



STATEWIDE ACADEMIC PROGRAM REVIEW REPORT TO THE GOVERNOR

MISSOURI DEPARTMENT OF HIGHER EDUCATION
› FEBRUARY 2011 ›



TABLE OF CONTENTS

Contents

| | |
|---|------------|
| Executive Summary | 3 |
| Academic Program Review | 8 |
| Institutional Summary Reports 4-year Sector | 17 |
| Harris-Stowe State University | 18 |
| Lincoln University | 20 |
| Missouri Southern State University..... | 26 |
| Missouri State University | 29 |
| Missouri University of Science and Technology | 34 |
| Missouri Western State University | 37 |
| Northwest Missouri State University | 40 |
| Southeast Missouri State University | 45 |
| Truman State University | 49 |
| University of Central Missouri | 51 |
| University of Missouri – Columbia..... | 54 |
| University of Missouri – Kansas City | 61 |
| University of Missouri – St. Louis | 65 |
| Institutional Summary Reports 2-year Sector | 67 |
| Crowder College | 68 |
| East Central College..... | 72 |
| Jefferson College | 74 |
| Linn State Technical College | 76 |
| Metropolitan Community College..... | 77 |
| Mineral Area College | 80 |
| Missouri State University-West Plains..... | 82 |
| Moberly Area Community College..... | 84 |
| North Central Missouri College..... | 86 |
| Ozarks Technical Community College | 89 |
| St. Charles Community College..... | 90 |
| St. Louis Community College..... | 93 |
| State Fair Community College..... | 97 |
| Three Rivers Community College | 99 |
| Appendices..... | 101 |
| Appendix A: Governor Nixon’s Remarks at Higher Education Summit | 102 |
| Appendix B: CBHE Statutory Authority for Program Review | 108 |
| Appendix C: CBHE Policy on Existing Academic Program Review | 109 |
| Appendix D: MDHE Methodology for Existing Academic Program Review | 111 |
| Appendix E: MDHE Program Response Form, Four-Year Institutions..... | 113 |
| Appendix F: MDHE Program Response Form, Two-Year Institutions | 114 |
| Appendix G: Program Review Feedback Instruments Instruction | 114 |

Statewide Academic Program Review

Executive Summary

At Governor Nixon's request and with the approval of the Coordinating Board for Higher Education (CBHE), the Missouri Department of Higher Education (MDHE) undertook a review of the complete academic program inventory at each of the state's four-year and two-year public institutions of higher education. MDHE staff conducted the review between September 2010 and January 2011 according to a methodology developed by the MDHE in consultation with the chief academic officers of both the two-year and four-year sectors. The methodology was based on existing CBHE policy but modified to meet the specific direction suggested by the governor and time and resource constraints.

The MDHE reviewed degree completions for all academic programs, and flagged for further review those programs whose average annual number of graduates over the past three years fell below a certain threshold. (A full description of the methodology is attached as Appendix D).

Four-year Institutions

As a result of this academic program review, four-year institutions deleted 72 programs, or 18 percent of the programs that MDHE identified for review. In ten instances the institutions intend to propose a single new program that effectively replaces two or more deleted programs. The

institutions also moved eight programs to inactive status. (See Table 1.1)

The MDHE examined a total of 438 programs within the four-year sector. Forty-eight programs were set aside, either because they had been approved within the past five years and lacked sufficient time to demonstrate viability, or they had data that had been misreported or miscoded. The MDHE accepted the justifications for maintaining the remaining programs, but recommends that 158 of those programs undergo a follow-up evaluation in three years.

Two-year Institutions

As a result of this academic program

review, two-year institutions identified 46 programs for deletion, or 23.5 percent of the programs that MDHE identified for review. The institutions moved another 16 programs to inactive status. (See Table 1.2)

The MDHE examined a total of 262 programs within the two-year sector. Sixty-six programs were set aside because they were too new to demonstrate viability or reflected incorrect data. The MDHE accepted the justification for maintaining the remaining programs, but recommends that 17 undergo a follow-up review in three years. The reviews for 32 programs are currently incomplete.

Four-year institutions deleted 72 programs or 18 percent of those reviewed; two-year institutions deleted 46 programs or 23.5 percent of those reviewed

| Table 1.1: Summary table for four-year sector | | | | | | |
|---|-----------------------------|----------------------------------|---------------------------------|--------------------------------------|----------------------------|---|
| Institution | Number of programs reviewed | Number of programs to be deleted | Number of proposed new programs | Number of programs to be inactivated | Number of on-going reviews | Number of recommended follow-up evaluations |
| Harris-Stowe State University | 8 | 0 | 0 | 0 | 0 | 6 |
| Lincoln University | 43 | 4 | 0 | 0 | 0 | 27 |
| Missouri Southern State University | 18 | 2 | 0 | 0 | 0 | 6 |
| Missouri State University | 41 | 7 | 1 | 0 | 0 | 20 |
| Missouri University of Science & Technology | 28 | 6 | 0 | 0 | 0 | 7 |
| Missouri Western State University | 19 | 1 | 0 | 0 | 0 | 7 |
| Northwest Missouri State University | 55 | 8 | 0 | 0 | 0 | 39 |
| Southeast Missouri State University | 28 | 4 | 1 | 0 | 0 | 10 |
| Truman State University | 7 | 0 | 0 | 0 | 0 | 3 |
| University of Central Missouri | 28 | 11 | 0 | 0 | 0 | 14 |
| University of Missouri-Columbia | 69 | 19 | 6 | 0 | 0 | 13 |
| University of Missouri-Kansas City | 34 | 5 | 1 | 7 | 0 | 5 |
| University of Missouri-St. Louis | 12 | 5 | 1 | 1 | 0 | 1 |
| Total | 390 | 72 | 10 | 8 | 0 | 158 |

| Table 1.2: Summary table for two-year sector | | | | | |
|--|-----------------------------|----------------------------------|--------------------------------------|------------------------------|---|
| Institution | Number of programs reviewed | Number of programs to be deleted | Number of programs to be inactivated | Number of incomplete reviews | Number of recommended follow-up evaluations |
| Crowder College | 28 | 6 | 0 | 0 | 9 |
| East Central College | 15 | 6 | 0 | 9 | 0 |
| Jefferson College | 10 | 5 | 0 | 0 | 1 |
| Linn State Technical College | 3 | 0 | 1 | 0 | 0 |
| Metropolitan Community College | 23 | 11 | 0 | 0 | 0 |
| Mineral Area College | 7 | 0 | 3 | 0 | 0 |
| Moberly Area Community College | 7 | 0 | 0 | 0 | 3 |
| Missouri State University-West Plains | 10 | 0 | 1 | 7 | 0 |
| North Central Missouri College | 20 | 5 | 5 | 0 | 2 |
| Ozarks Technical College | 3 | 2 | 0 | 0 | 0 |
| St. Charles Community College | 21 | 5 | 0 | 0 | 0 |
| St. Louis Community College | 27 | 1 | 6 | 15 | 1 |
| State Fair Community College | 8 | 3 | 0 | 0 | 0 |
| Three Rivers Community College | 14 | 2 | 0 | 0 | 1 |
| Total | 196 | 46 | 16 | 31 | 17 |

