Academic Program Review
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Submitted by the Academic Program Review Advisory Group:

Jay Akridge, Dean of the College of Agriculture

Diane Beaudoin, Director of Assessment OIRAE

Brent Drake, Chief Data Officer OIRAE

Leah Jamieson, Dean of the College of Engineering (Chair)

Bud Weiser, Dean of the College of Liberal Arts
Charge to the Committee

Colleagues:

Thank you for agreeing to serve on the Provost’s Advisory Group on Academic Program Assessment. I thank Dean Leah Jamieson for agreeing to chair this group.

I believe that assessments serve multiple purposes and are essential to ensuring program quality and effectiveness, and alignment with institutional priorities. Assessments on a continuous basis provide a framework for program faculty/staff and the University’s academic leadership (President, Provost, and Deans) to develop a shared understanding of the trade-offs in a resource constrained environment and make informed decisions to enhance academic excellence. That said, I believe it is important for us to first decide what our assessment objectives are and how we are going to use the assessment results.

I would like the group to develop recommendations for the following:

a) Our objectives for engaging in academic program assessment  
b) Key indicators to be used in the assessment  
c) Data sources necessary for (b) and our institutional readiness for securing reliable data  
d) A process for the assessment including its frequency and participant groups (internal and/or external)

I hope you will seek input for relevant stakeholder as you develop the recommendations. I have also included below links that describe program assessments at four peer institutions. This should give you a good idea about who is doing what and why.

UC Berkeley: http://vcue.berkeley.edu/apr/  
U Wisconsin: http://apir.wisc.edu/programreview.htm  
U Illinois: http://provost.illinois.edu/programreview/index.html

I would like Dean Jamieson to provide an interim report to the Academic Council of Deans in late September and I hope that the final recommendations will be submitted to me in October.

Thank you.

Deba
1. Introduction
This report outlines a process and proposed metrics for a periodic, comprehensive department/school-level review of academic programs at Purdue University. In developing these recommendations, the task force reviewed Purdue’s recent annual Academic Program Assessment (APA), Purdue’s FY15-16 Budget Priorities Discussion guidelines, Purdue’s Five-Year Graduate Program Review, 5-year review guidelines currently used by colleges/schools at Purdue, and 5-to-10-year program review processes at four peer institutions (the University of California, Berkeley; the University of Illinois at Urbana-Champaign; the University of Michigan; and the University of Wisconsin).

2. Charge to the Academic Program Assessment Advisory Group
Develop recommendations for the following:
1) Our objectives for engaging in academic program assessment
2) Key indicators to be used in the assessment
3) Data sources necessary for (2) and our institutional readiness for securing reliable data
4) A process for the assessment including its frequency and participant groups (internal and/or external)

3. Recommendations and Objective
Purdue should conduct a periodic, comprehensive Academic Program Review (APR) of each academic program at the department or school level on a major cycle of between five and eight years. The review should be conducted by the Office of the Provost. Section 5 outlines the review process. A less extensive annual review will be conducted in the context of the annual budget cycle.

The goal of Academic Program Review is to gauge the general health of academic programs and their alignment with and contributions to institutional goals.

“Academic programs” are defined to be undergraduate, graduate, and professional degree majors. The Academic Program Review is conducted at the level of the offering academic unit and includes all undergraduate, graduate, and professional degree majors offered by the unit.

“Health” here is defined broadly to include both the unit’s past performance and its positioning for the future in all phases of the land-grant mission: teaching/learning, research, engagement, and international, as well as the unit’s climate (work environment) and financial health. Specific objectives of the APR include:

- Providing a periodic opportunity for the unit to self-assess performance in all phases of its activities;
- Providing external feedback on the unit’s past performance and future plans;
- Facilitating a dialogue between the unit and campus leadership about the unit’s current position as well as future directions, plans, aspirations, and needs; and
• Providing insight and information useful in improving the overall health of the unit.

The “general health of academic programs” is to be assessed through a periodic review that includes a self-study, accreditation outcomes as appropriate, review by an external visiting panel, and feedback from the dean and provost. Metrics are proposed in section 4 of this report.

The Office of the Provost will be responsible for identifying institutional goals for the purpose of gauging the academic unit’s “alignment with and contributions to institutional goals.”

Figure 1 outlines the principal components of the annual and long-cycle reviews.

4. **Indicators of Health**

Metrics for gauging the health of an academic unit are proposed in six review areas:

A. Teaching and Learning  
B. Discovery  
C. Engagement and Extension  
D. Global and National Leadership, Faculty Excellence, and External Indicators of Health  
E. Climate and Diversity  
F. Human, Physical, and Financial Resources
The review is to include both quantitative and qualitative metrics. The core quantitative metrics for the academic unit will be provided by the Office of Institutional Research, Assessment, and Effectiveness (OIRAE) in the form of a Common Data Set.

