

EXECUTIVE SUMMARY

Item Name: Methodology for Identifying Low Productivity Programs at ASU, NAU, and UA

Action Item Discussion Item Information Item

Issue: The Committee is asked to approve a document that outlines the revised methodology used by the universities for determining low productivity programs.

Background

Every academic program is reviewed on a seven year cycle as part of the Academic Program Review (APR). The APR reports for programs reviewed each year are provided to the Academic Affairs Committee. As part of the APR, and at other times deemed necessary by the university, degree programs are reviewed for degree productivity using methodology outlined in the "Method for Identifying Low Productivity Programs at ASU, NAU, and UA". With the current budget challenges, the universities have looked closely at degree productivity to improve instructional efficiency.

The document that outlines the current methodology, approved by the Board in 1997, is confusing. The revised document is more streamlined and more clearly defines how to determine thresholds for productivity and criteria that might support retention of a low productivity program.

A review by ABOR staff of the current program productivity standards at other public universities made use of data provided by an information request to the State Higher Education Executive Officers (SHEEO). This review indicated that the program productivity standards in Arizona are comparable to those in other states.

Statutory/Policy Requirements

As prescribed in ABOR Policy 208. "Academic Program Reviews," for low productive degree programs with graduations below established thresholds, an evaluation will be conducted in accordance with the Board approved guidelines as set forth in a document entitled "A Methodology for Identifying Low Productive and Duplicative Programs" and reported to the Academic Affairs Committee.

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Strategic Implications

The revised document is clearer than the previous version.

Discussion

The thresholds for degree productivity over a three year period are: twenty-four undergraduate degrees, nine Masters degrees, and six doctoral degrees. A program that is below threshold might be recommended for retention under one of several conditions: it is a basic academic subject offered at peer institutions, the program quality is exceptional, the subject of the program is central to the mission of the university, the program contributes significantly to other programs at the university, the program meets valuable workforce needs in Arizona, the program is unique and serves an important mission in Arizona, the program is expected to grow and generate sufficient degrees in the near future, the program generates significant revenue that can be used to support the program, and the program provides opportunities that would otherwise be unavailable to particular populations in Arizona.

The proposed methodology is shown in Attachment A; the current one in Attachment B.

Recommendation

The Committee is asked to approve the "Methodology for Identifying Low Productivity Programs at ASU, NAU, and UA".

Attachment A

**Proposed Revision to
Method for Identifying Low Productivity Programs
at ASU, NAU, and UA**

As part of the Academic Program Review (every seven years) and at other times deemed necessary by the University, degree programs will be reviewed for degree productivity using the methodology outlined below.

Identify Programs with Degree Production below Thresholds

Undergraduate

Institutions will review degree information for each academic program for the most recent three years for which degrees-awarded data are available. Each degree and each major earned by a given student will count as a degree for this purpose (following IPEDS).

- Academic programs are expected to award twenty-four or more undergraduate degrees over the three-year period.
- Degrees with differing titles (e.g., B.A., B.S., etc.) for a given major will be combined for purposes of the threshold analysis if substantial overlap of course work exists among the different degrees.
- Degrees granted to students with dual majors are counted with each major.
- The review of undergraduate programs excludes interdisciplinary programs.

Graduate

For programs granting degrees at the masters or doctoral level, institutions will review the number of degrees granted in the most recent three years for which degrees-awarded data are available.

- Academic programs are expected to grant nine or more masters degrees and six or more doctoral degrees over the three-year period.
- In programs that offer both master's and doctoral degrees, the doctoral degree numbers will be used to identify productivity of the program (i.e., if the number of doctoral degrees awarded is above the threshold, the masters program need not meet or exceed the threshold for masters degree programs.
- Degrees with differing titles (e.g., M.A., M.S., etc.) for a given major will be combined for purposes of the threshold analysis if substantial overlap of course work exists among the different degrees.
- Dual degrees granted to a student are counted separately.
- The review of graduate programs excludes interdisciplinary programs.

Low degree production may occur because:

- The program no longer accepts students and is in the process of being phased out or has temporarily suspended admissions to undergo restructuring.

- The program was approved by the Arizona Board of Regents and implemented by the institution within the last six years. (Central office staff will provide each university with the year of ABOR approval).
- The program is offered at an off-campus location or at an alternate campus that offers unique degree programs or is an on-line program that is unique from other programs offered at the University. Degrees from university programs that are offered at other sites are counted with the majors and degrees offered on campus.

Programs with low degree productivity should be reviewed for viability. If a low productivity degree is duplicative, a plan should be developed to assess its viability relative to other similar programs at Arizona's state universities and implement steps to modify or eliminate the program. Justifications for the low degree production and a plan for improvements must be provided.

