

## Input on University of Maine Strategic Values and Vision – Report 2: Goals, Strategies and Key Indicators

College of Natural Sciences, Forestry and Agriculture

May 2, 2019

Below is summarized input from the college's academic units and dean's staff on goals, strategies, and key indicators. Unfortunately, only three of our academic units provided input. Their full reports are appended. Unit reports were not consistently in the form of goals, strategies, and key indicators, but we did our best to mold their input into that format. Some units provided other comments on goals proposed in the forums and that input is included below.

For the dean's office input, we aligned relevant objectives from our college's Roadmap to Excellence to UMaine's three vision and value categories. As outcomes of 26 faculty and staff listening sessions these objectives reflect college areas of priority. Some roadmap objectives are more similar to goal statements and others are more akin to strategies. For some roadmap objectives indicators are relatively easy to identify and we provided examples. We tried to provide input in the format of goals, strategies, and indicators for each area of emphasis (i.e., relevant roadmap objective).

### FOSTERING LEARNING SUCCESS

#### Input from Academic Units

##### Goals:

- Increase access to research experience early in undergraduate careers.
- Increase UMaine student success by increasing success in introductory courses.
- Create a thematic initiative that encompass all three visions and values with a "circular economy theme." Example in this case: natural resources-based circular economy initiative. (Learner success element)

##### Strategies:

- Small grants to faculty to support research activities of undergraduate students.
- Adjusting teaching - research workloads may be a viable approach for interested faculty.
- For selected "live" introductory courses that also have on-line versions provide students with access to course material several weeks prior to the course start. Alternatively provide opportunities for struggling students in selected "live" courses with on-line versions to have extended time to successfully complete courses via a contract arrangement.
- Re: circular economy initiative. Summit with state government, industry and other stakeholders. Create an initiative roadmap.

Key indicators:

- More students engaged in experiential research.
- A decrease in the proportion of students failing key introductory courses.
- Re: circular economy initiative: curricular modifications.

Additional comments:

- Creating deliberate pathways to employment might refocus attention away from basic research.
- Increasing teaching load of research faculty is a concern.

Input from Dean's Staff

Relevant college roadmap objectives are below as goals. Notes on strategies and indicators are in italics.

- **Develop a framework for understanding funding and other resource needs to support high quality activity-based learning formats & other experiential learning opportunities** (e.g., field trips, laboratory courses, clinical experience, research and capstone activities, active-learning classrooms, internships) as the foundation to improve college and unit stewardship of our undergraduate education programs.) *This is strategy for understanding how to continue to support our undergraduate experiential curriculums that are the fundamental to our success. Indicators need to be focused on keystone changes in the curriculum that are viable for our university. E.g., could be a focus on target core courses. Tradeoffs with research productivity that is the concern of faculty is not necessarily the only approach as there can be reprioritization of curriculum elements and revising the use of the current commitment of faculty workload for teaching.*
- **Ensure our undergraduate programs align with future educational and professional workforce needs of Maine and beyond** as the foundation for UMaine and student success. *Strategy: proactive engagement in selected clusters of majors where direct interaction with employers is weak: summits or development of on-going partnerships. Indicators: proportion of majors with direct employer engagement.*
- In the realm of educating graduate students for the 21<sup>st</sup> century:
  - **Expand training in broad career skills** so that research-intensive students leave their programs with the ability to effectively compete for a wide range of employment opportunities.
  - **Facilitate greater student interaction** to encourage networking and sharing of experiences, challenges and possibilities across disciplines.

- **Create a system for training early-career faculty in advising and mentoring** to improve the student experience and outcomes.

## CREATING AND INNOVATING FOR MAINE AND BEYOND

### Input from Academic Units

#### Goals:

- Create a thematic initiative that encompass all three visions and values with a “circular economy theme.” Example in this case: natural resources-based circular economy initiative. (R&D element)

#### Strategies:

- Re: circular economy initiative. Summit with state government, industry and other stakeholders. Create an initiative roadmap.

#### Key indicators:

- Creation of a collaborative roadmap for R&D and economic growth with stakeholders and UMaine.
- A decrease in the proportion of students failing key introductory courses.

### Input from Dean’s Staff

Relevant college roadmap objectives are below as goals. Notes on strategies and indicators are in italics.