The major cycle and annual metrics are enumerated in appendices A and B respectively. The annual cycle metrics are a subset of the major cycle metrics, so that a picture can be developed over the longer period of the major cycle. It is assumed that the annual cycle metrics will be consistent/aligned with the metrics used for the annual budget review, though the University’s budget allocation is to the college/school rather than to each academic program. It is important to emphasize that the role of the data is to provide a basis for analysis. The narrative, including discussion of the quantitative and qualitative metrics, will be the heart of both the long-cycle and annual reviews.

In the accompanying spreadsheet, the “Common Data Set” tab gives an assessment of the readiness of the metrics, including which are currently available by department and which are currently only at the college/school level. The “Overall Readiness” tab indicates data sources and assesses the current availability of both the quantitative (Common Data Set) metrics and the qualitative indicators recommended for the major cycle and annual reviews. The “Annual Readiness” tab assesses the current availability for the annual cycle metrics.

5. Process for Periodic Academic Program Review

Each academic program will be reviewed on a major cycle of between five and eight years. A less extensive annual review will be conducted in the context of the annual budget cycle. The process for the major cycle assessment of an academic program’s general health is outlined below. In parallel, the Office of the Provost will conduct an assessment of the academic program’s alignment with and contributions to institutional goals.

**Long-Cycle Review:** Principle components of the recommended major cycle general health assessment are:

1. A narrative **self-study** created by the unit, organized around the six review areas enumerated in section 4. A guide for the self-study is presented in Appendix C.
   a. The self-study will make use of data from the centrally-provided Common Data Set, to allow consistency across units on key definitions and metrics. The Common Data Set will also allow analysis of trend data, as it will preserve data from prior years. It is recognized that not all metrics will be relevant for all units, and it is also recognized that units may wish to augment the metrics with indicators that are germane to that unit. Units are especially encouraged to consider “leading indicators” of health that may be specific to the unit.
   b. Also provided will be survey data for the unit. Possible relevant surveys include COACHE, the undergraduate SERU survey, Purdue’s Graduate School annual exit surveys, and Gallup-Purdue indices for the department. It may be useful/necessary for Purdue to administer or create climate surveys for students and staff.
c. Peer benchmarking should be a component of the self-study. Peer institutions should be recommended by the department in the context of each major in the department, and are to be approved by the dean. The department’s list of peer institutions should be reviewed periodically, as peer institutions may change over time. It is recognized that a discipline’s peers may not be the same as the university’s peers. A decision must be made about the mechanism for developing peer benchmark data for the self-study. This should be coordinated with the recommendations from the Academic Program Excellence and Rankings (APER) Advisory Group, including alignment with the University’s decision about using Academic Analytics.

d. In recognition that Purdue’s academic units vary in mission and emphasis, the unit may customize the report by augmenting the topics presented.

e. It will be desirable for the Academic Program Review to leverage accreditation/certification reviews already being conducted. For each unit, it should be determined how the APR can be an input into accreditation, how the accreditation can be an input into APR, or if the accreditation review provides sufficient insights that align with the purpose of the APR that the accreditation review can in fact serve as the APR. This will likely differ by discipline, so there may be variations in the ordering of the APR and the accreditation review, and also in the timing of the APR cycle. Either ordering should be acceptable: accreditation precedes the APR and serves as input to the APR or the APR precedes accreditation and serves as input to the accreditation self-study. The APR cycle for a given unit can be adjusted to align with the accreditation cycle within a range of 5-8 years. (We recommend that the university’s regional accreditation, which is on a 10-year cycle, be separate and independent from the APR.)

2. A review of the academic program by an external visiting panel, commissioned by the dean and resulting in a report to the dean from the review team. The review panel, which should be comprised of members from peer institutions, is to be nominated by the academic program/department and approved by the dean.

3. A response from the academic program to the dean and a subsequent response from the dean to the program.

4. A comprehensive report to the provost that includes the self-study plus the external review report and related responses.

5. A response from the provost, including next steps. Depending on the findings, the next steps may involve a specific plan developed by the provost, dean, and head to address specific issues.
   a. If the review surfaces problems, the unit prepares a follow-up response. As appropriate, the provost, dean, and head together develop a plan to address the specific issue(s). The timeframe for the plan depends on the problem, and is to be determined by the provost and dean.
   b. If no serious problems are surfaced, the next major cycle review must at a minimum include a discussion of how recommendations from the last report were addressed.
Timing: As noted above, the timing of the major cycle APR may vary based on the disciplines’ accreditation cycles. The Advisory Group recommends that the timing be flexible, within the requirement that each unit conduct a major cycle review every 5-8 years. The units should be given the opportunity to recommend the timing of their APR in order to best leverage the work that goes into the two reviews.