Review Programs that Are Below the Low Degree Production Threshold for Criteria that Might Support Retention

A program might be recommended for retention if one of a variety of institutional priorities is met. These might include:

- **Basic academic subject:**
The program is considered a basic academic subject offered by a majority (8 or more) of our peer institutions. The most recent IPEDS Degree Completion report should be used to compare CIP code and degree levels at the peer institutions.
- **Program quality:**
Quality may be demonstrated by student, faculty, or overall program quality. Examples of measures include evidence of instructional effectiveness (such as student performance and outcomes), employer satisfaction, student placement, research/scholarship/creative/artistic excellence, external funding, external recognition and national rankings, and accreditation.
- **Centrality to university mission:**
Universities have complex missions with multiple goals. A program's contribution to the university mission is evidenced by identifying the university goal that the program fulfills.
- **Contribution to other programs in the university:**
Universities have responsibilities to provide students access to courses and programs of study that support both broad educational goals (such as general education) and specific student needs (such as certificate programs). Evidence of a program's contribution to other programs in the university includes the number of student credit hours (or full-time equivalent students -- FTE) taught, courses taught that meet general

education requirements, students completing minors, students completing certificates, courses required by other majors, and non-majors in courses required of majors.

- **Contributions to workforce development:**
The program prepares graduates that are valuable and needed by industry, business, and other stakeholders in Arizona.
- **Program uniqueness:**
The program is important to Arizona by virtue of its unique educational contribution. Uniqueness is evidenced by a distinctive program focus (such as community partnerships, internships, interdisciplinary, or unique intellectual focus).
- **Program Growth:**
The program has recently been modified and there has been a significant increase in the number of students entering this major such that the number of degrees is expected to meet threshold within the next six years.
- **Program/unit revenue:**
The unit housing the program generates significant revenue that can be used to support the program.
- **Access**
The program provides opportunities to earn degrees to students that, for geographic or other reasons, would not be able to participate in other programs. The measure of access will be the number of students enrolled in the program from rural or otherwise under represented populations.
- **Other**

Recommendations

Recommendations for programs not meeting any of the above conditions

As part of the Academic Program Review process, or at other times deemed necessary by the University, and based on the information from the reviews outlined above, institutions will provide a recommendation for each program that does not produce enough degrees to meet threshold. Recommendations may include that the program should be retained, eliminated, merged, or in some way modified. Changes requiring ABOR approval include program disestablishment and program mergers; these need to be submitted on the Academic Strategic Plan to the Academic Affairs Committee of ABOR.

Attachment B

**Current
Methodology for Identifying Low Productive
and Duplicative Programs**

Stage 1: Identify Low Productive Programs

Step 1 Identify Programs with Degree Production below Thresholds

Undergraduate

Institutions will review degree information for each academic program for the most recent three years for which degrees-awarded data are available. Academic programs at main campuses awarding twenty-four or more degrees over the three-year period and programs at non-main campuses awarding fifteen or more degrees are excluded from further consideration. Degrees with differing titles (e.g., B.A., B.S., etc.) for a given major will be combined for purposes of the threshold analysis if there exists a substantial overlap of course work among the different degrees. Degrees granted to students with dual majors are counted with each major. The review of undergraduate programs excludes interdisciplinary programs.

Graduate

For programs granting degrees at the masters or doctoral level, institutions will review the number of degrees granted in the most recent three years for which degrees-awarded data are available. Academic programs at main campuses granting nine or more masters degrees over the three-year period and programs at non-main campuses awarding six or more degrees are excluded from further consideration, as are programs granting six or more doctoral degrees. In those cases where a program offers both masters and doctoral degrees, if the number of doctoral degrees awarded is above the threshold, the masters program need not meet or exceed the threshold for masters degree programs. The review of graduate programs excludes interdisciplinary programs.

Step 2 Identify Valid Reasons for Low Degree Production

Institutions will review academic degree programs identified in Step 1 and remove those, which satisfy one or more of the following conditions:

1. The program no longer accepts students and is in the process of being phased out.
2. The program was recently approved by the Board of Regents and recently implemented by the institution. Approved academic programs at the baccalaureate and doctoral levels that were implemented more recently than six years prior to the first year for which data are examined will be excluded; those implemented three years prior will be excluded at the masters level. If, however, a campus only offers upper-division courses, a program at the baccalaureate level will be excluded only if it was implemented more recently than four years prior to the first year for which data are examined.*

* Central office staff will provide each university with the year of ABOR approval.

3. In general, the Board effective approval date, as determined from Board records, will be used as the implementation date. If, however, the Board effective approval date differs from the date on which, according to university records, the program was actually offered, then the date the program was first offered in the campus catalog will be used as the date of implementation.
4. In the case of programs offered outside of the main campuses, the following determines what implementation date will be used:
 - ◆ Programs that were approved for a main campus and subsequently moved (in their entirety) to a non-main campus site carry their implementation date with them.
 - ◆ Programs that were never requested and approved for the main campus but that were requested and approved for the non-main-campus site will use the date of implementation for the non-main campus program as the official date of date of implementation for that program.
 - ◆ Programs that were approved for the main campus but that also are offered on non-main campuses will be reviewed separately for the main and non-main campuses. The implementation date for the non-main campus program will be the date that program was first offered at that site according to a catalog. Programs for which 50% or more of the courses are offered through information technology are not defined as non-main campus programs, and graduates from these programs will be considered to be graduates from the main campus program. In the case of a collaborative program offered using information technology, unless a single university is responsible for 50% or more of the courses offered through information technology, the program would be classified and reviewed separately as a "joint" program.

