REPORT FROM THE TASK FORCE ON A MICHIGAN UNDERGRADUATE EDUCATION IN THE THIRD CENTURY

MARCH 6, 2019

On January 10, 2018, Martin A. Philbert, Provost and Executive Vice President for Academic Affairs for the University of Michigan, charged and convened a task force of university faculty, students, and staff to address fundamental questions pertaining to "Undergraduate Education in the Third Century." Over the course of a year, the task force convened to establish a set of shared values, research and benchmark best practices, and ultimately challenge the university to build upon our strong undergraduate experience in ways that further our shared values.

The task force met regularly for over a year to develop this report. Some members remained active for the full year; others participated in Phase 1 (January, 2018 – August, 2018) or Phase 2 (October, 2018 – March, 2019). We are grateful for the opportunity and welcome the conversations we know will be inspired in part by this report, but more so by a university that never settles and strives to be the "leaders and best."

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Executive Summary

The University of Michigan is a top-ranked public research institution with a long-standing commitment to undergraduate education. In fact, the opportunity for undergraduates to work with and learn from faculty who are leading researchers and creative artists across a wide range of disciplines and professional fields is one of the distinctive features of a Michigan undergraduate education. The university is also distinctive for the sheer scale of its operations, which multiplies the opportunities available to undergraduates, both inside and outside the classroom. That scale also poses real challenges, including: (a) coordinating undergraduate educational efforts across schools and colleges; (b) providing adequate support for a diverse cohort of undergraduates to achieve success as they navigate their educational paths; and (c) fostering the kinds of inclusive learning communities and close mentoring relationships that characterize successful undergraduate education.

In addressing these opportunities and challenges, the *Task Force on a Michigan Undergraduate Education in the Third Century* (the "Task Force") focused primarily on residential programs in considering the future of undergraduate education at the University of Michigan. In the two decades since the report "The Second Chapter of Change: Renewing Undergraduate Education at the University of Michigan," the national conversation about higher education has focused on student success and well-being. The current Task Force put at the center of its work connectedness and community along with a commitment to presenting bold, potentially disruptive ideas that could transform the nature of undergraduate education at UM. This report synthesizes the Task Force's assessment of a set of needs and challenges to undergraduate education in its current form and provides a framework to structure a second stage of developing, testing, and enacting changes in undergraduate education at UM.

The Task Force recommends adopting a set of *shared values* for undergraduate education at the University of Michigan to guide new initiatives and changes to existing structures. These values include *Bold Exploration, Greater Good, Purposeful Inclusion, Collaborative Spirit, Well-being, and Self-determination.* Working from these values, we identify key areas of misalignment between the values and current practices in undergraduate education. We then target high impact areas for transformations in undergraduate education at Michigan and pose a set of *challenges,* framed as *opportunities,* in the form of provocative, "What if?" questions. This report intentionally poses big questions at this stage, to emphasize the scope of the structural changes we believe are required to have a truly transformative impact. The grand challenges include:

- 1. What if university structures around learning (e.g., transcripts, grading system, the academic calendar, credit hours, etc.) were flexible enough to not only allow but foster exploration, intellectual risk-taking, and learning from failure, both in the classroom and beyond the classroom?
- 2. What if every undergraduate course identified its contribution to the greater good?
- 3. What if every course and every co-curricular and extracurricular opportunity underwent a rigorous review of the diversity, equity, and inclusiveness of its existing policies, practices, and materials?
- 4. What if learning and leadership in undergraduate education is defined as a more collective and collaborative endeavor?

5. What if undergraduate education purposefully fostered student reflection on their purpose, learning experiences, and future aims?

In the discussion of each of these challenges to undergraduate education, we pose a few additional "what if" questions (e.g., What if every student had a "coach"? What if UM had a "no final exams" policy?) and provide specific suggestions for pilot projects to move forward toward addressing these challenges.

Second, the Task Force recognized the university-wide needs for coordinating undergraduate education across units as well as the scope of pursuing transformations and opportunities within and across units. Therefore, we recommend *the creation of a Vice Provost for Undergraduate Education*, a position dedicated to undergraduate education across campus. We envision a leader who can inspire a comprehensive, cohesive approach to undergraduate education centered on shared values and who can work across institutional boundaries to advance the kinds of large-scale changes proposed in this report: to address misalignments, prioritize opportunities, and coordinate pilots and the assessment of outcomes. This leader must be empowered to partner across campus to pursue changes in structures such as the academic calendar, transcripts, and graduation requirements. This moment marks a turning point for undergraduate education at the University of Michigan and in the United States, and it will require bold change through strong leadership within and between the schools and colleges.

As a result of a year-long study, the Task Force calls for a reimagining of how to leverage Michigan's deep educational resources within a coordinated and synergistic community to achieve our core values. This Third Century transformation of undergraduate education will define the University of Michigan's mission and leadership in envisioning and enacting values-based higher education throughout its schools and colleges. Michigan's prominence as a public research university affords this opportunity to create a shared Michigan undergraduate learning experience that sets the standard for higher education in the nation and world.

I. Task Force Charge and Exigency

The instructions to the Task Force were to think deeply about structural and institutional processes that promote or impede what we found to be the university's mission with regards to the undergraduate experience. Our recommendations were not to be constrained, at this stage, by anticipated difficulties in implementation and should attempt to identify a few grand challenges that UM should explore. (For the full charge, see Appendix A.) The Task Force defined the undergraduate educational mission at UM to include the Colleges of Literature, Sciences, and the Arts and of Engineering, and the Schools of Art and Design, Dentistry, Medicine, Pharmacy, Public Health, Nursing, Business, Environment and Sustainability, Education, Information, Public Policy, Architecture and Urban Planning, Kinesiology, and Music, Theater, and Dance. This breadth of undergraduate programs from traditional four-year liberal arts degrees to professional specializations captures the changing nature of undergraduate education in UM's third century.

The national conversation about student success provided one exigency for the Task Force's work. A widely cited 2014 Strada-Gallup survey of college graduates tied long-term outcomes such as well-being and higher workplace engagement to these six college experiences:

- professors who cared about them as a person;
- a professor who made them excited about learning;
- a mentor at the university who encouraged them to pursue their goals and dreams;
- a college internship or job where they applied what they were learning in the classroom;
- a project that took more than one semester to complete;
- sustained activity in extracurricular projects and organizations.

These experiences were also linked to students' confidence that they are gaining knowledge and skills they will need in their future careers. Similarly, research has identified the importance of mentoring relationships for student success and the multidimensional role of faculty in student success, along with the power of engaging in research opportunities and extracurricular learning experiences (Chambliss & Takacs, 2014). With the diversity of educational and professional programs on its campus, the University of Michigan operates on a scale of faculty, research, and co-curricular and extracurricular activities¹ that is unparalleled at other universities. The University of Michigan is uniquely positioned to establish a new model for undergraduate educational systems centered on enacting its values within each individual's learning experiences on campus.