Annual Review: The annual review will be conducted in the context of the annual budget process and is conducted at the level of the college/school. Principle components of the recommended annual assessment are:

1. A narrative summary created by the college/school, organized around questions formulated by the Provost.
   a. The self-study will make use of data from the centrally-provided Common Data Set, to allow consistency across units on key definitions and metrics. The department-level data in the Common Data Set will be rolled up to the college level for use in the annual review.
   b. The annual review will look at both the academic health and the fiscal health of the college/school.

2. A meeting with the Provost and Treasurer to discuss the unit’s key accomplishments and challenges.

Periodic Review of the APR Process: The Common Data Set and the overall Academic Program Review process should be reviewed periodically. It is the intent that both the annual and long-cycle APR processes be stable over a period of at least 10 years. However, it will also be important to take stock of how the processes are working, especially in the first few years. It will also be important to review the metrics periodically in order to allow the review processes to capture changes in the disciplinary, institutional, and higher education landscapes. The responsibility for these reviews rests with the Office of the Provost.

6. Questions to be Answered, Decisions to be Made

1. The accompanying spreadsheet assesses the readiness of the metrics proposed for the major cycle review, annual review, and the Common Data Set. Only metrics that are “ready” will be included in the initial reviews. It will be important to have a plan for moving all of the metrics to the “ready” state over time, and incorporating them into the review process at the appropriate time. A metric is considered ready for inclusion when (a) there is a clear definition of the metric and how it is calculated/determined; (b) the definition is widely understood; (c) there is recognition and understanding of variations that may occur across units; (d) there is a well-defined methodology for collecting the data for the metric, and for clearly reporting gaps or uncertainties in the data.

2. As noted in section 5, a decision must be made about the role of peer benchmarking in the self-study. This should be coordinated with the recommendations from the
Academic Program Excellence and Rankings (APER) Advisory Group, including alignment with the University's decision about using Academic Analytics.

3. As noted in section 5, Purdue does not currently have an institutionalized practice for assessing climate for students or staff. It may be useful/necessary for Purdue to administer or create climate surveys for students and for staff.

4. A timeline is needed to set a start date, end date, and time intervals for the major steps of the major cycle review. As noted in section 5, this should take into account the accreditation schedule for the programs that perform periodic external accreditation or certification reviews, including a program-by-program decision about whether the accreditation review can serve as the long-cycle academic program review. We recommend that this be done in discussions with each college/school/program. The APR Advisory Group has focused on recommending a process, but did not attempt to create a detailed timeline.

5. The scheduling of the APR review for each specific program has not been addressed. The start date for the overall APR major cycle process will presumably depend on the target date for completion of the Common Data Set and determination of other metrics flagged as not yet ready.

6. It will be important for the Provost, Treasurer, and deans to assess how this year’s Budget Priorities Discussions worked for each of the stakeholders. It is hoped that the guiding questions for the Annual Budget Priorities Discussion will be relatively stable over periods of at least a few years.

7. In the long term and in the interests of transparency, it will likely be desirable for the Common Data Set to be viewable by audiences beyond the deans and heads, including by people outside the unit. We recommend, though, that access to the Central Data Set for a given unit be limited initially to a “need to know” circle (unit head, dean, and their designees) to allow for vetting of data and definitions and to allow refinements as needed.

8. As noted in section 3, the proposed APR is to look at both the general health of academic programs and their alignment with and contributions to institutional goals. The Advisory Group focused on the “general health” component of the review but tasked the Office of the Provost with identifying institutional goals to be used to gauge the academic unit’s “alignment with and contributions to institutional goals.”
APPENDIX A. Major Cycle Metrics

A. Teaching/Learning
1. Credit Hour Production
   - Separated out online versus face-to-face
   - Clinical teaching broken out
   - Broken out by students in and out of the major
   - Broken out by offering department as well as by unit paying the instructor
2. Faculty teaching load by type of faculty and by type and level of course
3. Majors/Minors
4. Retention to major
5. Degree production/graduation rate
6. Time to degree
7. Placement/Post-Graduate activities – Potentially change for graduate students
8. Career Advising
9. Scholarly activities of graduate students
10. Gallup-Purdue / personal metrics
11. Teaching awards – departments must supplement
12. Innovative teaching practices and incentives for innovation in teaching
13. Honors
14. Cross-discipline, cross-college activities
15. Opportunities for non-majors to explore
16. Experiential learning
17. Scholarship of teaching and learning
18. Professional development of students – teaching, grant writing, scholarly publications/presentations
19. Transfer students and how their needs are handled