- In the health sciences, pursue the following:
  - **Expand graduate education programs at the Ph.D. level** including an interdisciplinary Ph.D. option.
  - **Catalyze the growth of faculty research and scholarly activity** including exploring opportunities for thematic initiatives on health issues (e.g., rural health care delivery) or more broadly across the college (e.g., Initiative for One Health and Environment) and UMaine.
  - *Consider focusing on key and natural niches for our health science programs and branding that effort, e.g., rural health, opioid issues. The present health sciences committee in the college is considering the question of a niche focus for our programs.*
- **Facilitate cross-disciplinary research initiatives** that leverage the diversity of expertise within the college to generate high-impact, societally-relevant projects. *We also refer to these as thematic initiatives such as the current development of the Arctic Research Network.*

- **Enact a system to promote and utilize sharable instrumental and human resources** to increase the efficiency and effectiveness of existing infrastructure within the college.
- **Develop and implement a capital planning process** that facilitates strategic planning for college facilities and improves the tracking and cost controls for infrastructure projects, better leverages UMS and UMaine initiatives and resources, improves coordination with Facilities Management and better positions the college for public and private fund-raising for facility modernization. *Modern science laboratory facilities are critical to faculty recruitment, and ours are in a rough state on average. Therefore infrastructure improvement is fundamental to R&D. Indicator: inventory of laboratory space and quality.*
- *Address the low-grade friction between research centers and academic units at UMaine, (which includes many research-intensive academic units), that has a basis in a lack of (or lack of awareness of) comprehensive written policy and procedures on research centers and relationships with academic units. A high performance R&D engine would not have friction between major parts.*

## GROWING AND STEWARDING PARTNERSHIPS

### Goals:

- Create a thematic initiative that encompass all three visions and values with a “circular economy theme.” Example in this case: natural resources-based circular economy initiative. (Partnership element)

### Strategies:

- Re: circular economy initiative. Summit with state government, industry and other stakeholders. Roadmap.

### Key indicators:

- Increase in the number of successful collaborative partnerships.

### Input from Dean’s Staff

Relevant college roadmap objectives are below as goals. Notes on strategies and indicators are in italics.

- **Ensure our undergraduate programs align with future educational and professional workforce needs of Maine and beyond** as the foundation for UMaine and student success. *We have above average employer-faculty/curricular relationships in the health sciences. A goal in this area can be the basis for partnership development and be on-going.*

- **Develop deeper stakeholder partnerships in the environmental fields.** *For research, the college has admirable stakeholder relationships with the agricultural sector and forestry sector. Weaker in other environmental and natural resource areas. Well-developed stakeholder engagement processes align our research activities with needs. Strategy: develop engagements mechanisms in targeted sectors that are equally valued by both UMaine and the sectors.*
- **Explore creative partnerships with the private sector to meet our clinical practice needs** and provide other opportunities for experiential learning or internships. *A necessity for growth of health sciences.*

## APPENDIX: ACADEMIC UNIT REPORTS

School of Biology and Ecology  
*Input to the President's Strategic Vision Statement*  
May 2, 2019

### First Year Success:

We applaud the focus on retention and appreciate the focus the Provost has placed on this goal. Many SBE faculty have been participating in the process and on different sub-groups within this initiative.

1. Including a component of academics into new student orientation by including participation of components from the Provost's office is a welcome addition to this program.
2. Focus on the first-year curriculum is important. A new math placement test is welcome. Improving the profile of first-year instruction by adding resources such as MLAs and a coordinator or mechanism to facilitate proper timing of assignments/test in all first-year course.
3. We are intrigued by professional advising, but do not want to lose academic-program specific advising. Associate Dean Criner's model of providing non-academic advising appears to be a good model to pursue.

### Foster Learner Success:

1. We are excited that the university would like to attract and retain a diverse faculty and staff. Given the limited funding available to recruit in general, we see this as a challenge. Current practice to ensure a diverse applicant pool as well as a diverse selection committee are great steps along this route.
2. Increasing access of undergraduates to research experiences early in their careers are a key to a UMaine education. Small grants that faculty could apply for to help offset supplies might help in many arenas.
3. We are concerned that creating deliberate pathways to employment might refocus attention away from basic research questions. A balance between basic and applied research is welcome and necessary but one should not take over for the other.
4. Increasing the teaching load of research faculty will limit their ability to innovate and create new knowledge. An evaluation of courses taught and limiting the number of different courses might free up some time to focus on research. Some faculty might wish to change their appointments to increase their teaching load and this should be welcomed and valued.
5. An effective communication strategy would naturally lead to increased collaborations across campus and across campuses.