¹ "Co-curricular activities" refer to non-credit experiences that have explicit and intentional educational goals; "extracurricular activities" refer to the many other experiences sponsored by the university that can have great educational impact.

The Task Force sees the future of the undergraduate residential experience as centered on diversity, equity, and inclusion, which is a second exigency for the work. Higher education in the third century requires a focus on connectedness and community for all participants—perhaps especially as new technologies can both connect and disconnect—as well as engagement with diverse points of view. We would highlight the critical mission of access to education, described in the challenges and recommendations in the UM DEI Strategic Plan (<u>http://diversity.umich.edu/strategic-plan/</u>), and stress that inequities in access to opportunities remain once students are on campus. Inclusivity also encompasses the kind of climate and deeper relationships required for community members to have crucial conversations where we can disagree in respectful and constructive ways—a key part of undergraduate education.

As we assess undergraduate education in an increasingly global world, we must consider opportunities for students to engage internationally and opportunities for international students to connect on campus. The Task Force noted important investments in study abroad opportunities since the 2000 report, which should continue. We also tie the global to opportunities for exploration and contributing to the greater good; and we see it as imperative to keep a focus on international students (many of whom are transfer students) as part of purposeful inclusion.

The importance of well-being for all members within the UM community provided a third exigency for the Task Force (Lipson et al., 2018; Milojavic et al., 2018). Research on motivation suggests that mastery, autonomy, purpose, and relatedness provide the intrinsic motivation that leads to meaningful, healthy lives (Deci & Ryan, 2000). Learning environments can foster or impede the well-being of participants, and the pace and stress of undergraduate study is also highlighted in the national discussion of higher education (Wolverton, 2019) and in the UM campus assessments of student health, which has seen a 42% increase in Counseling and Psychological (CAPS) services from comparative periods of 2009-11 to 2016-18. The evidence documents a major shift toward extensive college preparation, inequities in access, high stakes competition for access to opportunities once on campus, and a vibrant yet stressful student life. The Task Force took seriously the implications of putting well-being—including mastery, autonomy, purpose, and connectedness—at the center of undergraduate education, for students, faculty, advisors, and other educational community members.

We are aware that scale may feel overwhelming for a focus on connectedness, but the numbers tell a different story, especially if we recognize the important roles of faculty, advisors, and other educational staff in mentoring students. There are currently 29,821 undergraduate students on the Ann Arbor campus. There are over 3,000 faculty (tenured and tenure-track, Lecturers, and clinical); there are also an estimated 400 full-time faculty and staff advisors. The ratio of possible mentors to undergraduates is highly reasonable.

At this stage, the Task Force focused less on technologies of teaching, which we view as important tools toward achieving the ends described in this report. We see the Office of Academic Innovation as a key financial supporter, partner, and incubator for projects designed, in their words, "to harness technology and learning analytics to shape the future of learning and redefine public residential education at a 21st century research university." Our focus is on synergies—to connect and coordinate these kinds of innovations toward a shared vision of undergraduate education at UM. (See Appendix B for a fuller description of the Task Force's process.)

II. Shared Values

The Task Force began its work with this fundamental question in the charge:

• To what extent do we share—and do we want to share—a set of core principles and goals for undergraduate education across the schools and colleges? How might such a shared set of principles or goals, in turn, shape the curriculum, teaching, and the co-curriculum in the schools and colleges?

After surveying students, faculty, and staff on campus, the Task Force distilled a set of core values to guide undergraduate education at UM. We tried to balance a deep concern for student well-being—especially in light of recent statistics about student anxiety and depression—and an equally strong belief in the distinctive opportunities of an undergraduate education at Michigan as a *public, research* university. Our commitment to diversity, equity, and inclusion as the center of our work was reinforced by the feedback from stakeholders, especially current UM students. Once drafted, we shared the values with groups of faculty, staff, and students across campus, and modified the statement of shared values in response to feedback:

University of Michigan Undergraduate Education in the Third Century:

A Statement of Shared Values

The University of Michigan community—faculty, staff, students, and alumni—are connected by shared values across all disciplines that enable us collectively and as individuals to be "leaders and best" and lifelong learners. The University of Michigan is committed to providing an undergraduate education built upon these shared values:

<u>Bold Exploration</u> - To expand knowledge and encourage curiosity and discovery, to gain in breadth of experiences and in depth of critical inquiry, and to embrace intellectual and creative risks.

<u>Greater Good</u> - To encourage a sense of responsibility to society, both local and global, and to promote informed, active citizenship focused on creating ideas and outcomes bigger than ourselves to benefit others.

<u>Purposeful Inclusion</u> - To thoughtfully, intentionally, and actively engage in a community that allows all members to thrive by valuing and learning from others' backgrounds, identities, and perspectives, and by striving for equitable treatment.

<u>Collaborative Spirit</u> - To seek and learn effective teamwork across disciplines, with intellectual and cultural humility, integrity, and awareness of the value of diverse contributions for collective achievement.

<u>Well-being</u> - To foster resilience in the face of adversity and challenges and to support the overall health of each individual within the learning community as they pursue their goals.

<u>Self-determination</u> - To promote reflection, explore purpose, and make mindful choices among pathways leading to meaningful work and meaningful lives.

Adopting these values would unite the undergraduate programs at Michigan in their resolution to embody the values' meaning. The values also serve as a unifying framework for establishing the goals and assessing the outcomes of current programs, developing innovations, and building towards a values-based educational mission at the University of Michigan.

III. Identifying Areas of Misalignment

These shared values provide a touchstone for evaluating the goals and outcomes of programs and practices in undergraduate education across the university. The Task Force celebrates the many undergraduate educational practices in place within schools and colleges and in Student Life that align with these values, holding them up as existing commitments from which to build. For example, many UM undergraduates are already having a rich array of experiences that involve exploration, application of learning, collaboration, and community engagement. In academic year 2018, 96% of UM undergraduates had at least one of following experiences: research (47%), client based project (41%), civic engagement (56%), entrepreneurship (23%), international experience (45%), internship-practicum-clinical (81%). In Fall 2018 UM was ranked No. 1 for its undergraduate entrepreneurship program, which spans programs and centers, courses, student organizations, and more. UM is also currently ranked No. 3 in the nation in the total number of students studying abroad, which reflects an important investment by the university since "The Second Chapter of Change" report in 2000.

In that context, the Task Force focused attention on areas of misalignment, where current practices deviate from the shared values. We believe these areas will benefit from strategic, bold interventions with significant impact on educational outcomes.

The areas of misalignment below are organized around the identified values, recognizing that there is significant overlap across the categories.