B. Discovery
1. MS students/faculty
2. PhD students/faculty
3. Professional students/faculty
4. Publications
5. Citations
6. Awards for centers/grants over $1M
7. Annual expenditures
8. Percent of faculty with external funding
9. Contract/grant expenditures per tenured/tenure track + research faculty FTE
10. Tech transfer metrics (patents, licenses, startups)
11. Collaboration, interdisciplinary activity (measured in grants/publications)
12. Recognized national leadership areas
13. New scholarly directions

1 Current status of the Common Data Set and readiness of the long cycle and annual metrics are enumerated in the accompanying Excel spreadsheet 2015Jan21_APR_Metrics_FINALReport.xlsx
C. Engagement/Extension
1. Units define/submit metrics (both measures of activity and measures of impact)
2. Scholarship of engagement
3. Interdisciplinary collaboration
4. Opportunities for external stakeholders to provide advice/perspective

D. Global and National Leadership, Faculty Excellence, and External Indicators of Health
1. Units define appropriate faculty excellence metrics (CAREER awards, fellow, academies, etc.)
2. Prestigious awards, academy members
3. Respect among peers
   - faculty called on for expertise (testifying, media)
   - grant panel service
   - editorial service
   - professional society leadership
4. National and international rankings
5. Gallup-Purdue indicators
6. Accreditation/certification reviews
7. Inclusion on industry “priority school” recruiting lists
8. Ability to recruit desired undergraduate students
9. Ability to recruit desired graduate students
10. Ability to recruit desired professional students
11. Ability to recruit desired faculty
12. Enrollment trends in relation to national trends

E. Climate and Diversity
1. Gender and ethnicity for faculty, students, staff (by all categories)
2. Faculty retention broken down into retirements, move up, lateral move, dual career
3. Promotion and tenure by level and demography
4. Student retention by level and demography
5. Gallup-Purdue metrics
6. Efforts to address climate (faculty, staff, students)
7. Efforts to address diversity (faculty, staff, students), including innovative practices, incentives, and outcomes regarding diversity/climate
8. Climate survey measures (COACHE and a student climate survey)
9. Transparency assessment
10. Mentoring of assistant and associate professors
11. Leadership changes over time

F. Human, Physical, and Financial Resources
1. Appropriate labs, classrooms, research space
2. Adequate S&E, including life cycle replacement
3. Student to faculty ratio
4. Percentage of faculty in various categories (tenure/tenure-track, clinical, research, continuous term lecturer)
5. Staff support by category
6. Funding sources and amount for graduate students, including percent of students supported, in units of 0.5 FTE
APPENDIX B. Annual Metrics

A. Teaching/Learning
1. Credit Hour Production
   - Separated out online versus face-to-face
   - Clinical teaching broken out
   - Broken out by students in and out of the major
   - Broken out by offering department as well as by unit paying the instructor
2. Faculty teaching load by type of faculty and by type and level of course
3. Majors/Minors
4. Degree production/graduation rate
5. Time to degree

B. Discovery
1. MS students/faculty
2. PhD students/faculty
3. Professional students/faculty
4. Publications
5. Citations
6. Awards for centers/grants over $1M
7. Annual expenditures
8. Percent of faculty with external funding
9. Contract/grant expenditures per tenured tenure track + research faculty FTE
10. Tech transfer metrics (patents, licenses, startups)

C. Engagement/Extension
1. Units define/submit metrics (both measures of activity and measures of impact)

D. Climate/Diversity
1. Faculty retention broken down into retirement, move up, lateral move, dual career, administrative move
2. Student retention by level and demography
3. Efforts to address diversity (faculty, staff, students), including innovative practices, incentives, and outcomes regarding diversity/climate

E. Global and National Leadership, Faculty Excellence, and External Indicators of Health
1. Prestigious awards, academy members
2. Ability to recruit desired undergraduate students
3. Ability to recruit desired graduate students
4. Ability to recruit desired professional students
5. Ability to recruit desired faculty
6. Enrollment trends in relation to national trends

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2 Current status of the Common Data Set and readiness of the long cycle and annual metrics are enumerated in the accompanying Excel spreadsheet 2015Jan21_APR_MetricsFINALReport.xlsx
F. Resources
1. Appropriate labs, classrooms, research space
2. Adequate S&E, including life cycle replacement
3. Student to faculty ratio
4. Percentage of faculty in various categories (tenure/tenure-track, clinical, research, continuous term lecturer)
Goal
The goal of Academic Program Review (APR) is to gauge the general health of academic programs and their alignment with and contributions to institutional goals.

