January 23, 2015

To: Head and Chairs

From: Katherine Newman

Re: Spring 2015 Prompts: Research and Graduate Education

Cc: Deans of the Colleges and Schools

In the Fall 2014 strategic planning exercise, every department was asked to describe the current state of research and graduate education (“looking in the mirror”), while focusing the “action agenda” on undergraduate reform plans. For the Spring, we are looking toward the future of research and graduate education on this campus. We will be meeting on Friday, January 30 from 11:30-1:30 in the Marriot Center (top floor) to discuss the prompts provided in this document.

Please note: we will spend 90 minutes on this exercise and the last half hour on new procedures for hiring. It is important that you remain for the entire time because we must have an opportunity to communicate the new policies vis a vis provision of confidential materials, the responsibilities of search committees and the voting practices that produce departmental recommendations for hiring.

Introduction

In each main section of this document, there is a broad ‘vision’ question followed by several questions about how that vision might be realized. In order to keep the number of questions to a minimum, each question is accompanied by some ‘guidance’ prompts. The guidance prompts are not separate questions that have to be answered in a mechanical fashion. Rather, they are intended to help clarify the main question and suggest directions along which your thinking might run. The guidance is not a checklist; for instance, if a guidance prompt is about sponsored research, and sponsored research is unimportant in your discipline, you should pass over it silently.

The documents your department will prepare this semester are due to your Dean by April 3. Each dean will “roll up” the departmental plans on research and doctoral education by April 24 and share their reflections with you and with the Provost’s office. Your dean will solicit comments on her/his summative statement and the final version will then be due in the Provost’s office by May 30. It will subsequently be provided to the appropriate committees (JTFSO, etc.).
If this isn’t a contradiction in terms, we are seeking forward-looking and imaginative ideas for each department that are, at the same time, grounded in the data we assembled on where we are now and mindful of the resource constraints that are always there. We will be searching for the most feasible ways to realize the ambitions of this campus and these documents will represent a record of them. Our ultimate aim is to turn these ambitions into a set of “blueprints.”

1. Research and the Faculty

The AQAD reports on your department may be a valuable resource for answering the questions in this section, but you have also been provided with additional data drawn from a variety of external and internal sources, available at umass.edu/oir-dept-review. We are in the process of updating the Academic Analytics data to encompass a period that runs through the end of calendar year 2013.

1.1 Your Vision

1. In no more than 3 pages, describe your vision for the future of research and the composition and visibility of faculty in your department.

Guidance:

- Your vision should be aspirational, but also grounded in reality. If a large investment is required, possible sources of those funds will need to be addressed in response to question 2 below.
- What is your department best known for? Will that change, perhaps as a result of changes in the composition of your faculty or the focus of your discipline? Who are your competitors in these areas, and what will you do to move ahead of them or remain competitive with them? How does faculty hiring figure into this?
- What are the emerging areas of research in your field? What will you do to maintain or achieve prominence in at least some of these areas?
- How well are your faculty doing in making their mark? What can your department do to increase the impact of their research in your discipline?
- In what ways can you serve public good through innovation and focusing on opportunities with high impact and high quality? A strategic planning subcommittee identified certain federal, state, and regional priorities: https://www.umass.edu/chancellor/sites/default/files/RG.pdf
  - Does/could your department make a contribution in any of these areas?
  - How does tech transfer figure into your research priorities?
  - What are your opportunities for interdisciplinary research through cross-department or cross-college collaboration? What is needed to realize these opportunities?
  - What are your opportunities for local (community) or global (international) engagement and research?
1.2 Realizing your vision

2. Very likely, it will take money or other resources to realize your vision. We hope to be able to improve our infrastructure and support faculty growth, but we know that there are ups and downs in the state budget. What contributions can your department make?

   Guidance:
   - What can be done through internal reallocation – e.g., shifting faculty lines as they become vacant from subfields of diminishing importance?
   - Are there sponsored research opportunities that you can pursue?
   - Are there (non-speculative) opportunities for private philanthropy?
   - Are there potential sources of revenue from development of online certificate or degree programs?
   - What about fee-paying master’s programs?

3. The federal funding climate for research has grown ever more difficult in the last decade. How should your department adjust its strategy to mitigate the impact of this decline on research and graduate education?