Areas of Misalignment with Shared Values

Bold Exploration

- As a research institution, exploration and knowledge creation are core to our mission. The primary educational purpose for student research is creative exploration in the process of asking big questions and trying to answer them, where outcome is not always the privileged driver. Given UM's status as a research institution, more undergraduates should have the opportunity to experience original research, as individuals or in teams, including in classroom contexts.
- Our values suggest we should encourage risk-taking, resilience, and engagement on campus; yet, our grading practices and transcript methods send a clear signal that grades are the only metric that matters in undergraduate education. Our values raise questions about how grades and transcripts reflect the learning experience: (a) they may inhibit students' exploration of new areas of knowledge and intellectual risk-taking within the curriculum; (b) they emphasize appearance over a focus on learning and problem solving; (c) they exclude co-curricular and extracurricular learning from documentation of educational outcomes; and (d) they can undermine the purpose of feedback on learning as opportunities for reflection, mastery, and creating meaning after learning experiences.
- Our current grading practices and transcript methods document learning experiences without regard to change through undergraduate experiences, including acclimation to college study, changes in academic programs, and individual circumstances such as parental loss and student illness.

Greater Good

- The current curricula across the schools and colleges are neither consistently oriented toward nor consistently explicit about how academic work (coursework, reading, research, art, and other outcomes of learning experiences) may further the common good by building more knowledgeable community members, raising awareness of the needs of the wider community (local, state, national, and/or global), and demonstrating methods and means for advancing collaborative change.
- The wide variety of extracurricular and co-curricular activities on campus that address the greater good often feel undervalued and receive limited support. The value of these programs lies not only in the contributions of UM students to others, but in our enhanced connections to broader communities, the engaged scholarship and research and results, the enhanced learning for students as they delve into unfamiliar environments through guided experiences, and the critical application of classroom knowledge enacted not in the mind but in the world.

Purposeful Inclusion

- The existing student body, faculty and staff population, and curriculum are not sufficiently representative of the diverse communities within the state or nation.
- The campus community experience often feels less inclusive for underrepresented minority students, and international students report feeling isolated on campus. Each student deserves the feeling of belonging on campus as a base for their educational experiences.
- Forms of assessment do not consistently align with what we hope students will learn. For example, modes of inquiry are the substance of learning, but specific content lends itself to testing.
 Instructional models and assessment practices in large lecture classes, especially in STEM, appear to disadvantage students underrepresented in STEM (see Chen, 2013). Because these large entry courses serve as gatekeepers to technical careers, leveling the playing field for students is critical.
- The learning experiences of our undergraduates are not equitably distributed across the student body.
 - Because UM guarantees housing in the first year only and accommodates approximately 35-40% returning to the residence halls, many students face a competitive marketplace where walkable commutes are priced at a premium. The cost of living in Ann Arbor or finding accessible and affordable parking to commute is prohibitive. In addition, securing a rental requires a substantial deposit not available to some students. Students who live in outlying areas and commute to campus by bike, bus, or car are at a disadvantage in campus activities.
 - Students who work part-time or over the summer have fewer opportunities to participate in cocurricular and extracurricular activities, and may be unable to take on non-paying internships.
 - Learning events on campus may include a cost for participating (e.g., admissions fees, registration, travel, and membership fees). Opportunities to attend undergraduate rituals like home football

games require a substantial cost to students. Travel expenses (such as the short fall break) are sometimes prohibitive. There is no systematic attention to the uneven access to events based on ability to pay.

- Students arrive on campus with differences in their preparation for study at Michigan; however, these differences are also institutionalized and exacerbated by UM policies and practices. For example, using the number of credit hours to determine registration dates amplifies the privilege of students from schools offering advanced placement courses, because their credits place them ahead of others in their class for enrollment, a benefit continuing throughout the undergraduate years.
- There is insufficient attention to ensuring that inclusive undergraduate teaching is enacted thoughtfully by instructors at Michigan. Lecturers report not being consistently valued for their pedagogical work, and a disproportionate burden is carried by instructors of courses designated with "Race and Ethnicity" relevance instead of ensuring its embeddedness throughout the curriculum.

Collaborative Spirit

- Students and faculty at Michigan enjoy tremendous benefits from interdisciplinary programs; however, the structures and requirements of different units result in barriers for study and engagement across schools and colleges, and even departments within them.
- While cooperation may be espoused, we often signal student recognition based on solitary efforts and on GPA, for example with the recognitions at the Honors Convocation (Angell Scholars, University Honors, Branstrom Prize). There are fewer high profile or university-wide systems of acknowledgement for students most engaged in building a strong campus community, both individually and in teams.
- Assessment practices such as grading on curves foster competition over collaboration and do not evaluate students on mastery. If curves function to sort students into percentiles, which courses need to curve grades and why?
- The undergraduate experience of limited access to courses, programs, and activities often fosters a spirit of competition instead of collaboration.
- Faculty often find themselves positioned as gatekeepers for students focused on attaining the highest grade possible rather than as mentors or coaches dedicated to bringing out each student's potential for growth in the classroom.
- Faculty do not consistently receive training on the effective use of teamwork or other collaborative pedagogical tools within the classroom or other scholarly activities.
- Available staff are not consistently viewed as mentors who can partner with faculty as a mentoring team, yet collaboration between academics and student life (as well as financial aid) appears linked to better outcomes.

• Access to classroom environments that support teamwork is challenging.

Well-being

- UM undergraduate students are experiencing mental health distress at the highest rates recorded at the university. In the 2018 Student Mental Health Report, published by Counseling & Psychological Services (CAPS), comparative data shows a 42% increase in CAPS services from the comparative periods of 2009-2011 to 2016-2018, with the most significant increase in the area of anxiety.² Certainly we must ensure sufficient counseling support services are available; we also need to examine how our educational practices affect well-being.
- Students face challenges in developing relationships with faculty to serve as mentors during their undergraduate programs. These close mentoring relationships may not even seem feasible to students because they are often in large classes and may rarely be enrolled with the same faculty member twice. Faculty and staff also report the many demands on their time.
- The current system of course scheduling and grading seems to be a negative factor in students' wellbeing. The current system's emphasis on external motivation in the form of grades also reduces the joy that faculty find in teaching and mentoring.
- The current culture often undervalues well-being in that "busy" schedules are the norm. Informal interaction with community members outside of class is key to strong outcomes in undergraduate education, but scheduling may leave insufficient space for it.
- Resources for community members' physical, mental, and spiritual health are under supported.