Health” here is defined broadly to include both the unit’s past performance and its positioning for the future in all phases of the land-grant mission: teaching/learning, research, engagement, and international, as well as the unit’s climate (work environment) and financial health. Specific objectives of the APR include:

- Providing a periodic opportunity for the unit to self-assess performance in all phases of its activities;
- Providing external feedback on the unit’s past performance and future plans;
- Facilitating a dialogue between the unit and campus leadership about the unit’s current position as well as future directions, plans, aspirations, and needs; and
- Providing insight and information useful in improving the overall health of the unit.

Process
On a regular basis (5-8 years, tbd for each unit), each academic program will be evaluated through an external review process. The initial step in this process is the preparation of a self-study, outlined in this document. The self-study forms the basis for review by an external panel comprised of members from peer institutions, nominated by the program/department and approved by the dean. Subsequent steps include a written report by the review team, a unit response to the review report, the dean’s response to the report and unit response, submission of the review and subsequent responses to the Provost, and the Provost’s response to the dean and unit, including recommendations for an action plan as necessary.

Instructions and Overall Framing
This self-assessment focuses on six areas: teaching and learning; discovery; engagement and extension; global and national leadership, faculty excellence, and external indicators of health; climate and diversity; and the human, physical and financial resources of the department. The self-study should respond to the questions in a succinct way, so as to create a reflective report that is 20 to 25 pages long. Each of the six sections should begin with a short contextualizing discussion of the unit’s major areas of focus, initiatives, accomplishments (including accomplishments against the unit’s strategic plan), challenges, and national/international trends in this area how the unit is responding to them.

The self-study should begin with an introduction that provides context for the external review team, including an overview of Purdue University and the College, relevant history of the unit, and a summary of the unit’s current mission, vision, and goals for the future.

Common Data Set
To assist with the report, a common data set (CDS) is provided by the Office of Institutional Research, Assessment, and Effectiveness. While the CDS provides a base, the APR process is intended to recognize the differences among colleges/schools and their academic programs, and is designed to be flexible and adaptable as appropriate. Each unit can and
should write a report that reflects the unit’s unique mission and operations. For questions regarding the common data set contact the chief data officer at 494-7139 or the Director of Assessment at 494-9246.

**Deadlines**
The report is due to the external reviewers and the Provost’s office two weeks before the external review visit. Prior to the report being sent to the reviewers and the Provost’s office, your college’s Dean’s office must approve the self-study. Your Dean’s office will let you know how far in advance they will need the report.

**Questions**
Any questions about the process can be directed to Diane Beaudoin at beaudoin@purdue.edu or 494-9246.
A. Teaching and Learning

The purpose of this section is to provide an overview of teaching and learning at the undergraduate, graduate, and professional degree levels. These questions serve as guidance in this area:

1. Briefly describe your academic programs in terms of current majors/areas of focus, recent changes in majors/focus or planned changes, key initiatives relating to teaching and learning programs, key accomplishments and challenges, and any national/international trends that may be relevant for your program.
2. Using the Common Data Set as guidance, discuss enrollment, credit hour production, degree production, retention, graduation rates, teaching load of faculty (including online teaching and clinical teaching), ratio of students per faculty, and placement/post-graduate activities, both in terms of success and challenges.
3. How do the faculty in the program support student career advising and professional development at the undergraduate, graduate, and professional degree levels?
4. What types of scholarly activities do your graduate students participate in? How widespread are these activities across your graduate students?
5. How does your curriculum provide opportunities for students to understand their learning in a global perspective, experience other cultures, etc.?
6. What types of experiential learning activities do your students participate in and what fraction of your students participate in them? What does your department do to reinforce the other Gallup metrics such as . . . ?
7. What types of scholarship of teaching and learning do your faculty participate in? Are there other innovative teaching practices that your faculty participate in and what types of incentives are provided by the department for faculty to do so? What teaching awards have your faculty received?
8. What types of opportunities do undergraduate non-majors have to explore your discipline?
9. How are the particular needs of transfer students addressed?
10. Please address other topics related to teaching and learning as appropriate.
B. Discovery

One of a unit’s main missions is to conduct original research. This section of the report asks the unit to reflect on its research productivity. Academic Analytics should be used as a way to benchmark the unit with others in the country. These questions are a guide for this section’s response:

1. Briefly describe the key areas of research focus in your unit, recent changes in focus or planned changes, key initiatives relating to research, key accomplishments and challenges, and any national/international trends that may be relevant for your program.
2. What is learned about the unit from the Academic Analytics data? How will the unit address any areas that fall below the average of peer units?
3. What prestigious awards or academy memberships have been won by your faculty?
4. Discuss your unit’s annual expenditures, percentage of faculty with external funding, contract/grant expenditures per faculty FTE, and note any awards for centers/grants over $1M.
5. To what degree is the research activity interdisciplinary? If it is interdisciplinary, please identify the other disciplines within or outside of the college.
6. To what extent is the research activity international?
7. What is the impact of the research being conducted in the unit? Comment on any patents, licenses, startups, etc. that have occurred since the last review.
8. To what degree is your unit respected amongst its peers? Comment on faculty called on for their expertise (testifying and/or media), grant panel service, editorial service, professional society leadership, etc.
9. How is your unit recognized in national leadership areas?
10. Is your unit moving in new research directions? If so, what are they and what do you think will be the impact?
C. Engagement and Extension

The purpose of this section is to comment on the engagement and/or extension activities of the unit. Engagement programs differ greatly across the campus in form, scope, and scale. Please comment on the following areas to provide an overview and assessment of the engagement/extension program for your unit:

1. Provide an overview of your unit’s engagement program in terms of key areas of focus/stakeholders served. Describe any recent changes in focus/any planned changes in the focus of your engagement program, key engagement initiatives, key accomplishments, and challenges. Please describe any relevant national and/or international trends affecting your engagement program.

2. Describe some of your most innovative engagement programs and what makes them unique/creative. How is your unit engaged in and supporting the scholarship of engagement? Provide any relevant metrics which characterize your unit’s involvement in the scholarship of engagement (publications, citations, presentations, posters, books, other creative works, etc.)

3. How does your unit assess the impact of your engagement activities? Provide any evidence supporting the impact of your engagement program.

4. How is your engagement program linked to your learning and discovery programs? Present any high impact examples of engagement programs that are explicitly linked to your discovery and learning missions.

5. How does your unit participate in and support collaborative engagement activities with partners on and off campus? Provide examples of high impact on and off campus engagement partnerships.

6. How does your unit fund engagement activities? Provide a summary of your resourcing strategy and any relevant metrics which help characterize your unit’s external funding for engagement.

7. What approaches does your unit use to collect input and feedback from stakeholders? How do you insure your unit is serving stakeholder needs in your learning, discovery, and engagement programs?
D. Global and National Leadership, Faculty Excellence, and External Indicators of Health

The purpose of this section is to comment on how the unit and its faculty, staff, and students are viewed globally and/or nationally as leaders in the discipline. Please discuss the following topics:

1. National and international rankings
2. Accreditation or Certification reviews
3. Inclusion on industry “priority school” recruiting lists, if relevant
4. Ability to recruit desired faculty, graduate students, professional students, and undergraduate students
5. Enrollment trends in relation to national trends
E. Climate and Diversity

Understanding the climate and diversity within a unit is a measure of its health and vitality. These questions are a resource to guide the responses for this section of the report:

1. Discuss the breakdown by gender, race and ethnicity of faculty, staff and students within the unit. What efforts have been made to support diversity within the unit? Consider recruiting strategies, training, on-boarding approaches, and any other initiatives your unit is pursuing in support of a more diverse group of faculty, staff, and students. What barriers do you see in becoming a more diverse unit and how are you addressing these?
2. Discuss faculty P&T and retention by gender, race and ethnicity.
3. What do the most recent climate surveys (COACHE, etc.) say about your unit? What efforts have been made to support a positive climate / address issues of climate within the unit?
4. What processes are in place within the unit to mentor assistant and associate professors?
5. Discuss student retention by gender, race, and ethnicity
6. Identify any leadership changes since the last review.
F. Human, Physical and Financial Resources

Understanding the staffing, physical space and financial resources of a unit provides a useful way to review the health of a unit. These questions are a resource to guide the responses for this section of the report:

1. Does the unit have appropriate lab and research space?
2. Does the unit have adequate S&E funding, including life cycle replacement of computers, etc.?
3. Is the current student to faculty ratio at the graduate, professional, and undergraduate levels appropriate? If not, what is necessary to address this?
4. Are the percentages of faculty in various categories (TT, clinical, research, CTL, LTL, etc.) appropriate? If not, what is necessary to address this?
5. What level of staff support is available to the unit?
6. How well are startup resources aligned with the unit’s needs.
7. What are the funding sources and associated amounts devoted to graduate student and professional student support?
8. Discuss trends in the unit’s total budget of the unit by source (general funds, research, development, etc.).
APPENDIX D. Excel Spreadsheets of Metrics and Their Readiness
Annual Metrics

