological and Brain Sciences (co-chair, Instruction, Pedagogy, and Technology subgroup)
- Niyanthini Kadirgamar, Graduate Student, Education (PhD)
- Adam Lechowicz, Undergraduate Student, Computer Science and Political Science
- Anne Massey, Dean and Thomas O'Brien Endowed Chair Operations & Information Management, Isenberg School of Management (chair, Workload and Support subgroup)
- Key Nuttall, Chief Marketing Officer, University Relations
- John Wells, Senior Vice Provost for Lifelong Learning and Professor, Operations and Information Management (chair, Academic Calendar, Registration, and Facilities subgroup)
- Tilman Wolf, Senior Vice Provost for Academic Affairs and Professor, Electrical and Computer Engineering (co-chair, Instruction, Pedagogy, and Technology subgroup)

Task Force Subgroups

Instruction, Pedagogy, and Technology

This subgroup will explore the faculty-student didactic experience inside the classroom, including issues of adaptable access and engagement in a Flexible Learning modality, the pedagogies involved, technology needs and limitations, and best practices to support adaptation of course offerings to Flexible Learning.

- Tilman Wolf, Senior Vice Provost for Academic Affairs and Professor, Electrical and Computer Engineering (co-chair)
- Linda Isbell, Professor, Psychological and Brain Sciences (co-chair)
- Gabrielle Abelard, Clinical Assistant Professor, Nursing
- Caitlyn Butler, Associate Professor, Civil and Environmental Engineering
- Allison Butler, Senior Lecturer, Communication
- Julia Carino, Undergraduate Student, Political Science
- Claire Hamilton, Associate Provost and Director, Center for Teaching and Learning
- Ken Kleinman, Professor, Biostatistics and Epidemiology
- Christopher Misra, Vice Chancellor and CIO
- Simon Neame, Dean, University Libraries
- Sahara Pradhan, Graduate Student, Education (PhD)
- TreaAndrea Russworm, Associate Professor, English
- Heather Sharpes-Smith, Executive Director, Online Education Technology, Instructional Design, Engagement and Support (IDEAS)
- Ramesh Sitaraman, Director, Informatics Program and Professor, Computer Science
- Pamela Trafford, Senior Lecturer, Isenberg School of Management
- Torrey Trust, Associate Professor, Education
- Dhandapani Venkataraman, Professor, Chemistry
- Nefertiti Walker, Vice Chancellor, Diversity, Equity and Inclusion

Finances

This subgroup will examine the viability of new tuition models, possible expansion of the student body enabled by Flexible Learning, financial implications of instructional technology resources, faculty training, and how to provide high-quality student support services, especially students in remote locations.

- Deb Gould, Associate Provost for Administration and Finance (chair)
- Michael Ash, Professor, Economics and Public Policy
- Bill Brown, Associate Dean for Finance, Operations & Strategic Initiatives, Isenberg School of Management
- Barbara Krauthamer, Dean, College of Humanities & Fine Arts and Professor, History
- Lynn McKenna, Budget Director, Administration and Finance
- Jim Roche, Vice Provost for Enrollment Management
- John Wells, Senior Vice Provost for Lifelong Learning and Professor, Operations and Information Management

Workload and Support

This subgroup will focus on workload and course load models for Flexible Learning, especially in hybrid classrooms. It will explore how faculty workloads are to be determined in Flexible Learning course offerings, identify possible changes to staff workloads, and examine implications for faculty and class

sizes. This subgroup will ask what can be learned from experiences at UMass Amherst in Flexible Learning programs (e.g., VIP in engineering, AIMS multimedia collaborative distance learning) and explore what other schools have adopted as workload models.

- Anne Massey, Dean and Thomas O'Brien Endowed Chair Operations & Information Management, Isenberg School of Management (chair)
- Bill Brady, Vice Chancellor and CHRO
- Michael Eagen, Associate Provost for Academic Personnel
- Jessica Fill, CICS Director of Human Resources
- Ina Ganguli, Associate Professor, Economics
- Kate Hudson, Director, Online Education/Digital Learning and Senior Lecturer, College of Education
- Anushree Jana, Undergraduate Student, Operations & Information Management and Computer Science
- Niyanthini Kadirgamar, Graduate Student, Education (PhD)
- Xinyuan Li, MFA Scenic/Lighting Designer

Student Experience and Equity

This subgroup will explore out-of-classroom needs for flexible learners: How student support services that are primarily on campus can be made accessible to those off campus; steps that can be taken to ensure equity in access to technology in Flexible Learning models; and ways whereby equitable access to virtual resources can be achieved similarly to access to physical resources on campus.

- Mari Castañeda, Dean, Commonwealth Honors College and Professor, Communication (chair)
- Evelyn Ashley, Dean of Students
- Carolyn Bassett, Associate Provost for Student Success
- Cheryl Brooks, Associate Provost, Career and Professional Development
- Jennie Chang, Undergraduate Student, STPEC and Legal Studies
- Wilma Crespo, Director, CMASS
- Melissa Rotkiewicz, Director, Interim Associate Director for Clinical Services, CCPH
- Brad Riley, Graduate Student, MPPA
- Jeanne Ryan, Associate Director of Clinical Services, UHS
- Jamina Scippio-McFadden, Director, Springfield Center

Academic Calendar, Registration, and Facilities

This subgroup will examine possible changes to academic calendars, including summer course offerings, changes to add/drop timelines, and final exam schedules; admissions processes; and registration capacities. It will also investigate/recommend ways of adapting registration capabilities to Flexible Learning, such that students can register for classes in any of several different modes (e.g., in-person always, mixed in-person/online, and online-only).

- John Wells, Senior Vice Provost for Lifelong Learning and Professor, Operations & Information Management (chair)
- Shane Conklin, Associate Vice Chancellor, Facilities and Campus Services
- Jeff Cournoyer, Managing Director, Mount Ida Campus
- Farshid Hajir, Senior Vice Provost for Academic Affairs
- Patrick Sullivan, Registrar
- Kate Woodmansee, Senior Associate Registrar, Graduate School and University Without Walls