Recommendations and conclusions

1. Improve the productivity of high-priority programs.

Many of the programs that fell below the productivity thresholds were in fields designated as state priorities: STEM (science, technology, engineering and mathematics), foreign language and teacher education. (See Table 1.3) The MDHE

agreed with the institutions' justifications for retaining programs in these key areas as an investment in the state's future growth and development. As such, efforts must continue to strengthen these programs and develop appropriate and effective means of improving their productivity.

| Table 1.3: Low-productivity in high-priority fields | |
|--|--|
| Program area (Two-digit CIP) | Number of baccalaureate programs statewide below threshold |
| Agriculture, Agriculture Operations and Related Services | 10 |
| Computer and Information Sciences and Support Services | 8 |
| Education | 55 |
| Engineering Technologies and Engineering-Related Fields | 10 |
| Foreign Languages, Literatures and Linguistics | 27 |
| Mathematics | 8 |
| Physical Sciences | 16 |
| Health Professions and Related Programs | 16 |

2. Strengthen policies for the review of new program proposals.

All new programs approved by the CBHE should be on probation for five years, with a follow-up review required to remove the probationary status. If the program is not performing as expected or if there are not compelling reasons to continue the program, the CBHE may recommend termination of the program at the end of the five-year period.

3. Develop appropriate reforms in teacher education in collaboration with DESE.

MDHE staff raised particular concerns about the high number of education programs below the degree-appropriate thresholds. (See Table 1.4) It may be timely to conduct a statewide assessment of education programs generally and teacher preparation programs in particular to strengthen both the quality and productivity of the programs. The MDHE stands ready, in collaboration with the Department of Elementary and Secondary Education, to explore and develop appropriate reforms in teacher education programs.

| Table 1.4: Low-productivity in education programs | | | |
|--|---|---|--|
| Program area (by four-digit CIP) | Number of baccalaureate programs in education statewide | Number of baccalaureate programs in education statewide below threshold | Percent of baccalaureate programs in education statewide below threshold |
| All baccalaureate programs in Education | 103 | 55 | 53.4% |
| Programs in Teacher Education and Professional Development, specific levels and methods (1312) | 31 | 7 | 29.2% |
| Programs in Teacher Education and professional development, specific subject areas (1313). | 60 | 43 | 71.6% |

4. Revise and update the policy for the regular review of existing academic programs.

The CBHE has a policy for the review of existing academic programs but it is in need of revision. The CBHE should direct the MDHE, in collaboration with representatives of the state’s public institutions, to revise the policy for the review of existing academic programs. The revised process should examine program value within the context of statewide planning and the efficient use of state resources, and include an annual summary report to the CBHE.

5. Develop a policy for the review of programs in the two-year sector.

The CBHE should authorize the MDHE, in collaboration with representatives of the state’s two-year public institutions, to develop a policy for the review of academic programs in the two-year sector. This policy must account for the unique mission of the community and technical colleges, and the crucial role the sector plays in workforce development, among other issues and concerns.

6. Encourage collaboration for program delivery among institutions, especially in foreign languages.

The CBHE has identified foreign language as a skill “critical to Missouri’s future,” and a state resolution listed foreign language as an indispensable skill for the global workforce. The MDHE applauds the efforts put forth by the institutions to create collaborative programs for the delivery of course content, especially in foreign languages. The MDHE will encourage continued efforts to increase collaboration by facilitating the linkage of need and capacity among institutions.

7. Continue analysis of program duplication.

The governor asked the MDHE to identify duplicative programs as part of this special review. Further engaged discussion is required to define “unnecessary duplication” and to consider factors such as geographic proximity and institutional missions before recommendations can be made. Such discussion must address not only the state’s short-term economic and political situation, but also the long-term health and vitality of the state’s system of higher education. The MDHE will use guidance and expertise from institutional representatives to address the program duplication issue.

8. Conduct follow-up reviews in three years.

MDHE staff recommends that 175 selected programs subjected to this special review undergo a follow-up evaluation in three years. In some cases, this recommendation applies to programs along the margins of efficient productivity. In others, it is intended to assess the effect of development plans to improve the recruitment, retention and matriculation of students within a given program.

The CBHE has identified foreign language as a skill “critical to Missouri’s future.”

Academic Program Review

Governor Jay Nixon, the Coordinating Board for Higher Education (CBHE) and the Missouri Department of Higher Education (MDHE) jointly hosted the Governor's Summit on Higher Education on August 17, 2010. In his remarks at the summit, Governor Nixon identified four main goals in his agenda for higher education, one of which was a statewide review of academic programs. The governor noted specifically that "in 2009, the number of new academic programs launched at our public institutions outpaced discontinued programs" by a significant margin, a pace he characterized as "unsustainable." The governor further declared that "[w]e must take a hard and unsentimental look at all academic programs, and cull those that are of low productivity, low priority or duplicative. We simply cannot afford the luxury of supporting programs that are not connected strategically to state needs and priorities." The governor charged the CBHE and the MDHE to conduct a review of all academic programs in the state's two-year and four-year public institutions of higher education, and report the findings to him by February, 2011.

The governor requested that this review "be informed and guided" by the CBHE's existing policies on program productivity and viability. In adopting the governor's agenda for higher education, the CBHE directed the MDHE to identify those programs "that do not meet published productivity criteria and request that institutions having programs that do not

meet those criteria report on whether those programs will be eliminated, or if to be continued, their justifications for doing so."

The CBHE policy for the review of existing academic programs identifies four broad criteria for assessing programs:

- Contribution of program to institutional mission
- Statewide needs
- Access
- Program expenditures

In 1992, the CBHE adopted more specific criteria for assessing degree programs, standards the board reaffirmed in 1996. According to the criteria, degree programs shall, at a minimum:

- Demonstrate centrality to the sponsoring institution's mission.
- Provide objective evidence of success in addressing statewide needs and/or contributing toward the attainment of statewide goals.

• Maintain a critical mass of majors and graduate annually an average, calculated over the prior three years, of at least 10 majors at the associate or baccalaureate degree level, 5 majors at the master's degree level, and 3 majors at the doctoral degree level, unless there is sufficient justification for exceptions, particularly in the arts and sciences.

- Regularly produce highly qualified graduates as

"We simply cannot afford the luxury of supporting programs that are not connected strategically to state needs and priorities."

demonstrated in the following areas:

- Performance on assessments of general education, including measures of oral and written communication skills and critical thinking;
- Performance on nationally normed tests, licensure or certification examinations, and/or other measures of achievement in the major;
- Average placement rates of those seeking employment which take into account general economic conditions; and
- Alumni and employer satisfaction rates.

A decision to retain or delete a program is complicated by a host of subjective criteria.

MDHE staff used these guidelines and the input of the chief academic officers (CAOs) of the state's four-year public institutions to develop a methodology for conducting the review. Although CBHE policy does not identify specific criteria for

Overview

The MDHE initially identified 438 academic programs that appeared to be below the degree-appropriate level of productivity for the state's four-year public institutions. MDHE staff set aside 48 programs, either because they had been approved within the past five years (and had insufficient time to demonstrate viability) or they had data that had been misreported or miscoded. The institutions identified 72 programs for deletion, 18 percent of the 390 programs below the appropriate productivity thresholds. The MDHE accepted the justifications provided by the institutions for most of the remaining programs.

assessing academic programs in the two-year sector, the MDHE followed a similar process in developing the methodology for reviewing the two-year sector. The resulting methodologies are grounded in existing CBHE policy while taking into account time constraints and limited staff resources for conducting such a review. (See Appendix D for full methodology.)