A. Teaching/Learning
   1. Credit Hour Production
      - Separated out online versus face-to-face
      - Clinical teaching broken out
      - Broken out by students in and out of the major
      - Broken out by offering department as well as by unit paying the instructor
   2. Faculty teaching load by type of faculty and by type and level of course
   3. Majors/Minors
   4. Degree production/graduation rate
   5. Time to degree

B. Discovery
   1. MS students/faculty – Need to define faculty
   2. PhD students/faculty – Need to define faculty
   3. Professional students/faculty - Need to define faculty
   4. Publications
   5. Citations
   6. Awards for centers/grants over $1M
   7. Annual expenditures
   8. Percent of faculty with external funding
   9. Contract/grant expenditures per tenured/tenure track + research faculty FTE
   10. Tech transfer metrics (patents, licenses, startups)

C. Engagement/Extension
   1. Units define/submit metrics (both measures of activity and measures of impact)

D. Climate/Diversity
   1. Faculty retention broken down into retirements, move up, lateral move, dual career
   2. Student retention by level and demography
   3. Efforts to address diversity (faculty, staff, students), including innovative practices, incentives, and outcomes regarding diversity/climate

E. Global and National Leadership, Faculty Excellence, and External Indicators of Health
   1. Some Narrative For External Health must be included in each annual budget cycle
2. Prestigious awards, academy members
3. Ability to recruit desired undergraduate students
4. Ability to recruit desired graduate students
5. Ability to recruit desired professional students
6. Ability to recruit desired faculty
7. Enrollment trends in relation to national trends

F. Resources
1. Appropriate labs, classrooms, research space
2. Adequate S&E, including life cycle replacement
3. Student to faculty ratio – Must Define faculty
4. Percentage of faculty in various categories (tenure/tenure-track, clinical, research, CTL)
## Teaching/Learning

<table>
<thead>
<tr>
<th>Data Avail.</th>
<th>by College</th>
<th>by Dept</th>
<th>Credit Hour Production</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>by course offering dept yes now, by instructor of record department being worked on the more we subdivide it the less likely to have data by faculty of record's department. Separation by clinical not currently available - need definitions and methodology</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td>Separate out online versus face to face</td>
</tr>
<tr>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td>Breaks out by students in and out of the major</td>
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<tr>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td>Breaks out by offering department as well as by unit paying the instructor</td>
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<tr>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td>Breaks out clinical teaching</td>
</tr>
<tr>
<td>soon</td>
<td>soon</td>
<td></td>
<td>Faculty teaching load by type of faculty and by type and level of course</td>
</tr>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Ungrad yes/grad needs work</td>
<td>Time to degree</td>
</tr>
<tr>
<td>Yes</td>
<td>no</td>
<td>Ungrad and Prof 1 year post yes</td>
<td>Placement/Post-Graduate activities--Potentially change for graduate students</td>
</tr>
<tr>
<td>Yes</td>
<td>Yes</td>
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<td>Transfer students</td>
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</table>

## Discovery/Research/Scholarship

<table>
<thead>
<tr>
<th>Data Avail.</th>
<th>by College</th>
<th>by Dept</th>
<th>MS students/faculty---Need to define faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>PhD students/faculty---Need to define faculty</td>
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<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>s/faculty--Need to define faculty</td>
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<tr>
<td>Yes</td>
<td>unk</td>
<td>Yes</td>
<td>Annual expenditures</td>
</tr>
<tr>
<td>Yes</td>
<td>unk</td>
<td>Yes</td>
<td>Contract/grant expenditures per faculty FTE</td>
</tr>
<tr>
<td>Yes</td>
<td>no</td>
<td>Yes</td>
<td>Tech transfer metrics (patents, licenses, startups)</td>
</tr>
</tbody>
</table>

## Climate/Diversity

<table>
<thead>
<tr>
<th>Data Avail.</th>
<th>by College</th>
<th>by Dept</th>
<th>Gender and ethnicity for faculty, students, staff (by all categories)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>unk</td>
<td>yes at college/ department level will need work</td>
<td>Faculty retention broken down into retirements, move up, lateral, dual career</td>
</tr>
<tr>
<td>Yes</td>
<td>unk</td>
<td>yes, will also improve in future</td>
<td>Promotion and tenure by level and demography</td>
</tr>
<tr>
<td>Yes</td>
<td>unk</td>
<td>not readily available</td>
<td>Student retention by level and demography</td>
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<tr>
<td>yes</td>
<td>no</td>
<td>yes, but not to level of department</td>
<td></td>
</tr>
</tbody>
</table>

## External Health

<table>
<thead>
<tr>
<th>Data Avail.</th>
<th>by College</th>
<th>by Dept</th>
<th>Ability to recruit desired UG students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>yes</td>
<td>Enrollment trends</td>
</tr>
</tbody>
</table>