Self-determination

- The current structure of curricula, course offerings, and grading does not consistently enhance selfdetermination for students. The course of study is not consistently based on learning goals, guided reflection, enacting choices and exploring novel areas of learning. Achieving the full benefit from education, both curricular and extracurricular, requires guided reflection to develop a sense of progress, interests, and a pathway towards meaningful opportunities. Building autonomy requires feedback from interactions with others who can reflect a diversity of perspectives.
- Curricula at the undergraduate level is focused on mastery of discipline-specific content and skills. Our values suggest we should be focusing instead on mastery of skills for understanding, analyzing, and solving new problems in any domain and across domains.
- While a wealth of opportunities are offered at Michigan, students find in practice that some programs and majors are limited in capacity, courses can have deep waitlists, courses may not be regularly

² These statistics align with data from the nation's largest database on undergraduate student mental health: the Center for Collegiate Mental Health: https://ccmh.psu.edu/.

offered, and their own interests and preferences can take a back seat to the practicality of securing the needed credits for graduation. The pace of adaptation in curricula can be impeded by the structure of review and approval.

IV. Opportunities for Change

We know that *disrupt* is an overused verb in the business world at the moment, but we have structured the opportunities below around the core values and bold, potentially disruptive "What if" questions. All of these opportunities are designed to center diversity, equity, and inclusion and to create a community that recognizes well-being and intrinsic motivation as integral to learning.

As an example, let's consider this specific question, which the Task Force found sparked usefully outside-thebox discussion: What if UM had a "no final exams" policy? We could imagine a curriculum where each semester ended not with exams, typically taken by students individually under high-stress conditions, but with a week of intensive interdisciplinary, intergenerational team-based work on a topical problem tied to the common good, with a specific desired outcome at the end of the week. This kind of innovation would allow all participants to work in diverse teams and end the semester with collective as opposed to solitary experiences. It would foster collaborative and leadership skills. Of course, there are other ways to achieve similar ends, including an intersession with guided reflection and planning, and problem-based learning experiences where students apply course knowledge. We present examples of opportunities arising through bold questions to help us reimagine what is possible, and importantly, what might help us promote the shared core values.

Opportunity 1: Exploration

What if university structures around learning (e.g., transcripts, grading system, the academic calendar, credit hours, etc.) were flexible enough to not only allow but foster exploration, intellectual risk-taking, and learning from failure, both in the classroom and beyond the classroom?

Three more tangible "what if" questions:

- What if transcripts documented learning in curricular, co-curricular, and extracurricular experiences, and students curated their own integrative learning portfolios or demonstration portfolios to capture their learning and accomplishments?
- What if the grading system encouraged students to explore learning more boldly and allowed them to learn from failure without serious long-term consequences, especially early in their studies?
- What if the academic calendar and credit system facilitated breadth through multiple perspectives to complement depth of mastery within increasingly specialized professional programs of study?

Implications:

We understand that radically restructuring grading practices and transcript methods may raise concerns about marketability for UM undergraduates; however, we believe Michigan is poised to be a leader in this area. As a large university, we can demonstrate methods for capturing individual student learning even in large classes. By enriching the information provided to employers and graduate schools on the transcript, UM would 16

encourage evaluators to look beyond the GPA to the personal qualities and learning outcomes demonstrated in the learner's experiences over their undergraduate career. Increased information about students' experiences on campus (breadth and depth), their developing skills, and collaborative and leadership potential is frequently requested by employers, and they are willing to engage with even solely narrative transcripts, as shown by institutions such as Reed College and St. John's University.

Transcripts. We envision a university transcript that includes some narrative, to capture student learning and contributions both inside and outside the classroom. Annotations accompanying grades, for example, could originate from instructors, advisors, or the students themselves. With guided reflection built into the curriculum, students also could engage in the process of assessing their own learning throughout their undergraduate education and curating a portfolio of work products to illustrate skills, knowledge, and contributions to the greater good.

Grading System. We would like to see the University of Michigan radically rethink grading practices for undergraduates across units, especially in the first one to two years. The present system of documenting learning solely through a final course grade regularly results in students choosing courses where they know they can excel. But this approach is antithetical to learning through *desirable difficulties*—just past one's current level of expertise—ensuring all students are challenged beyond their current mastery (Bjork & Bjork, 2011). Alternative grading policies adopted by peer institutions have demonstrated success in promoting discovery within a standard program of study. These policies include "covered grades" early in a student's career—for example, the first semester at MIT and the first four semesters at the University of St. Andrews or pass/fail grading for the first year—as the UM medical school does—or elective pass/fail grading in any course—as the University of Pennsylvania does. In order to make room at UM for students' bold exploration, we recommend a rigorous assessment and establishment of alternative grading policies.

Academic Calendar. A more flexible academic calendar empowering shorter and longer learning experiences would allow undergraduate teaching units to leverage a unique resource: the many different undergraduate programs within the university. A more flexible academic calendar would also allow innovations such as intensive one- or two-week learning experiences for small groups of incoming first-year students (and transfers) before the regular term begins, or longer problem-solving initiatives that require more than a semester—and more than one course's worth of time. (A more radical step would involve rethinking the credit-hour currency.)

Alignment with Shared Values:

In addition to fostering exploration, changes in how we implement, assess, and document learning promote other identified values. Expanding the flexibility of learning structures, interaction among students, methods of assessment, and transcript content allows a richer learning profile better able to represent the accomplishments of a more diverse cohort of undergraduates as they adjust to undergraduate life, explore learning opportunities with desirable difficulty, and boldly explore with the goal of learning from failure (*Purposeful Inclusion*). A focus on exploration over and above grades, as well as flexibility around the duration and form of learning experiences, could help foster a sense of excitement about learning for students and

faculty (*Well-being*). A more narrative, curated transcript would encourage building guided reflection and learning into the core curriculum across a student's undergraduate journey (*Self-determination*).

Selected Pilot Projects:

- Implement a university-wide course repeat policy whereby a student's first attempt is forgiven (e.g., changed from letter grade to RP for repeat, like Stanford) and only the second attempt grade shows on the transcript and factors into GPA
- Experiment with "covered" grades for first-year students (incoming first-year and transfers) to give them time to adapt and encourage intellectual risk-taking.
- Begin to pilot ideas suggested by both the Beyond Grades project led by CRLT in 2017 (<u>http://crlt.umich.edu/psotf2017</u>) and the "Transcript of the Future" conversation started in 2016 with the convening of registrars of top universities. (<u>https://engaged.umich.edu/news-features/registrars-from-top-universities-discuss-the-transcript-of-the-future/</u>)
- Create a Discovery Pathway a special program selected by students as they matriculate to UM. The program includes specific incentives to encourage risk-taking in courses, credit for extracurricular and co-curricular activities, an advisor to coach, peer mentors, summative assessments based on personal improvement rather than achievement, dynamic transcripts to allow retrospective "P/F" grades; evidence of work on the "greater good" is communicated on the transcript portfolio, tuition is fixed, credit hours are meaningless, and a senior project communicates a student's impactful work to the greater community.
- The Big Idea project is an effort, led by a group of faculty and staff from across campus, to design a degree-granting program that is built around real-world problem solving and engaged scholarship. The high-level learning objective is to develop capacities for problem identification and problem solving in students. This is supported through learning in four areas: Ways of Knowing, Team Good, Public Good, and Personal Good. Students will have faculty mentors for the duration of their time in the program, work in both cohort and cross-age teams, and be engaged in ongoing faculty-led research projects. The idea is to use the entire University as a platform for learning. The program is designed around mastery, and is intended to operate without grades, credit hours, or formal course requirements. To complement the academic program, The Big Idea plans to develop an "institute," possibly in conjunction with the Ginsberg Center, to coordinate research opportunities, with the additional intent of enhancing multidisciplinary collaboration and community-based research partnerships. Next steps include the definition and piloting of key learning experiences and the organization of the institute. (https://ai.umich.edu/blog/the-big-idea-ambitious-learning-goals/)