For both sectors, the MDHE identified programs according to their Classification of Program (CIP) number, and flagged those whose degree production did not meet the minimum for that degree. The institutions

provided justifications for retaining the flagged programs or, in some cases, decided to delete the program from its inventory. In January 2011, MDHE finished reviewing the programs and wrote

summary reports for each institution in both the two-year and four-year sectors. The MDHE shared these reports with the leaders of each institution for comment before the final report was compiled.

The MDHE identified 262 academic programs that fell below the degree-appropriate level of productivity for the state's two-year public institutions. MDHE staff set aside 66 programs, either because they had been approved within the past five years (and had insufficient time to demonstrate viability) or they had data that had been misreported or miscoded. Of these, the institutions identified 46 programs for deletion, 23.5 percent of the 196 programs below the productivity thresholds. The MDHE accepted the justifications provided by the institutions for most of the remaining programs.

A decision to retain or delete a program is complicated by a host of subjective criteria. Some may wonder how a program that produces very few graduates is worth keeping. The institutions made strong cases for many such programs. The physics program at Missouri Southern State University provides a case in point.

Over the past three years, the physics program at Missouri Southern graduated exactly one student each year, well below the minimum threshold of 10 for baccalaureate programs. Missouri Southern vigorously justified the program on the basis that the physics program provides essential support for general education and other academic programs. The physics department faculty has made these service courses a priority, and teach courses specific to the physics

Physics is in the so-called STEM fields, disciplines promoted as keys for building and sustaining a 21st century economy and workforce.

major as overloads because they believe it is the only way to maintain a viable program in the discipline. Physics is in the so-called STEM fields (science, technology, engineering and mathematics), disciplines promoted as keys for building and sustaining a 21st century economy and workforce. Several employers in the region provided letters of support for the physics program,

noting its contribution to the regional economy. In short, Missouri Southern's physics program provides great value to the state and region. Despite producing only one graduate annually, the MDHE agreed with the university's justifications

and recommends the program's continuation. There were numerous examples similar to this from each institution.

Findings and recommendations

1. Improve the productivity of high-priority programs.

Several patterns emerged as a result of this review. Perhaps one of the most alarming is that many of the academic programs that produce few degrees are in areas identified as statewide priorities, such as foreign languages, teacher education and, in particular, the STEM fields. The latter are seen as key to developing a twenty-first century workforce.

Objective 2B in *Imperatives for Change: Building a Higher Education System for the 21st Century* commits the state to increasing the number of degrees and certificates

awarded in STEM-related and health practitioner fields. The High School Core Curriculum recommended by the CBHE includes three units of both mathematics and science.

Table 1.1 shows that nine academic fields had five or more baccalaureate programs statewide that did not reach the productivity thresholds, all but one of which (philosophy) can be characterized as a statewide priority. Table 1.2 identifies broad, high-priority program areas in which there are many baccalaureate programs below the productivity threshold.

| Table 1.1 | | |
|----------------------|-----------------------------|--|
| Six-digit CIP | Program title | Number of baccalaureate programs statewide below productivity threshold |
| 160501 | German | 7 |
| 160901 | French | 9 |
| 160905 | Spanish | 5 |
| 270101 | Mathematics | 5 |
| 380101 | Philosophy | 5 |
| 400501 | Chemistry | 5 |
| 400601 | Earth Sciences | 6 |
| 400801 | Physics | 5 |
| 511005 | Clinical Laboratory Science | 7 |

| Table 1.2 | | |
|----------------------|---|---|
| Two-digit CIP | Program area | Number of baccalaureate programs statewide below threshold |
| 11 | Computer and Information Sciences and Support Services | 8 |
| 13 | Education | 63 |
| 15 | Engineering Technologies and Engineering-Related Fields | 10 |
| 16 | Foreign Languages, Literatures and Linguistics | 27 |
| 27 | Mathematics | 8 |
| 40 | Physical Sciences | 16 |
| 51 | Health Professions and Related Programs | 16 |

The MDHE agreed with the institutions' justifications for retaining programs in these key areas as an investment in the state's future growth and development. As such, efforts must continue to strengthen these programs and develop appropriate and effective means of improving their productivity.

2. Strengthen policies for the review of new program proposals.

In setting forth his agenda for higher education, Governor Nixon noted that more programs were being added to the state's academic program inventory than were being deleted. The CBHE has statutory responsibility for approving new academic programs, and has clear policy guidelines that include expected productivity and costs to the state. The authority to eliminate a program, however, resides in an institution's governing body. The CBHE can do more to assure that new programs are cost-effective and productive in meeting statewide priorities.

The MDHE recommends that new academic programs, if approved by the CBHE, should be placed on probation for five years, with a follow-up review required before removing the probationary status. If the program is not performing as expected

or if there are not compelling reasons to continue the program, the CBHE may recommend termination at the end of the five-year period.

3. Develop appropriate reforms in teacher education in collaboration with DESE.

There are 455 programs statewide reported under the broad area of Education, the single largest program category for the four-year public institutions. Education programs account for nearly one-quarter of all academic programs statewide and two-and-one-half times more than the second largest category (Health Professions). Programs in Educational Administration account for more than 20 percent of all academic programs in Education.

MDHE staff raised particular concerns about the high number of education programs below the degree-appropriate thresholds. (See Table 1.3) It may be timely to conduct a statewide assessment of education programs generally and teacher preparation programs in particular to strengthen their quality and productivity. The MDHE

stands ready, in collaboration with the Department of Elementary and Secondary Education, to explore and develop appropriate reforms in teacher education programs.

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| Table 1.4: Low-productivity in education programs | | | |
|--|---|---|--|
| Program area (by four-digit CIP) | Number of baccalaureate programs in education statewide | Number of baccalaureate programs in education statewide below threshold | Percent of baccalaureate programs in education statewide below threshold |
| All baccalaureate programs in Education | 103 | 55 | 53.4% |
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| Programs in Teacher Education and professional development, specific subject areas (1313). | 60 | 43 | 71.6% |

The large number of education programs flagged for this review presents an opportunity to devote more state resources to areas defined as “critical” or “statewide” priorities, such as STEM teaching fields, and to encourage greater coordination between the P-12 and higher education sectors. There may be other opportunities as well, such as rethinking professional development for P-12 teachers and innovations in P-12 education delivery.

4. Revise and update the policy for the regular review of existing academic programs.

The CBHE has a policy for the review of existing academic programs but it is in need of revision. In past years, the institutions submitted annual reports on program review to the MDHE. This requirement was suspended several years ago while the MDHE and the institutions worked together to streamline the process and minimize duplication of effort. For many reasons, that initiative was never completed.

The CBHE should direct the MDHE, in collaboration with representatives of the state’s public institutions, to revise the policy for the review of existing academic programs. The revised process should examine program value within the context of

statewide planning and the efficient use of state resources, and include an annual summary report to the CBHE.

5. Develop a policy for the review of programs in the two-year sector.

The two-year sector had fewer programs identified for further review than did the four-year sector. As the CBHE’s policy for program review was written primarily with the four-year institutions in mind, it is likely that the methodology used for this review does not account fully for the various means of measuring program productivity within the two-year sector.