Step 3 Identify Programs Considered "Basic Academic Subjects"

For each program failing to satisfy the conditions in Steps 1 and 2, institutions will identify and remove those academic programs considered basic academic subjects. A program is considered a basic academic subject if a majority (twelve or more) of peer institutions grant degrees in the subject. The source of degree data is the most recent IPEDS Degree Completion report. Program matches are on the basis of CIP code and degree level in conjunction with peer program catalog review. Information about these programs will be reported to the board, as described in Stage 3, Step 2, below.

Stage 2: Provide Expanded Information

Universities with degree programs not meeting the minimum thresholds identified in Stage 1 will be asked to provide additional information about each program that is not recommended for elimination or consolidation. Information will include the number of degrees awarded during the period under review and assessments of each of the following:

1. Program quality:

Quality may be demonstrated by student, faculty, or overall program quality. Examples of measures include evidence of instructional effectiveness (e.g., student satisfaction), student performance (e.g., scores on national examinations), employer satisfaction, student placement, research/scholarship/creative/artistic excellence, external funding, external recognition (e.g., national rankings, awards), and accreditation.

2. Contribution to university mission:

Universities have complex missions with multiple goals. A program's contribution to the university mission is evidenced by identifying the university goal that the program fulfills (e.g., the university goal of providing educational services to an underserved population might be met by a degree that is targeted to a community).

3. Contribution to other programs in the university:

Universities have responsibilities to provide students access to courses and programs of study that support both broad educational goals (such as general education) and specific student needs (such as certificate programs). Evidence of a program's contribution to other programs in the university includes the number of student credit hours (or full-time equivalent students -- FTE) taught, courses taught that meet general education requirements, students completing minors, students completing certificates, courses required by other majors (e.g., mathematics courses required by engineering), and non-majors in courses required of majors.

4. Program uniqueness:

A program may be important to Arizona by virtue of its unique educational contribution. Uniqueness is evidenced by a distinctive program focus (such as community partnerships, internships, interdisciplinary, or subject area), differentiation between the program and other programs in the state, and being unique to the university's service area.

5. Program size:

The program size is indicated by the number of majors enrolled in the three previous years.

6. Program costs:

In units that devote all (or nearly all) of their effort to the program, the fixed cost of the program will be the faculty salaries and the variable costs will be operations and travel.

Units that have program cost accounting systems already in place and that offer multiple programs and/or contribute to other programs in the university should report fixed and variable costs assignable to the program. Units with multiple programs or contributing to other programs in the university without program cost accounting systems should identify the incremental costs associated with the degree program. To estimate the incremental cost, units should identify the additional services provided to students in the program and additional costs associated with those services (e.g., the costs of offering a course open only to majors).

7. Accessibility

A program is more accessible when it is opened to students who, for geographic or other reasons, would not be able to participate in other programs. The measure of access will be the number of students enrolled in the program from rural or otherwise under represented populations.

8. Other

Additional Criteria for Duplicative Programs

Programs failing to satisfy the conditions in Steps 1, 2, and 3 are reviewed for duplication** both within each university and between universities. If a low productivity program is duplicative, departments should also provide information related to which of the following criteria are met or, where the criteria are not met, a workplan for meeting the criteria should be provided:

- **Alternative delivery systems**
Alternative delivery systems have been fully considered and it is determined that this program cannot be delivered off-campus by the universities currently offering the program because of limited resources, because of the need for specialized equipment or library resources, or because for some other reason, the courses that make up the program cannot be delivered at a level of quality comparable to that of the on-campus program.
- **Efforts to collaborate**
Efforts have been made to collaborate between the universities to offer this program (e.g., joint degrees, shared courses, and team teaching of courses), and to minimize the duplication of programs and courses.
- **Other**

** The Board staff will provide each institution a list of duplicate programs offered by the three Arizona universities.

Stage 3: Recommendations

Step 1: Recommendations for programs not meeting Stage 1, Steps 1 & 2 conditions

Based on the information provided in Stage 2, institutions will provide a recommendation for each program failing to satisfy the conditions in Steps 1 and 2 of Stage 1 about whether it should be retained, eliminated, or in some way modified.

Step 2: Basic Academic Programs

Programs that fail to meet the conditions in Steps 1 & 2 of Stage 1 but that are, following Step 3, classified as basic academic programs, shall be listed, along with the number of degrees awarded, the number of peers offering the program, and the student credit hours generated by the courses required for the program in each of the past three years (which can be compared to the total university student credit hours).