Opportunity 2: Greater Good

What if every undergraduate course identified its contribution to the greater good?

Four more tangible "what if" questions:

- What if all faculty included a learning goal on every syllabus that links the course to the common or greater good?
- What if undergraduate courses consistently integrated co-curricular and extracurricular activities to apply new knowledge?
- What if all students contributed an original piece of work and knowledge to the greater society and reflected on that experience before graduation?
- What if all students were able to develop the skills of citizenship and democracy by practicing at the local, societal, and global level?

Implications:

Too often, the purpose of learning within a course is viewed as performing well on graded material. Linking individual learning and development to a "greater good" — value and meaning within a collective community — is a powerful method of signaling the role of purpose in learning (Yeager et al., 2014). Increasing intrinsic motivation is a critical development within students' college trajectories in order to establish post-college psychological health and well-being (Niemec et al., 2009). For many instructors and courses, links to the greater good are already in place, but they can become deemphasized by the institutional emphasis on GPA. Encouraging students to make novel connections between their coursework and real-world communities (scholars, other students, consumers, community groups, neighborhoods, social media networks, etc.) can also occur through co-curricular or extracurricular activities where students apply their learning in the course to a need in the world, to the added benefit of other students and instructors in the course.

University-wide efforts to link undergraduate education to the greater good more explicitly may also help those outside the university understand and benefit from the contributions of education to the collective community by exemplifying impact from specific courses, degree programs, and schools and colleges.

A more narrative transcript would allow the university to explore asking students to explain their contribution to a community and/or to include an original piece of work they feel contributes to the greater good.

Alignment with Shared Values:

This focus on our shared value of working for the *Greater Good* may also encourage students to take creative and intellectual risks, based on a sense of purpose beyond a given course (*Bold Exploration*). The intentional focus on a greater good could provide a sense of purpose among a more diverse

group of students (*Well-being, Purposeful Inclusion*). Designing courses in ways that connect to a greater good encourages faculty and students to reflect on the relationship of their individual learning and the well-being of the greater community around them, leading to questions and answers about how to pursue meaningful work and meaningful lives (*Self-determination*).

Selected Pilot Projects:

- Encourage "early adopter" faculty to develop course learning goals connecting to the greater good on their syllabus. Circulate examples for other faculty and create incentives to encourage faculty members' adoption of this practice.
- Enhance the Ginsberg Center capacity to provide community-engagement pedagogy expertise and consultation to support faculty interested in addressing "real-world" community needs and priorities as opportunities for student learning through the application of course concepts. Identified by AACU as a high-impact practice, Ginsberg Center supports faculty through community-engaged course design, in-class student preparation for reflective and socially responsible community engagement, and assessment of impacts on student learning and community benefit. Internships such as the Ford Fund-Ginsberg Summer Fellows could also provide a site for expansion.
- Document high-impact community engagement and extracurricular experiences and identify how they could be better recognized or integrated into the curriculum and/or co-curriculum. Document existing courses integrating extracurricular experiences and community engagement where students apply new knowledge from the course.
- As a student project, establish a bureau to match local community groups with UM course instructors and students seeking connections with a larger community. Train senior undergraduates to match potential stakeholders with course goals.

Opportunity 3: Purposeful inclusion

What if every course and every co-curricular and extracurricular opportunity underwent a rigorous review of the diversity, equity, and inclusiveness of its existing policies, practices, and materials?

Three more tangible "What if" questions:

- What if it was an expected best practice for instructors to articulate how each course is designed to be purposefully inclusive?
- What if all undergraduate students had open access to all arts, sports, and special event programming on campus?

• What if faculty were trained to design and integrate assessment tools that effectively align with and support learning goals for students from a diverse range of backgrounds?

Implications

One fundamental challenge for the university is putting diversity, equity, and inclusion at the core of the undergraduate curriculum in a sustainable way. We recognize the critically important work that has been led by the Office of Diversity, Equity, and Inclusion, including the development and ongoing implementation of unit plans. We are focused specifically on how this work plays out in the daily life of undergraduate students both inside and outside classrooms and want to encourage dedicated interventions that advance the integration of DEI work into the fabric of a UM education. This will require ongoing rigorous, honest review of current policies, practices, and materials across all undergraduate education units, including departments, academic programs, advising centers, student life organizations, etc. What's at stake includes:

- How we teach with concern for diversity in the student population;
- How students can be equitably positioned to succeed;
- How we design courses and program materials to be diverse and inclusive;
- How students gain access to courses, programs, and extracurricular opportunities;
- How inclusive the university community feels to students;
- Whether students, faculty, and staff from diverse groups are included through admissions and hiring practices.

The university would need to provide the incentive and resources for faculty and staff to undertake a rigorous self-assessment and then to create and carry out a plan for revising policies, practices, and materials. The justification for this coordinated effort is that despite increased awareness, low-level policies and traditions can impact students' experiences in less welcoming and inclusive ways. For example, extracurricular groups and outings may carry per student charges, and events relying on a "first come first served" policy in campus locations (such as the Union ticket office) may inadvertently make students commuting from further off campus less likely to secure tickets. Similarly, international students may be unaware of ways to find and succeed in opportunities on campus.

Evaluating the implications of current policies through a systematic assessment may identify barriers to participation based on socioeconomic status, lack of experience with college environments, and differences in experiences related to gender, sexuality, ethnicity, race, and citizenship status. This may require increasing the scale for some popular opportunities many students would like to embrace and changing university subsidies for programs based on accessibility to the student body. Traditional methods to control scale (such as application-based majors) should give way to the equitable distribution of opportunities within the university.