The MDHE recommends that the CBHE should authorize the MDHE, in collaboration with representatives of the state’s two-year public institutions, to develop guidelines to review academic programs in the two-year sector that account for the unique mission of the community

The CBHE should ... revise the policy for review of existing academic programs.

and technical colleges, and the crucial role the sector plays in workforce development.

6. Encourage collaboration for program delivery among institutions, especially in foreign languages.

The CBHE has identified foreign language as a skill “critical to Missouri’s future” and “strongly recommends” that high school students complete at least two units of a foreign language as an elective. The Missouri legislature in 2010 passed a resolution that encouraged higher education to “emphasize international education, including foreign language instruction and study abroad, in order to ensure graduates have the cross-cultural skills necessary to function effectively in the global workforce.”

The MDHE applauds the efforts put forth by the institutions to create collaborative programs for the delivery of course content, especially in foreign languages. The MDHE will encourage and facilitate continued efforts to increase collaboration among the institutions in achieving statewide priorities by facilitating the linkage of need and capacity among institutions.

The MDHE applauds the efforts put forth by the institutions to create collaborative programs.

7. Analyze program duplication.

As part of its statutory responsibility, the Coordinating Board for Higher Education reviews academic programs to ensure that there is no “unnecessary duplication” of academic programs and state resources are used efficiently. Needless to say, there is significant duplication of academic programs among Missouri’s 13 four-year public institutions of higher education, which collectively number nearly 1,900 programs distributed among 28 two-digit CIP codes. At one end of the spectrum is Harris-Stowe State University, which offers 14 academic programs, while at the other is the University of Missouri-Columbia with more than 300 programs.

Some program duplication is warranted, such as general education programs common to all institutions of higher education. Determining what constitutes “unnecessary duplication” is subjective, as there is no policy or precedent to use as a guide. Many of the general education programs flagged for further analysis are duplicated programs, yet eliminating them would restrict access to higher education for many Missourians.

The MDHE’s analysis of the program inventory of the state’s public four-year institutions of higher education, using broad, two-digit CIP categories, has identified several program areas that *may be* unnecessarily duplicative. Table 1.4 lists discipline areas in which there are at least five baccalaureate programs statewide below the productivity threshold. Additional review will be necessary, however, to determine if these programs are unnecessarily duplicative.

| Table 1.4: Low-productivity and duplication in broad program disciplines, four-year sector | | |
|--|--|--|
| Two-digit CIP | Program area | Number of baccalaureate programs statewide below threshold |
| 01 | Agriculture, Agriculture Operations and Related Services | 10 |
| 11 | Computer and Information Sciences and Support Services | 8 |
| 13 | Education | 63 |
| 15 | Engineering Technologies and Engineering-Related Fields | 10 |
| 16 | Foreign Languages, Literatures and Linguistics | 27 |
| 23 | English Language and Literature | 5 |
| 27 | Mathematics | 8 |
| 30 | Multi/Interdisciplinary Studies | 6 |
| 38 | Philosophy and Religious Studies | 5 |
| 40 | Physical Sciences | 16 |
| 45 | Social Sciences | 15 |
| 50 | Visual and Performing Arts | 21 |
| 51 | Health Professions and Related Programs | 16 |
| 52 | Business, Management, Marketing and Related Support Services | 11 |

The issue of low-productivity and duplication is less pronounced in the two-year sector, although, as with the four-year

sector, areas of concern fall in the category of statewide priorities.

| Table 1.5: Low-productivity and duplication in broad program disciplines, two-year sector | | |
|---|---|--|
| Two-digit CIP | Program title | Number of programs statewide below threshold |
| 11 | Computer and Information Sciences and Support Services | 25 |
| 15 | Engineering Technologies and Engineering-Related Fields | 45 |
| 51 | Health Professions and Related Programs | 25 |

The MDHE has gone as far as it can in reviewing program duplication without further engagement with the institutions and

other stakeholders. There needs to be agreement on what constitutes “unnecessary duplication” and to what extent such factors

as geographic proximity and institutional missions should be taken into account, if at all. The MDHE needs the guidance and expertise that the institutional representatives can provide in addressing these and other issues.

8. Conduct follow-up evaluations in three years.

The MDHE recommends follow-up evaluation in three years of 175 selected programs (158 programs in the four-year sector and 17 programs in the two-year sector). In some cases this recommendation

Conclusion

This special review of academic programs provided valuable insights into higher education in Missouri. It identified high priority but low-producing programs in foreign languages, teacher education and STEM fields that should be strengthened for the state to fulfill projected work force needs, grow economically and compete globally. It afforded new opportunities for institutions to collaborate on academic program delivery, and this collaboration will continue. It also identified the need for new

applies to programs whose low-degree production might be an aberration or explained by the recent economic downturn. For other programs, the follow-up is intended to assess the effectiveness of strategic plans developed by the institutions to improve student retention and degree production. For still others, the intent of the follow-up is to examine the effectiveness of novel approaches to low degree productivity, with the expectation that successful approaches might be exported to other institutions and other programs.

policies and processes to promote the efficient use of state resources while maintaining academic quality on campuses statewide.

The Coordinating Board for Higher Education, and its administrative arm, the Missouri Department of Higher Education, seek to promote a more robust, efficient and accountable system of higher education for Missouri. Academic program review will continue to be one of the policy tools used by the CBHE to accomplish this goal.

###

**Institutional
Summary
Reports**

4-year Sector

HARRIS-STOWE STATE UNIVERSITY
Statewide Review of Academic Programs

Summary Report

MDHE staff identified eight programs that fell below the degree-appropriate productivity threshold. The MDHE asked officials at Harris-Stowe State University to provide justifications for these programs:

| Programs identified for further review | | |
|--|--|---|
| Degree level | Program name | Average annual number of graduates for three previous years |
| Baccalaureate | Early Childhood Education | 6.7 |
| Baccalaureate | Health Care Management | 4.3 |
| Baccalaureate | Hospitality & Tourism Management | 2.0 |
| Baccalaureate | Information Sciences and Computer Technology | 5.3 |
| Baccalaureate | Middle School/Junior High School Education | 2.3 |
| Baccalaureate | Professional Interdisciplinary Studies | 6.3 |
| Baccalaureate | Secondary Education | 9.0 |
| Baccalaureate | Urban Education | 4.7 |
| Total | 8 | |

Harris-Stowe State University did not identify any programs for deletion or inactivation.