   Guidance:
   - Are there steps we can take to better ensure our ability to compete for the research dollars available at NSF, NIH, etc.? What are we not doing now that we should make every effort to do?
   - Previous generations enjoyed a more robust climate for research support than the rising generation of young scientists. What do you forecast the impact of this generational divergence to be? What adjustments if any should we make in how we evaluate young scientists, structure labs, enable senior/junior collaboration?

4. Do we have the right physical and administrative infrastructure to support your vision?

   Guidance:
   - What are the critical future needs (maintenance, replacement, growth) for equipment, facilities, and support personnel to realize the long term research ambitions of your department? (This should be a high-level summary, not a long list.)
   - What are your faculty members’ most important center or institute affiliations? Do any of your faculty direct a center or institute? Are the existing centers and institutes meeting their needs, or are changes or additions necessary?

5. Are you able to recruit and retain the faculty you need to realize your vision?

   Guidance:
   - Why should a top-flight faculty candidate with multiple offers join your department?
• What could we do to enhance the environment and make us a more competitive institution?
• What improvements could/should be made to elevate the research visibility of junior faculty?
• How well are you doing at improving the diversity of your faculty?

6. Tenured faculty represent a substantial institutional commitment in space and treasure. As we look to the future, should we be making changes in how we support them and what we ask of them?
Guidance:
• What improvements could/should be made to ensure that associate professors remain productive scholars and move ahead to promotion for full professor in a timely fashion?
• Should we think of the career of full professors differently than we do now to ensure continued visibility and productivity? For example, are there some who could contribute best by shifting effort from research to teaching, or vice-versa?
• What do you currently do in your department to promote tenured faculty innovation and to evaluate and seek to improve research support?
• UMass lags in badges of distinction such as honors (e.g., Fellow of the AAAS) and prestigious fellowships (e.g., Guggenheim). What does/will your department do to ensure that your strongest faculty members are nominated or apply for these awards?

7. We need to do more creative thinking about faculty retirement. We would like to know how our colleagues think about this next phase in their careers, what they would most value going forward. Open comments on this issue are most welcome.
Guidance:
• As faculty in critical areas near retirement, it is sometimes prudent to use ‘bridge’ funding to hire a replacement in anticipation of the retirement. Are there situations like this in your department?
• We are contemplating the creation of an institute for advanced study for our retired faculty. It would be centrally located (probably in the du Bois Library) and provide modest support for travel and research. The “Academy at Amherst” would enable research-active retired faculty to continue to contribute to the campus. How much interest would there be in your department for such an institution?
• In science and engineering departments, access to labs is important for continued research. How would your faculty feel about shared lab space for retired faculty who are still externally supported? In the arts, studio space and performance opportunities are likewise dependent on access to appropriate facilities. What are the options here?

2. Graduate Education
Again, the AQAD reports on your department may be helpful in answering the questions in this section, but you have also been provided additional data drawn from a variety of external and internal sources, available at https://www.umass.edu/oir-dept-review.

If you do not have graduate programs of the appropriate type and do not envision starting any, you may of course skip those sections. Departments with a master’s degree on the books can skip the master’s section if they do not normally admit students for the master’s degree only.

2.1 Doctoral and MFA Programs

2.1.1 Your Vision

1. **In no more than 3 pages, describe your vision for the future of doctoral or MFA education in your department.**

   Guidance:
   - How will your department build on its competitive advantages in graduate education? How will it improve in areas where it is disadvantaged relative to your “true peers” – or stop competing in those areas altogether?
   - The Doctoral Program Review identified certain goals for our programs: recruiting excellent, diverse students; providing them with the financial, mentoring, and other forms of support they need to remain in graduate school and complete their degrees in a reasonable period of time; and placing them in employment that is appropriate to their training. How does your vision address these goals? What are the highest priorities for improving doctoral/MFA education in your department?
   - What are the reasons strong applicants enroll with your competitors instead of accepting your offer? How successful are you in recruiting students from underrepresented minority groups?
   - Recognizing that doctoral and MFA students are attracted to universities for a variety of reasons (especially the opportunity to work with distinguished faculty in their fields of interest), nonetheless funding is crucial. To the extent that financial support plays a role in attracting the best students, how far from fully competitive is your department? What kind of support package would you need to offer to compete for the very strongest students? How do you fare against your competitors?
   - How many new students should you recruit each year? Is this a change from your current practice? Explain in what ways you anticipate change in light of expected future graduate student funding prospects, faculty resources, and career opportunities.
   - What kinds of careers will your graduates pursue? How will you prepare them for these careers (see also question 3 below)?
2.1.2 Realizing Your Vision

2. Very likely, it will take money or other resources to realize your vision for graduate education. We rarely see philanthropic support for graduate education and for many reasons, both donors and the state focus more intently on undergraduates. As a result, we should not anticipate large amounts of new funding for doctoral/MFA students. With that dose of realism at the ready, how could your department improve its support for these advanced student?