## Resources

<table>
<thead>
<tr>
<th>Data Avail.</th>
<th>by College</th>
<th>by Dept</th>
<th>Student to faculty ratio---Must Define faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Unk</td>
<td>yes</td>
<td>Percentage of faculty in various categories (TT, clinical, research, CTL)</td>
</tr>
<tr>
<td>Yes</td>
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<td>yes</td>
<td>Staff support by category</td>
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</table>
### Overall Readiness

**Teaching/Learning**

<table>
<thead>
<tr>
<th></th>
<th>by College</th>
<th>by Dept</th>
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<td>Yes</td>
<td>Yes</td>
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<tr>
<td>A</td>
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</tbody>
</table>

#### Data Avail.

- **Credit Hour Production**
  - Separate out online versus face to face
  - Breaks out by students in and out of the major
  - Breaks out by offering department as well as by unit paying the instructor
  - Breaks out clinical teaching

- **Faculty teaching load by type of faculty and by type and level of course**
  - MA, PhD, Professional

- **Only For majors presently**
  - Majors/Minors

- **Degree production/graduation rate**
  - Time to degree
  - Placement/Post-Graduate activities—Potentially change for graduate students
  - Retention to major

- **Survey results yes, practices**
  - Gallup metrics

- **Some available most Qual**
  - Teaching awards—Departments must supplement
  - Innovative teaching practices & incentives for
  - Cross-discipline, cross-college activities
  - Opportunities for non-majors to explore
  - Experiential learning
  - Scholarship of teaching and learning
  - Professional development of students-teaching, grant writing, scholarly pubs/presentations
  - Transfer students and how their needs are handled

#### Discovery/Research/Scholarship

- **MS students/faculty—Need to define faculty**
- **PhD students/faculty—Need to define faculty**
- **Professional student/faculty—Need to define faculty**

- **If we endorse Academic Analytics**
  - Publications

- **Use that method**
  - Citations

- **Awards for centers/grants over $1M**

- **Transfer students and how their needs are handled**
  - Annual expenditures
Percent of faculty with external funding
Contract/grant expenditures per tenured/tenure track + research faculty FTE
Tech transfer metrics (patents, licenses, startups)
Collaboration, interdisciplinary activity (measured in grants/pubs)
Recognized national leadership areas
New scholarly directions
Units define/submit metrics (both measures of activity and measures of impact)
Scholarship of engagement
Interdisciplinary collaboration
Opportunities for external stakeholders to provide advice/perspective
Units define appropriate metrics (CAREER awards, fellow, academies, etc.)
Prestigious awards, academy members
Respect among peers
faculty called on for expertise (testifying, media)
grant panel service
editorial service
professional society leadership
Gender and ethnicity for faculty, students, staff (by all categories)
Faculty retention broken down into retirements, move up, lateral, dual career
Promotion and tenure by level and demography
Student retention by level and demography
Gallup metrics
Efforts to address climate (faculty, staff, students)
Efforts to address diversity (faculty, staff, students)
Climate survey measures (COACHE and student one)
Transparency assessment
Mentoring of asst. and assoc. professors
Leadership changes over time
ranks
ranks
Gallup Purdue
Accreditation/Certification reviews
<table>
<thead>
<tr>
<th>Year</th>
<th>Needs</th>
<th>Current Data</th>
<th>Notes</th>
<th>Proposed Data</th>
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<tr>
<td>6 yr</td>
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<td>Qual</td>
<td>Inclusion on industry &quot;priority school&quot; recruiting lists</td>
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<td>A?</td>
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<td>Yes</td>
<td>Yes admissions data</td>
<td>Ability to recruit desired UG students</td>
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<td>Need discussion with graduate school</td>
<td>Ability to recruit desired grad students</td>
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<td>Units have traditionally provided professional admissions metrics</td>
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<td>Enrollment data readily available, context would need to be provided by dept</td>
<td>Enrollment trends in relation to national trends</td>
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Some Narrative For External Health must be included in each annual budget cycle

**Resources**

<table>
<thead>
<tr>
<th>A (narrative)</th>
<th>Space Availability data possibly but unlikely to dept level, context</th>
<th>Appropriate labs, classrooms, research space</th>
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<tbody>
<tr>
<td>Yes</td>
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<td>would be QUAL</td>
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<td>Percentage of faculty in various categories (TT, clinical, research, CTL)</td>
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<td>If we mean staff numbers by college yes/ by department</td>
<td>Staff support by category</td>
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<td>6 yr</td>
<td>Potentially from Finance</td>
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<td>By College</td>
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<td>Enrollment data readily available, context would need to be provided by dept</td>
<td>Enrollment trends in relation to national trends</td>
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