MDHE staff accepted the justifications provided by Harris-Stowe State University for the programs listed in the table below.

| Program justifications accepted by MDHE | | |
|--|--------|---|
| Program title | Degree | Brief summary of justifications |
| Information Sciences/Computer Technology | BS | <ul style="list-style-type: none"> • Mission critical • Supports other programs • Underserved access • Unique need • Other: Development plan |
| Professional Interdisciplinary Studies | BS | <ul style="list-style-type: none"> • Mission critical • Supports other programs • Interdisciplinary • Underserved access |

MDHE staff recommends that the programs listed below be retained and undergo a follow-up review in three year.

| Program recommended for follow-up review in three years | | |
|---|--------|---|
| Program title | Degree | Brief summary of justifications |
| Health Care Management | BS | <ul style="list-style-type: none"> • Mission critical • Supports other programs • Underserved access • Unique need • Other: Development plan |
| Urban Education | BS | <ul style="list-style-type: none"> • Mission critical • Underserved access |
| Early Childhood | BS | <ul style="list-style-type: none"> • Mission critical • Shared courses/faculty • Demand • Underserved access • Unique need |
| Middle School/Junior High School | BS | <ul style="list-style-type: none"> • Mission critical • Shared courses/faculty • Underserved access |
| Secondary Education | BS | <ul style="list-style-type: none"> • Mission critical • Shared courses/faculty • Underserved access |
| Hospitality and Tourism Management | BS | <ul style="list-style-type: none"> • Mission critical • Shared courses/faculty • Underserved access • Unique need • Increased demand |

MDHE staff raised particular concerns about several programs. Hospitality and Tourism Management has averaged about 6.7 majors and about 1.0 graduate over the past nine years (2.0 over the past three years). The institution believes that the demand for employment in the hospitality industry will increase in the next several years. Given the limitations of the current review, the MDHE does not recommend outright elimination now. The MDHE does recommend, however, that the governing board of Harris-Stowe State University thoroughly assess the viability and cost effectiveness of the program to determine if it should be retained.

MDHE staff also has concerns about Harris-Stowe State University's education programs. As education programs at other institutions face challenges similar to Harris-Stowe's, it may be timely to conduct a statewide assessment of education programs generally and teacher preparation programs in particular. At this time, however, the MDHE does not recommend the outright elimination of these programs.

LINCOLN UNIVERSITY
Statewide Review of Academic Programs

Summary Report

MDHE staff identified 51 programs as falling below the appropriate degree productivity threshold. Seven programs should not have been included in the list, either because they had been approved within the past five years (and have not had sufficient time to demonstrate viability) or whose data had been misreported or miscoded.

The MDHE requested officials at Lincoln University to provide justifications for the following 44 programs:

| Programs identified for further review | | |
|--|--------------------------------------|--|
| Degree level | Program name | Average number of graduates for three previous years |
| Associate | Administration and Office Management | 1.0 |
| Associate | Computer Science | 1.3 |
| Associate | Criminal Justice | 1.5 |
| Associate | Drafting Technology | 5.0 |
| Associate | Early Childhood Care and Education | 4.0 |
| Associate | Pre-Engineering | 1.3 |
| Baccalaureate | Accounting | 8.0 |
| Baccalaureate | Agribusiness | 1.3 |
| Baccalaureate | Agriculture | 8.7 |
| Baccalaureate | Applied Science in Technology | None |
| Baccalaureate | Biology | 8.3 |
| Baccalaureate | Chemistry | 1.5 |
| Baccalaureate | Civil Engineering Technology | 5.0 |
| Baccalaureate | Economics | None |
| Baccalaureate | English | 2.7 |
| Baccalaureate | Fine/Studio Arts | 4.0 |
| Baccalaureate | History | 5.7 |
| Baccalaureate | Mathematics | 3.0 |
| Baccalaureate | Medical Technology | 1.0 |
| Baccalaureate | Middle School Education | 1.0 |
| Baccalaureate | Physics | 1.0 |
| Baccalaureate | Political Science | 6.3 |
| Baccalaureate | Public Administration | None |
| Baccalaureate | Sacred Music | 3.0 |
| Baccalaureate | Art Education | 2.0 |
| Baccalaureate | Biology Education | None |
| Baccalaureate | Business Education | 2.0 |
| Baccalaureate | Chemistry Education | None |

| | | |
|---------------|---------------------------------------|------|
| Baccalaureate | English Education | None |
| Baccalaureate | Mathematics Education | None |
| Baccalaureate | Music Education | 1.0 |
| Baccalaureate | Physical Education | 2.0 |
| Baccalaureate | Physics Education | None |
| Baccalaureate | Social Science Education | 2.3 |
| Baccalaureate | Sociology | 7.0 |
| Baccalaureate | Spanish | 2.7 |
| Baccalaureate | Special Education | 6.7 |
| Baccalaureate | Wellness | 5.7 |
| Ed.Sp. | Educational Leadership | 4.0 |
| Masters | History | 4.0 |
| Masters | School Administration and Supervision | 4.0 |
| Masters | Social Science | 1.0 |
| Masters | Sociology | 3.0 |
| TOTAL | 44 | |

Of these, Lincoln identified five for deletion.

| Programs identified by institution for deletion | |
|---|--------------------------------------|
| Degree level | Program name |
| Associate | Administration and Office Management |
| Baccalaureate | Accounting |
| Baccalaureate | Applied Science in Technology |
| Baccalaureate | Economics |
| Masters | Social Science |

MDHE staff accepted the justifications provided by Lincoln for the programs listed in the table below.

| Program justifications accepted by MDHE | | |
|---|--------|--|
| Program title | Degree | Brief summary of justifications |
| Computer Science | AAS | <ul style="list-style-type: none"> Shared courses/faculty |
| Criminal Justice | AA | <ul style="list-style-type: none"> Shared courses/faculty |
| Drafting Technology | AAS | <ul style="list-style-type: none"> Shared courses/faculty Other: Development plan |
| Pre-Engineering | AAS | <ul style="list-style-type: none"> Interdisciplinary Shared courses/faculty Underserved access Other: Development plan |
| English | BA | <ul style="list-style-type: none"> Mission critical, supports other programs Shared courses/faculty Unique need Other: revenue-producing program |

| | | |
|------------------------|-------|--|
| Fine/Studio Arts | BA | <ul style="list-style-type: none"> • Mission critical • Supports other programs • Interdisciplinary • Underserved access • Other: Development plan, revenue-producing program, collaboration with community |
| Public Administration | BS | <ul style="list-style-type: none"> • Unique need |
| Sociology | BA/BS | <ul style="list-style-type: none"> • Mission critical • Supports other programs • Interdisciplinary • Shared courses/faculty • Underserved access • Unique need |
| Special Education | BS Ed | <ul style="list-style-type: none"> • Supports other programs • Shared courses/faculty • Unique need |
| Educational Leadership | EdS | <ul style="list-style-type: none"> • Mission critical • Shared courses/faculty • Demand • Underserved access • Unique need • Other: Development plan |
| Sociology | MA | <ul style="list-style-type: none"> • Mission critical • Interdisciplinary • Shared courses/faculty • Underserved access |

MDHE staff recommends that the 17 programs listed below be retained and undergo a follow-up review in three years.