Guidance:

- What can be done through internal reallocation, such as admitting fewer students but funding them better?
- Are there sponsored research opportunities that you can pursue? How has the decline in federally sponsored research affected your ability to fund doctoral students? Have you had recourse to bridge funding in the form of fellowships, TA-ships, or RTF- or GOF-funded RAs?
- Are there potential sources of revenue from development of online certificate or degree programs?
- What about fee-paying master’s programs as a source of revenue to support doctoral education? Do you have an accelerated (5th-year) master’s program? If so, what has been your experience with it? If not, why not?

3. In some disciplines, there is a strong emphasis on preparing doctoral students for careers as faculty members at R1 universities like UMass Amherst. The reality is that under 10% of our recent doctoral recipients are pursuing R1 faculty careers. What should your department do to prepare students for the opportunities open to them?

Guidance:

- How can you best prepare your students for alternatives to the professoriate? This could include industry, alt-ac, government, or non-profits and NGOs.
- Should your graduate program provide training for faculty careers at teaching-intensive institutions?
- Faculty who have pursued typical R1 academic careers may be less familiar with these destinations and hence be concerned about advising students about alternative careers. Would you be open to assistance from the Graduate School?
- Graduate students often report reluctance to discuss these alternative careers with their advisors. How can we ensure that students will meet a positive response when they turn to their faculty colleagues for advice?

4. Some departments feel that the presence or the size of its graduate program should be tied to responsibilities they have to service undergraduate education needs. This approach may run counter to the available job prospects for PhD graduates. If this is relevant to your department, what are your thoughts?

Guidance:
• Clearly doctoral students need opportunities for pedagogical training and experience. No doubt, teaching will always be part of their development. How do you help to prepare them for high quality teaching? How much of it do they need to do in order to be qualified?
• To the extent that we should avoid over-producing doctoral students without job prospects, are there alternative ways to address undergraduate teaching needs other than relying solely on graduate students?

2.2 For master’s programs (other than MFA)

2.2.1 Your Vision

1. In no more than 3 pages, describe your vision for the future of master’s education in your department.

Guidance:
• In what way is the master’s education that you offer distinctive “in the marketplace” of similar programs at other universities? Who are your main competitors in recruiting good students?
• What are the major strengths of your MA program? Are there weaknesses that should be remedied?
• Career preparation is a critical component of most master’s programs. What kinds of careers do/will you prepare your students for? How will you adapt to future changes in what employers expect from students with the training you provide? What specific career preparation will you offer? Would you benefit from career preparation help from the Graduate School or other campus units? If the focus of your master’s program is not career preparation, what will it offer students in the way of future prospects?
• What funding do your competitors provide, if any? To what extent are the long term benefits of the education you provide strong enough to attract students who will pay for it?
• To what extent does your program’s ability to recruit master’s students rely on its distinctive qualities?
• To what extent does your program’s ability to recruit master’s students rely on the fact that it prepares them for desirable careers?
• If you have multiple master’s degree programs, including joint degrees, are all of them equally successful and important? If you have any with low enrollment, what will you do to enlarge them or, alternatively, phase them out?
• Are there new graduate degrees or concentrations that you should start? How will they respond to state, regional, or national priorities? Will they have an audience? Do they support the campus’s goal of being a destination of choice?
2.1.3 Realizing Your Vision

2. **What will it take in the way of additional resources to realize your vision?**
   Have you identified potential sources for those resources?

3. Do you have an accelerated (5th-year) master’s program? If so, what has been your experience with it? If not, why not? Are there things we should change about policies and practices to make these more effective?

4. At some universities, funding for master’s students primarily comes in the form of partial tuition remission (scholarships, in effect) rather than assistantships. Is this something you might contemplate for your program?

   **Guidance:**
   - It is part of UMass tradition and consonant with its values to provide scholarship support for students who come from low income and first-generation backgrounds. If you were to design a scholarship program of this kind for your master’s students, to ensure that those who come from less affluent backgrounds can pursue this advanced training, how would you structure it?