Alignment with Shared Values:

A coordinated focus on diversity, equity, and inclusion based in every undergraduate education-related unit brings this value to bear on daily educational practices and policies. Ensuring equitable access to courses, support programs, and extracurricular activities would encourage more students to freely explore their interests both in and out of the classroom (*Bold Exploration*). Supporting efforts across units to make activities more equitably accessible will add in the recruitment of a more diverse student body and promote a more inclusive orientation on campus. Differences in students' preparation for college study, non-school responsibilities such as work and parenting, and differential access to knowledge about "making the most of Michigan" must be addressed. A key component will be fostering the social integration of international students as part of co-curricular and residential programming.

These efforts clearly contribute to the greater good—at the university, within the state, and at the national and international level (*Greater Good*). Enhancing the diversity and inclusiveness of curricular and extracurricular activities will help students learn to benefit from diverse teams through intellectual and cultural humility (*Collaborative Spirit*). A more purposefully inclusive educational community will also enhance the *Well-being* of students, staff, and faculty.

Selected Pilot Projects:

- Make arts, sports, and entertainment programming across campus freely accessible to all enrolled students to minimize exclusion due to out-of-pocket costs. Exposure to the arts, sports, and entertainment on campus, with open access, supports all students in exploring interests and making connections to curricular experiences. (See *Integration*, 2018.)
- Explore ways to support students in their participation in co-curricular and/or extracurricular activities without regard to financial circumstances.
- Revise how registration appointments are assigned so that students who earned AP/IB/dual enrollment credits in high school are not privileged with earlier registration appointment times, leading to advantages in course access compared to peers. (The Provost's Office is currently looking into this possibility.)
- Pilot a program for departments where all faculty meet with expert consultants to review their current syllabi, course materials, and teaching practices to see how they could be made more purposefully inclusive.
- Scale the efforts of the Program on Intergroup Relations to expand faculty training on use of intergroup dialogue pedagogy in the classroom.
- Commit resources to the Growing STEM initiative, a UM Diversity, Equity, and Inclusion Knowledge Community, currently being supported by the National Center for Institutional Diversity. (<u>https://lsa.umich.edu/ncid/engagement-opportunities/knowledge-communities/growing-stem.html</u>)

- Create programs that foster learning experiences across and among groups of students. For example, train groups of sophomores as "campus ambassadors" with an explicit expectation that they will take the lead in talking to strangers, offering help, and making new students feel they "belong at Michigan."
- Explore the extension of the English Language Institute's online pre-arrival course for newly admitted international graduate students to international undergraduate students. The ELI's Community-Engaged Language and Culture program could also potentially be adapted into a high-impact learning opportunity for international undergraduates.
- Continue to build on the success of purposeful learning communities (e.g., the current living-learning communities, UROP). Michigan learning communities, for example, are some of the most diverse communities on campus and demonstrate academic benefits for first-year students—and often especially first-generation students and students underrepresented on campus and/or in specific fields.
- Pilot offering pre-med test prep for all UM undergraduates (free of charge) and creating an "MD Assist" internship over breaks where students spend time shadowing UM docs with the purpose of getting to know them as a person and mentor.

Opportunity 4: Collaborative spirit

What if learning and leadership in undergraduate education is defined as a more collective and collaborative endeavor?

Four more tangible "what if" questions:

- What if faculty, advising staff, and Student Life staff could function as a team in supporting student learning?
- What if faculty were repositioned to serve more as coaches in undergraduate courses instead of gatekeepers?
- What if faculty, advisors, and students interacted in intentional mentoring more often outside classroom contexts?
- What if faculty and small groups of students could have immersive collaborative experiences regularly throughout the curriculum?

Implications:

This opportunity focuses on the importance of relationships and feelings of connectedness to others as a motivation for learning. As the Strada-Gallup Student Survey suggests, students who thrive after college often

identify a specific faculty mentor or an instructor who made them excited about learning. We would like to provoke a serious discussion about ways to think differently about how to make more space for collaborative, intercohort, and intergenerational learning experiences at Michigan. We hope this reframing encourages faculty to strengthen connections between their undergraduate teaching and their engagement in research, sharing the excitement of research exploration and discovery with undergraduate students. Mechanisms to support more mentoring by faculty include access to training in team-based research activities and faculty time to lead small-group research and experiential activities as contributions to individual mentoring.

Alignment with Shared Values:

Collaborative spirit is a leadership quality valued not only on campus but also by employers visiting the UM campus. Students teaching other students as they master material together recreates the circumstances for continued education in career settings. Collaborative teaching and research opportunities, supported by strong mentoring relationships, can immerse students in the research currently underway at the university to introduce the pursuit of answers to the unknown (*Bold Exploration*). Collaborative learning opportunities can often connect with outcomes aimed toward the common good (*Greater Good*). Strong mentoring relationships and a sense of collective mission have the potential to make the campus feel more inclusive, allow each student to appreciate the contributions of differing perspectives, and enhance the well-being of students and mentors (*Purposeful Inclusion, Well-being*).

Selected Pilot Projects:

- Experiment with immersive, team-based learning experiences led by faculty and educational staff for incoming first-year and transfer students before their first academic term with follow-up during the current exam period.
- Design more spaces on campus outside departments (e.g., libraries, residence halls) that not only welcome but encourage informal meetings among faculty and students.
- Provide residence hall meal tickets to teaching faculty every semester to encourage informal interaction with students in the dining halls.
- Experiment with courses where all students must collectively achieve a specific level of mastery for the entire class to succeed, fostering the development of collaborative learning skills within the class.
- Include into the charge of the new Vice Provost for Undergraduate Education the coordination of advising across the University to improve consistency, quality, and innovation in advising and of a strong network of effective support across units, CAPS, the University Health Service, and Dean of Students offices for students needing assistance.
- Incorporate best practices for improving learning experiences in the classroom to go well beyond the current university-wide online evaluations. A recent study published by *Life Sciences Education* (Dennin et al., 2018) focuses on teaching as a continuous learning process, and highlights efforts at peer institutions to change the culture of undergraduate teaching at research intensive universities.

Ideas from these exemplars include emphasizing the importance of teaching during the hiring process, communicating criteria and expectations for teaching, articulating how teaching will be evaluated, and establishing a consistent culture across campus that recognizes teaching as a scholarly activity.

Opportunity 5: Well-being and self-determination

What if undergraduate education purposefully fostered student reflection on their purpose, learning experiences, and future aims?

Three more tangible "what if" questions:

- What if sustained reflection on learning was embedded in the curriculum across schools and colleges?
- What if every student who entered UM had a faculty "coach" and an upper-class undergraduate student mentor, in addition to an academic advisor?
- What if all faculty had training in research-based best practices for enhancing learning, student development (including skills, values, and interests), and student success?