| Programs recommended for follow-up review in three years | | |
|--|--------|--|
| Program title | Degree | Brief summary of justifications |
| Early Childhood Care and Education | AAS | <ul style="list-style-type: none"> • Supports other programs • Shared courses/faculty • Underserved access • Unique need • Other: collaborative program with early head start |
| Agribusiness | BS | <ul style="list-style-type: none"> • Mission critical • Underserved access • Unique need |
| Agriculture | BS | <ul style="list-style-type: none"> • Mission critical • Demand • Underserved access |
| Biology | BS | <ul style="list-style-type: none"> • Mission critical • Supports other programs • Demand |
| Chemistry | BS | <ul style="list-style-type: none"> • Mission critical • Demand • Underserved access |
| Civil Engineering Technology | BS | <ul style="list-style-type: none"> • Mission critical • Supports other programs • Shared courses/faculty • Unique need |

| | | |
|---------------------------------------|-------|--|
| | | <ul style="list-style-type: none"> • Other: Development plan |
| History | BA | <ul style="list-style-type: none"> • Supports other programs • Shared courses/faculty • Unique need |
| Mathematics | BA/BS | <ul style="list-style-type: none"> • Mission critical • Supports other programs • Demand • Underserved access • Unique need |
| Medical Technology | BS | <ul style="list-style-type: none"> • Demand • Other: Caring for Missourians Initiative |
| Middle School Education | BS Ed | <ul style="list-style-type: none"> • Shared courses/faculty • Other: Development plan |
| Physics | BS | <ul style="list-style-type: none"> • Mission critical • Supports other programs • Demand |
| Political Science | BA | <ul style="list-style-type: none"> • Mission critical • Supports other programs • Underserved access • Other: Development plan |
| Sacred Music | BA | <ul style="list-style-type: none"> • Mission critical • Supports other programs • Shared courses/faculty • Underserved access |
| Spanish | BA | <ul style="list-style-type: none"> • Mission critical • Supports other programs • Demand • Unique need • Other: potential for collaborative program |
| Wellness | BS | <ul style="list-style-type: none"> • Mission critical • Supports other programs • Shared courses/faculty • Underserved access • Other: Development plan |
| History | MA | <ul style="list-style-type: none"> • Shared courses/faculty • Demand • Unique need |
| School Administration and Supervision | M Ed | <ul style="list-style-type: none"> • Shared courses/faculty • Demand • Underserved access • Unique need • Other: Development plan |

MDHE staff has particular concerns about Lincoln University’s programs in Secondary Education. All of the Secondary Education programs combined have averaged less than 10 graduates annually for the past three years.

| Programs of concern | | |
|---|--------|--|
| Program title | Degree | Average number of graduates for three previous years |
| Art Education | BS Ed | 2.0 |
| Biology Education | BS Ed | None |
| Business Education | BS Ed | 2.0 |
| Chemistry Education | BS Ed | None |
| English Education | BS Ed | None |
| Mathematics Education | BS Ed | None |
| Music Education | BS Ed | 1.0 |
| Physical Education | BS Ed | 2.0 |
| Physics Education | BS Ed | None |
| Social Science Education | BS Ed | 2.3 |
| Total graduates for all Secondary Education programs | | 9.3 |

Moreover, in many cases both the education program and the companion content program (i.e., English Education and English, or Chemistry Education and Chemistry) are below the productivity thresholds.

| Program name | Average number of graduates for three previous years | Total graduates for education program and content program |
|-----------------------|--|---|
| Biology Education | None | 8.3 |
| Biology | 8.3 | |
| Chemistry Education | None | 1.5 |
| Chemistry | 1.5 | |
| English Education | None | 2.7 |
| English | 2.7 | |
| Art Education | 2.0 | 6.0 |
| Fine/Studio Arts | 4.0 | |
| Mathematics Education | None | 3.0 |
| Mathematics | 3.0 | |
| Physics Education | None | 1.0 |
| Physics | 1.0 | |

As education programs at other institutions face challenges similar to Lincoln's, it may be timely to conduct a statewide assessment of education programs generally and teacher preparation programs in particular. At this time, however, the MDHE does not recommend the outright elimination of these programs.

MISSOURI SOUTHERN STATE UNIVERSITY
Statewide Review of Academic Programs

Summary Report

MDHE staff identified 20 programs that fell below the productivity threshold. Two programs (Nursing and Criminal Justice) should not have been included in the list, because they were approved within the past five years and has not had sufficient time to demonstrate viability.

The MDHE asked officials at Missouri Southern State University to provide justifications for these programs:

| Programs identified for further review | | |
|--|---------------------------------|---|
| Degree level | Program name | Average annual number of graduates for three previous years |
| Associate | Computer Assisted Manufacturing | 6.3 |
| Associate | Computer Information Science | 9.7 |
| Associate | Radiologic Technology | 8.0 |
| Baccalaureate | Chemistry | 2.0 |
| Baccalaureate | Environmental Health | 7.7 |
| Baccalaureate | French | 1.5 |
| Baccalaureate | German | 3.0 |
| Baccalaureate | History | 3.7 |
| Baccalaureate | International Studies | 3.3 |
| Baccalaureate | Justice Studies | None |
| Baccalaureate | Management Technology | 3.0 |
| Baccalaureate | Mathematics | 4.7 |
| Baccalaureate | Medical Technology | 2.0 |
| Baccalaureate | Middle School Education | 3.7 |
| Baccalaureate | Music | 4.0 |
| Baccalaureate | Physics | 1.0 |
| Baccalaureate | Theatre | 2.3 |
| Masters | Dental Hygiene | None |
| TOTAL | 18 | |

Of these, Missouri Southern State University identified two programs for deletion.

| Programs identified by institution for deletion | |
|---|-----------------------|
| Degree level | Program name |
| Baccalaureate | Justice Studies |
| Baccalaureate | Management Technology |

MDHE staff accepted the justifications provided by Missouri Southern for the programs listed in the table below.

| Program justifications accepted by MDHE | | |
|---|--------|--|
| Program title | Degree | Brief summary of justifications |
| Computer Assisted Manufacturing | AS | <ul style="list-style-type: none"> • Supports other programs • Shared courses/faculty • Unique need |
| Radiologic Technology | AS | <ul style="list-style-type: none"> • Mission critical • Demand • Unique need |
| Chemistry | BS, BA | <ul style="list-style-type: none"> • Mission critical • Supports other programs |
| History | BA | <ul style="list-style-type: none"> • Mission critical • Supports other programs |
| International Studies | BA | <ul style="list-style-type: none"> • Mission critical |
| Mathematics | BS | <ul style="list-style-type: none"> • Mission critical • Supports other programs • Interdisciplinary |
| Music | BA | <ul style="list-style-type: none"> • Supports other programs |
| Physics | BS | <ul style="list-style-type: none"> • Shared courses/faculty |
| Theatre | BA | <ul style="list-style-type: none"> • Mission critical • Supports other programs |
| Dental Hygiene | MS | <ul style="list-style-type: none"> • Student demand • Consortium |

MDHE staff recommends that the programs listed below be retained and undergo a follow-up evaluation in three years.

| Programs recommended for follow-up evaluation in three years | | |
|--|--------|--|
| Program title | Degree | Brief summary of justifications |
| Computer Information Science | AS | <ul style="list-style-type: none"> • Shared courses/faculty • Other: New data |
| Environmental Health | BS | <ul style="list-style-type: none"> • Unique need |
| German | BA | <ul style="list-style-type: none"> • Mission critical • Supports other programs • Interdisciplinary • Underserved access • Other: Collaborative possibility |
| French | BA | <ul style="list-style-type: none"> • Mission critical • Supports other programs • Interdisciplinary • Underserved access • Other: Collaborative possibility |
| Medical Technology | BS | <ul style="list-style-type: none"> • Unique need |
| Middle School Education | BS Ed | <ul style="list-style-type: none"> • Mission critical • Supports other programs • Shared courses/faculty • Unique need • Other |

MDHE staff has particular concerns about the Middle School Education program. As education programs at other institutions face challenges similar to Missouri Southern's, it may be timely to conduct a statewide assessment of education programs generally and teacher preparation programs in particular.

| Program of concern | | |
|-------------------------|--------|---|
| Program title | Degree | Average annual number of graduates for three previous years |
| Middle School Education | BS Ed | 3.7 |

MISSOURI STATE UNIVERSITY
Statewide Review of Academic Programs

Summary Report

MDHE staff identified 45 programs that fell below the productivity threshold. Four programs (Applied Anthropology, Project Management, Early Childhood & Family Development, and Global Studies) should not have been included in the list, because they had been approved within the past five years and have not had sufficient time to demonstrate viability.