### Expansion of UMaine and UMS research and Development:

1. I think this is a grand goal and one that many in SBE have already embraced. We work with state stakeholders in forestry, aquaculture, farming, and tourism.
2. The current UMaine goal of increasing external research funding is increasing our potential for enhancing Maine's economic potential.
3. Enhanced conversations with state leaders about the importance of UM and UMS research and infrastructure to carry out research is vital to improving Maine's economic potential.

School of Economics

*Input to the President's Strategic Vision Statement*

May 2, 2019

Thank you for giving us the opportunity to submit some ideas from the School of Economics about UMaine's Strategic Vision and Values. Specifically, you asked us to provide input on goals and strategies that are consistent with this effort, as well as indicators of progress. I attended the open forum on April 15 and was an active participant in several group discussions, which generated a lot of input into the process. Since all of this information was recorded at the forum, I will not repeat it here.

Our first idea supports the value of "fostering learner success" and it also contributes to first-year student success.

Goal: UMaine students succeed in their introductory-level classes.

Strategy 1: For selected "live" introductory-level classes that also have on-line versions, provide students with access to some on-line materials prior to the start of the live class. For example, students taking live introductory-level classes during the fall (spring) semester could receive a link to the first few weeks of material during the summer (winter) break. The University could provide a modest reward (e.g., gift card at the union, entry into a raffle for free books, etc.) to students that review the material and complete a few basic assessments.

Strategy 2: For selected "live" introductory-level classes that also have on-line versions, provide students that are struggling in the live class some extra time to complete the course. We don't have all of the details worked out, but the general idea would be to identify students with poor grades around the 10<sup>th</sup> week of the semester and allow them to transition into a hybrid version of the course. The struggling students would still be expected to attend the live class, but they would also have access to an on-line version of the class that would extend through Winter Term (for fall classes) or May Term (for spring classes). The on-line part of the course would have some "review assignments" from the first part of the live class—i.e., the part where the student struggled—as well as some assignments covering material from the final part of the class. With the additional time provided to complete the class, students could go back and cover earlier material and master the new concepts at a slower pace.

Key Indicators of Progress: A reduction in the percentage of students receiving poor grades in introductory-level courses.

Our second idea supports the value of "growing and expanding partnerships."

Goal: UMaine faculty, staff and students are proactive in seeking out partnerships.

Strategy 1: Provide incentives for faculty to incorporate activities with UMaine's partners into the curriculum.

Strategy 2: Provide seed funding to support partnerships that are initiated by UMaine faculty, staff and students.

Strategy 3: Implement an annual program where the campus “adopts” a few small Maine communities. This could include a few artistic events (e.g., the band performs in a town parade, theatre presentations at a local venue, etc.), a seminar series at the town library, assistance to local businesses (e.g., designing websites), assistance to the local government (e.g., developing a local economic profile) and some guest lectures in the public schools. UMaine might be able to obtain some financial resources for these activities from a state or national foundation that provides community development grants.

Key Indicators of Progress: An increase in the number of partnerships, particularly those that are initiated by UMaine faculty, staff and students.

I hope that you find these suggestions to be useful.

School of Forest Resources

*Input to the President's Strategic Vision Statement*

May 2, 2019

**What goals should the university pursue to realize the three strategic goals:** fostering learner success, creating and innovating for Maine and beyond, and growing and expanding partnerships?

Define and implement a Natural resource based circular economy initiative

**What strategies should be used to achieve these goals?**

Hold a circular economy workshop - with international and national keynote speakers along with state government and industry for providing common themes - following by breakout sessions in different natural resource areas (i.e. forest-based, marine-based) and ultimate creation of a roadmap.

**What would be key indicators of progress?**

Curricular modifications/development with identified circular economy theme

Official collaboration with an international institution for each area

A state of Maine initiative/statement about circular economy - with directive to state agencies and identified interactions with UMS faculty/staff/students

Popular press/news articles in the NYC/Washington DC markets about the initiative, its anticipated impacts.