Implications

To encourage self-determination, we would like to see elements of the curriculum embed guided reading, discussion, and reflection on learning—both in and out of the classroom—every semester. This could be an opportunity for peer teaching and mentoring, as well for faculty, advisors, and other educational staff to work closely with students as they navigate their educational paths. Reflection about learning can enhance mastery of material, strengthen perseverance, heighten the ability to learn from challenges and failure, and encourage the transfer of skills and knowledge to other contexts.

We firmly believe that this critical aspect of learning cannot be simply an "add-on" alongside other coursework; instead, space and time for self-determination must be embedded into the heart of the curriculum. We also hope a focus on reflection and self-determination leads to exciting innovations in capstone experiences designed for and by undergraduate students.

Alignment with Shared Values:

The ability to reflect upon and draw meaning from learning experiences both in and outside the classroom potentially fosters even greater willingness to explore opportunities across the curriculum, co-curriculum, and extracurriculum (*Bold Exploration*). Asking students to reflect on why they are learning what they are learning—their purpose—and how they want to apply it connects their learning to the greater good (*Greater Good*). This kind of mentoring is inherently collaborative, as mentors strive to support students as they define meaning within their learning experiences, identify nascent skills and interests, and intentionally chart their paths at UM and after graduation (*Collaborative Spirit*). The value of experience is determined by whether one

takes the opportunity to reflect on, attribute meaning to, and plan for future opportunities in learning (*Well-being*). This key process consolidates learning experiences in a form one can apply to other learning.

Selected Pilot Projects:

- There are at least two potential models on which to build in terms of integrating guided reflection into the heart of the curriculum:
 - A course in the college of Engineering (ENGR 110: Designing Your Engineering Experience), one of the pilot courses in the Foundational Course Initiative, aims to help students develop a knowledge base and self-understanding for making academic and personal decisions during and after their undergraduate training. Students are supported as self-directed learners through learning and applying design thinking principles to their decision-making as they explore engineering majors, careers, and experiential learning opportunities. Through reflection in small groups, they learn how to articulate the impact of their interests, identities, values, and goals as they plan for the future. This pilot could be extended beyond the first year.
 - ALA 171, "Making the Most of Michigan," is a one-credit seminar offered to first-year students in their residence communities. It is part of a broad Student Life First Year Experience (FYE) initiative that helps students become self-directed learners, navigate their new environment, connect with others across differences, and live in a community that advances health and wellness. Utilizing integrative learning pedagogy, students produce an e-portfolio reflecting their meaning-making across these learning goals. ALA 471, "Leadership and Facilitation in Community Building," is a three-credit (graded) course which prepares upper-level undergraduates to facilitate ALA 171 in sections of 6-15 students. ALA 472 "Advanced Leadership and Facilitation in Community Building in community Building" is a one-to-three credit course for those who have completed ALA 171 and wish to deepen their facilitation skills in class and out-of-class.
- Biomedical Engineering's *Instructional Innovation Incubator*: Undergraduate and graduate students collaborate with faculty to develop new pedagogical programs and train faculty.
- Assess the impact and potentially build on the Foundational Course Initiative, sponsored by the Center for Research on Learning and Teaching's (CRLT), which focuses on pedagogy-related technology to support faculty teaching large gateway courses.
- Experiment with shorter "time out" sessions each year for guided reflection on learning, goals, and aspirations both inside and outside the classroom. (This recommendation was included in the "The Second Chapter of Change" report for the sophomore year.)

V. Conclusion

We recognize that this report is aspirational and raises bold and challenging questions for the university. It establishes the urgent need for change in framing how our values and practices can misalign, and provides an initial vision for moving forward. We urge the university administration and the entire university community to embrace the challenge and the risk of embarking on some radical innovations in undergraduate education.

We also want to sound a note of caution about *how* we undertake this bold next chapter. The recent news of the failure of University of Austin's Project 2021 (see Ellis, 2019), only two years into its five-year timeline, is potentially instructive. We often focus on the *why* and *what* of changing education, without enough attention to the *how*. Implementation is as important as visioning. We urge the administration to build in change management principles from the outset of experimentation and implementation. For example, it will be vital to have dedicated central leadership at the highest level to guide this effort, setting the vision, communicating clearly and broadly with all constituents, and operating with appropriate levels of support. Our recommendation for the creation of a new Vice Provost for Undergraduate Education is one step in that direction. Timelines for this kind of educational change should be ambitious enough to spur collective action yet also allow the space and flexibility for bold and diverse experimentation, creative collaboration, systematic assessment, and thoughtful implementation based on the results.

While the curricula of different schools and colleges may appear to have minimal overlap, we believe we are united by shared values for undergraduate education. The world requires individuals able to reach across differences in perspective, identities, experiences, and disciplinary training to work in collaborative teams, solving complex problems creatively to enhance the greater good. We believe UM is one of the best places in the world to get this education and that we have the vision, capacity, and commitment to do even better.

REFERENCES

The Task Force created an extensive list of excellent reference documents, compiled in an M-Box location. Not all resources are referenced here, but the resources can be made available to anyone seeking additional information.

- Bjork, E. L., & Bjork, R. A. (2011). Making things hard on yourself, but in a good way: Creating desirable difficulties to enhance learning. In M.A. Gernsbacher et al. (eds.), *Psychology and the real world: Essays illustrating fundamental contributions to society* (pp. 56-64). New York: Worth Publishers.
- Chamblis, D.F., & Takas, C.G. (2014). How college works. Cambridge, MA: Harvard University Press.
- Chen, X. (2013). STEM attrition: College students' paths into and out of STEM fields (NCES 2014-001). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC.
- Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the selfdetermination of behavior. *Psychological Inquiry*, *11*(4), 227-268.
- Dennin, M., Schutlz, Z. D., Feig, A., Finkelstein, N., Greenhoot, A. F., Hildreth, M., Leibovich, A. K., Moldwin, M., O'Dowd, D. K., Posey, L. A., Smith, T. L., & Miller, E. R. (2018). Aligning practice to policies: Changing the culture to recognize and reward teaching at research universities. *CBE Life Sciences Education*, 16(4). https://www.lifescied.org/doi/10.1187/cbe.17-02-0032
- Diversity, Equity, and Inclusion Strategic Plan, 2016-2021, University of Michigan. <u>http://diversity.umich.edu/strategic-plan/</u>
- Ellis, L. (2019, March 4). How UT-Austin's bold plan for reinvention went belly up. *The Chronicle of Higher Education*. <u>https://www.chronicle.com/interactives/Project2021</u>
- Garcia, S. M., & Tor, A. (2009). The N-effect: More competitors, less competition. *Psychological Science*, 20(7), 871-877.
- The integration of the humanities and arts with sciences, engineering, and medicine in higher education.(2018). A Consensus Study Report of The National Academies of Sciences, Engineering, and Medicine.Washington, DC: The National Academies Press.
- Lipson, S. K., Lattie, E. G., & Eisenberg, D. (2018, November 5). Increased rates of mental health service utilization by U.S. college students: 10-year population-level trends (2007–2017), *Psychological Services*. <u>https://doi.org/10.1176/appi.ps.201800332</u>

The Michigan Almanac, 12th edition, September 2018.