The MDHE asked officials at Missouri State University to provide justifications for these programs:

| Programs identified for further review | | |
|--|---|---|
| Degree level | Program name | Average annual number of graduates for three previous years |
| Baccalaureate | Agricultural Education | 6.3 |
| Baccalaureate | Agronomy | 7.0 |
| Baccalaureate | Antiquities | 6.0 |
| Baccalaureate | Art History (collab. w/ Drury Univ.) | 2.7 |
| Baccalaureate | Biology Education | 8.7 |
| Baccalaureate | Business Education | 6.3 |
| Baccalaureate | Chemistry Education | 2.7 |
| Baccalaureate | Clinical Laboratory Sciences - Medical Tech | 2.0 |
| Baccalaureate | Dance | 5.0 |
| Baccalaureate | Earth Science Education | 3.0 |
| Baccalaureate | Emerging Technologies Management | 9.3 |
| Baccalaureate | Engineering Physics | 2.0 |
| Baccalaureate | French | 2.0 |
| Baccalaureate | French | 6.7 |
| Baccalaureate | Geology | 9.3 |
| Baccalaureate | Geospatial Sciences | 4.3 |
| Baccalaureate | German | 1.0 |
| Baccalaureate | German | 2.3 |

| | | |
|---------------|--|------|
| Baccalaureate | Gerontology | 5.0 |
| Baccalaureate | Horticulture | 8.7 |
| Baccalaureate | Latin | 1.5 |
| Baccalaureate | Latin Education | 2.0 |
| Baccalaureate | Mathematics | 8.7 |
| Baccalaureate | Music | 4.5 |
| Baccalaureate | Musical Theatre | 8.0 |
| Baccalaureate | Philosophy | 7.7 |
| Baccalaureate | Physics | 4.7 |
| Baccalaureate | Physics Education | 1.3 |
| Baccalaureate | Public Administration | 4.3 |
| Baccalaureate | Respiratory Therapy | 3.5 |
| Baccalaureate | Spanish Education | 6.3 |
| Baccalaureate | Speech & Theatre Education | 9.0 |
| Baccalaureate | Technology Education | 1.5 |
| Masters | Cell and Molecular Biology | 3.3 |
| Masters | Chemistry | 4.7 |
| Masters | Engineering Management | None |
| Masters | Geospatial Sciences in Geography and Geology | 3.7 |
| Masters | Materials Science | 4.7 |
| Masters | Mathematics | 3.3 |
| Masters | Plant Science | 3.0 |
| Masters | Theatre | 3.0 |
| Total | 41 | |

Of these, Missouri State University identified seven programs for deletion.

| Programs identified by institution for deletion | |
|---|----------------------------------|
| Degree level | Program name |
| Baccalaureate | Antiquities |
| Baccalaureate | Dance |
| Baccalaureate | Emerging Technologies Management |
| Baccalaureate | Engineering Physics |
| Baccalaureate | Public Administration |
| Baccalaureate | Technology Education |
| Masters | Engineering Management |

Although Missouri State University intends to delete the Antiquities program, it also intends to submit a proposal for a new program in Classics with concentrations available in Latin and Antiquities.

MDHE staff accepted the justifications provided by Missouri State University for the programs listed in the table below.

| Program justifications accepted by MDHE | | |
|---|--------|--|
| Program title | Degree | Brief summary of justifications |
| Art History (collab. w/ Drury Univ.) | BA | <ul style="list-style-type: none"> • Supports other programs • Shared courses/faculty • Other: Development plan |
| Clinical Laboratory Sciences - Medical Tech | BS | <ul style="list-style-type: none"> • Shared courses/faculty • Demand • Other: Unique program; meets regional need |
| French | BA | <ul style="list-style-type: none"> • Supports other programs • Shared courses/faculty • Other: Curriculum revisions, potential for collaboration |
| Geology | BS | <ul style="list-style-type: none"> • Supports other programs • Other: Most recent graduate data meets productivity threshold for three years |
| Geospatial Sciences | BS | <ul style="list-style-type: none"> • Shared courses/faculty |
| German | BA | <ul style="list-style-type: none"> • Supports other programs • Shared courses/faculty • Other: Curriculum revisions, potential for collaboration |
| Gerontology | BS | <ul style="list-style-type: none"> • Unique need • Other: Development plan |
| Latin | BA | <ul style="list-style-type: none"> • Supports other programs • Shared courses/faculty • Other: Create new degree in classics - combine antiquities and Latin programs |

| | | |
|--|--------|---|
| Music | BA | <ul style="list-style-type: none"> • Supports other programs • Shared courses/faculty • Other: Supports other productive programs |
| Philosophy | BA, BS | <ul style="list-style-type: none"> • Mission critical • Supports other programs • Other: Development plan |
| Respiratory Therapy | BS | <ul style="list-style-type: none"> • Shared courses/faculty • Other: Development plan |
| Geospatial Sciences in Geography and Geology | MS | <ul style="list-style-type: none"> • Demand • Unique need • Other: Development plan |
| Materials Science | MS | <ul style="list-style-type: none"> • Demand • Unique need • Other: Development plan |
| Plant Science | MS | <ul style="list-style-type: none"> • Interdisciplinary • Demand • Unique need • Other: Development plan, collaboration with institutions in China |

MDHE staff recommends that the programs listed below be retained and undergo a follow-up review in three years.

| Programs recommended for follow-up review in three years | | |
|--|--------|---|
| Program title | Degree | Brief summary of justifications |
| Agricultural Education | BS Ed | <ul style="list-style-type: none"> • Shared courses • Other: Internal review |
| Agronomy | BS | <ul style="list-style-type: none"> • Other: Past performance; development plan; curricular changes |
| Horticulture | BS | <ul style="list-style-type: none"> • Other: Development plan; curricular changes |
| Musical Theatre | BFA | <ul style="list-style-type: none"> • Interdisciplinary • Shared courses/faculty • Unique need • Other: Development plan |
| Physics | BS | <ul style="list-style-type: none"> • Supports other programs • Other: Curricular redesign; development plan. |
| Cell and Molecular Biology | MS | <ul style="list-style-type: none"> • Demand • Other: Development plan |
| Chemistry | MS | <ul style="list-style-type: none"> • Demand • Unique need • Other: Development plan; funding opportunities |
| Mathematics | MS | <ul style="list-style-type: none"> • Shared courses/faculty • Other: Development plan |
| Theatre | MA | <ul style="list-style-type: none"> • Unique need |
| Biology Education | BS Ed | <ul style="list-style-type: none"> • Shared courses • Other: Internal review |
| Chemistry Education | BS Ed | <ul style="list-style-type: none"> • Shared courses • Other: Internal review |
| Earth Science Education | BS Ed | <ul style="list-style-type: none"> • Shared courses • Other: Internal review |
| Physics Education | BS Ed | <ul style="list-style-type: none"> • Shared courses • Other: Internal review |

| | | |
|----------------------------|-------|--|
| French Education | BS Ed | <ul style="list-style-type: none"> • Shared courses • Other: Internal review |
| Spanish Education | BA | <ul style="list-style-type: none"> • Shared courses • Other: Internal review |
| Speech & Theatre Education | BS Ed | <ul style="list-style-type: none"> • Shared courses • Other: Internal review |
| Latin Education | BS Ed | <ul style="list-style-type: none"> • Shared courses • Other: Internal review |
| Mathematics Education | BS Ed | <ul style="list-style-type: none"> • Shared courses • Other: Internal review |
| German Education | BS Ed | <ul style="list-style-type: none"> • Shared courses • Other: Internal review |
| Business Education | BS Ed | <ul style="list-style-type: none"> • Shared courses • Other: Internal review |