Milojevic, S., Radicchi, F., and Walsh, J. P. (2018, December 11). Changing demographics of scientific careers: The rise of the temporary workforce. *Proceedings of the National Academy of Sciences of the United States of America (PNAS)*, *115(50)*, 12616-12623. https://doi.org/10.1073/pnas.1800478115 Niemiec, C. P., Ryan, R. M., & Deci, E. L. (2009). The path taken: Consequences of attaining intrinsic and extrinsic aspirations in post-college life. *Journal of Research in Personality, 43*, 291-306.

Strada-Gallup 2014 College Student Survey. Gallup.

- Student Mental Health Data Report: May 2016-April 2018, Counseling & Psychological Services, University of Michigan.
- Wolverton, B. (2019, February 21). As students struggle with stress and depression, colleges act as counselor. *New York Times*. <u>https://www.nytimes.com/2019/02/21/education/learning/mental-health-</u> <u>counseling-on-campus.html</u>
- Yeager, D. S., Henderson, M. D., Paunesku, D., Walton, G. M., D'Mello, S., Spitzer, B. J., and Duckworth, A. L. (2014). Boring but important: A self-transcendent purpose for learning fosters academic self-regulation. *Journal of Personality and Social Psychology*, *107(4)*, 559-580.

APPENDIX A: THE TASK FORCE CHARGE

Task Force on a Michigan Undergraduate Education in the Third Century

January 10, 2018

Co-Chairs:

Anne Curzan, Arthur F Thurnau Professor, College of Literature, Science and the Arts Mark Moldwin, Arthur F Thurnau Professor, College of Engineering

Reporting to:

Martin A. Philbert, Provost and Executive Vice President for Academic Affairs

Background:

For nearly 200 years, the University of Michigan has provided an unparalleled educational experience for hundreds of thousands of students. We are a place of deep traditions with a mission to "serve the people of Michigan and the world through preeminence in creating, communicating, preserving and applying knowledge, art, and academic values, and in developing leaders and citizens who will challenge the present and enrich the future".

The University's legacy of impact and service is extraordinary because of the diverse contributions of faculty, students, staff, and alumni. Specifically, our contribution to undergraduate education and a residential experience for many young minds has proven that education can transform people and ideas, can solve complex problems in an evolving world, and can yield ideas and innovation across many disciplines.

Higher education is evolving at a rapid pace while facing both threats and opportunities from technology, financial realities, political expectations and an increasingly globalized world. As the University begins its third century of research, education and service, it is a good time to take a bold and creative look at what we do in terms of undergraduate education across the schools and colleges, why we do it, and how we might do it even more effectively.

Task Force Charge:

The Task Force on a Michigan Undergraduate Education in the Third Century is charged with addressing these fundamental questions:

• What do we see/want to see as distinctive about an undergraduate education at the University of Michigan? What does or should it mean to graduate with an undergraduate degree from the University of Michigan?

- What is our role in preparing an informed and educated citizenry?
- To what extent do we share and do we want to share a set of core principles and goals for undergraduate education across the schools and colleges? How might such a shared set of principles or goals, in turn, shape the curriculum, teaching, and the co-curriculum in the schools and colleges?
- To what extent should we be teaching a set of skills that will lead to employability?
- Why do we teach what we teach, the way we teach it? How do students learn in today's environment? What are the roles of traditional and emerging disciplines, as well as traditional and emerging technologies, in preparing the next generation of undergraduate students?

The Task Force should consider the institution's history and the challenges and opportunities facing higher education today and in the future. The Provost's teams that worked on engaged learning and digital instruction in 2013 have laid important groundwork for addressing these questions.

Discussions and deliberations of the Task Force should include a survey of the most creative approaches to undergraduate education at peer institutions and input from external audiences and experts as well as internal stakeholders, including a diverse range of instructors, students and employers. Sub-committees and/or advisory groups may be formed as needed.

Timeline, Deliverables and Resources:

The Task Force will carry out the initial stage of its work from January to June of 2018.

At the end of this time period, the Task Force should submit a written preliminary report to the Provost addressing the questions above. The report should include an articulation of values and principles for undergraduate education at the University of Michigan that can be further vetted and explored as well as recommended next steps. Next steps should consider ways to assess student learning within this framework.

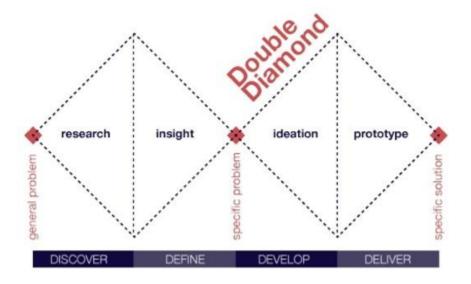
It is expected that the Task Force will provide updates throughout the process to share and discuss with the Provost and other groups, as appropriate. The preliminary report will be edited as necessary and finalized after input from the provost and other academic leaders.

The Office of the Provost will provide administrative and financial support.

APPENDIX B: THE TASK FORCE PROCESS

The Task Force adopted a process model to organize our efforts called the Double Diamond Process.³ The model presents four main stages across two adjacent diamonds. As illustrated (below) in the Double Diamond model's first diamond, the general problem statement and understanding of a problem are equally important. Each of the four stages is characterized by either convergent or divergent thinking. These stages are:

- Discover –identify, research and understand the initial problem.
- Define limit and define a clear problem to be solved.
- Develop focus on and develop a solution.
- Deliver test and evaluate, ready the concept for production and launch.



This report captures the Task Force's work to "discover" and "define" (i.e., the first diamond). This first stage followed a process of identifying a set of needs and challenges to undergraduate education in its current form. This year-long engagement focused on gathering information from a wide range of sources to inform the Task Force about the undergraduate mission. We conducted a search for innovative programs and initiatives at peer and college institutions, current research on higher education, and news media, books, and expert discussions. Within the University, we collected documentation of the many varied and innovative programs within units designed to enhance undergraduate education. Finally, in an extensive empirical effort, we surveyed undergraduates, faculty, and staff to collect their views of critical needs and successful experiences. (The analysis of a survey of almost 1800 undergraduate students in STATS 250 is available upon request.) This

³ <u>https://innovationenglish.sites.ku.dk/model/double-diamond-2/</u>

report synthesizes the Task Force's views as informed by these "sense-making" activities, and provides a framework to structure a second stage of developing, testing, and enacting changes in undergraduate education at the University.