MDHE staff has particular concerns about Missouri State's programs in Secondary Education. As education programs at other institutions face challenges similar to Missouri State's, it may be timely to conduct a statewide assessment of education programs generally and teacher preparation programs in particular. At this time, however, the MDHE does not recommend the outright elimination of these programs.

| Programs of concern | | |
|----------------------------|--------|---|
| Program title | Degree | Average annual number of graduates for three previous years |
| Biology Education | BS ED | 8.7 |
| Chemistry Education | BS ED | 2.7 |
| Earth Science Education | BS ED | 3.0 |
| Physics Education | BS ED | 1.3 |
| French Education | BS ED | 2.0 |
| Spanish Education | BA | 6.3 |
| Speech & Theatre Education | BS ED | 9.0 |
| Latin Education | BS ED | 2.0 |
| Mathematics Education | BS ED | 8.7 |
| German Education | BS ED | 1.0 |
| Business Education | BS ED | 6.3 |

MISSOURI UNIVERSITY OF SCIENCE & TECHNOLOGY
Statewide Review of Academic Programs

Summary Report

MDHE staff identified 29 programs that fell below the degree-appropriate productivity threshold. One program (Explosives Engineering) should not have been included in the list, because it had been approved within the past five years and has not had sufficient time to demonstrate viability.

The MDHE requested officials at Missouri University of Science & Technology to provide justifications for these programs:

| Programs identified for further review | | |
|---|-------------------------------|---|
| Degree level | Program name | Average number of graduates for three previous years |
| Baccalaureate | Chemistry | 7.7 |
| Baccalaureate | English | 8.0 |
| Baccalaureate | Interdisciplinary Engineering | None |
| Baccalaureate | Nursing (coop with UMSL) | None |
| Baccalaureate | Petroleum Engineering | 9.0 |
| Baccalaureate | Philosophy | 1.0 |
| Masters | Applied Mathematics | 4.3 |
| Masters | Ceramic Engineering | 2.0 |
| Masters | Earth Sciences | None |
| Masters | Engineering Mechanics | 3.3 |
| Masters | Mathematics | 2.3 |
| Masters | Metallurgical Engineering | 3.3 |
| Masters | Mining Engineering | 3.7 |
| Masters | Nuclear Engineering | 3.0 |
| Masters | Petroleum Engineering | 3.7 |
| Doctoral | Aerospace Engineering | 1.0 |
| Doctoral | Chemical Engineering | 2.5 |
| Doctoral | Computer Engineering | 2.5 |
| Doctoral | Computer Science | 2.3 |
| Doctoral | Engineering Mechanics | None |
| Doctoral | Geological Engineering | 1.5 |
| Doctoral | Geology and Geophysics | 2.5 |
| Doctoral | Mathematics | 2.7 |
| Doctoral | Metallurgical Engineering | 1.0 |
| Doctoral | Mining Engineering | 2.7 |
| Doctoral | Nuclear Engineering | None |
| Doctoral | Petroleum Engineering | None |
| Doctoral | Physics (coop with UMSL) | 2.7 |
| Total | 28 | |

Of these, Missouri University of Science and Technology identified six programs for deletion.

| Programs identified by institution for deletion | |
|---|-------------------------------|
| Degree level | Program name |
| Baccalaureate | Chemistry |
| Baccalaureate | Interdisciplinary Engineering |
| Baccalaureate | Nursing (coop with UMSL) |
| Masters | Engineering Mechanics |
| Masters | Earth Sciences |
| Doctoral | Engineering Mechanics |

MDHE staff accepted the justifications provided by Missouri University of Science and Technology for the programs listed in the table below.

| Program justifications accepted by MDHE | | |
|---|--------|--|
| Program title | Degree | Brief summary of justifications |
| English | BA | <ul style="list-style-type: none"> • Mission critical • Supports other programs • Underserved access |
| Petroleum Engineering | BS | <ul style="list-style-type: none"> • Mission critical • Shared courses/faculty • Other: Development plan |
| Ceramic Engineering | MS | <ul style="list-style-type: none"> • Mission critical • Shared courses/faculty • Demand • Unique need |
| Mathematics | MST | <ul style="list-style-type: none"> • Shared courses/faculty • Underserved access |
| Metallurgical Engineering | MS | <ul style="list-style-type: none"> • Mission critical • Shared courses/faculty • Demand • Unique need |
| Mining Engineering | MS | <ul style="list-style-type: none"> • Mission critical • Unique need |
| Nuclear Engineering | MS | <ul style="list-style-type: none"> • Mission critical • Unique need |
| Petroleum Engineering | MS | <ul style="list-style-type: none"> • Mission critical • Shared courses/faculty • Unique need • Other: Development plan |
| Chemical Engineering | PhD | <ul style="list-style-type: none"> • Mission critical |

| | | |
|---------------------------|-----|--|
| Geological Engineering | PhD | <ul style="list-style-type: none"> • Mission critical • Shared courses/faculty • Unique need • Other: produces external revenue |
| Geology and Geophysics | PhD | <ul style="list-style-type: none"> • Mission critical • Supports other programs • Demand • Unique need • Other: produces external revenue |
| Metallurgical Engineering | PhD | <ul style="list-style-type: none"> • Mission critical • Shared courses/faculty • Demand • Unique need |
| Mining Engineering | PhD | <ul style="list-style-type: none"> • Mission critical • Unique need |
| Nuclear Engineering | PhD | <ul style="list-style-type: none"> • Mission critical • Unique need |
| Physics (coop with UMSL) | PhD | <ul style="list-style-type: none"> • Mission critical • Demand |

MDHE staff recommends that the programs listed below be retained and undergo a follow-up review in three years.

| Programs recommended for follow-up review in three years | | |
|--|--------|---|
| Program title | Degree | Brief summary of justifications |
| Philosophy | BA | <ul style="list-style-type: none"> • Mission critical • Other: Development plan |
| Aerospace Engineering | PhD | <ul style="list-style-type: none"> • Mission critical • Shared courses/faculty • Demand • Unique need |
| Computer Engineering | PhD | <ul style="list-style-type: none"> • Shared courses/faculty • Demand |
| Computer Science | PhD | <ul style="list-style-type: none"> • Shared courses/faculty • Other: Strong masters degree; development plan |
| Mathematics | PhD | <ul style="list-style-type: none"> • Mission critical • Supports other programs • Unique need • Other: Development plan |
| Petroleum Engineering | PhD | <ul style="list-style-type: none"> • Mission critical • Shared courses/faculty • Unique need • Other: Development plan |

MISSOURI WESTERN STATE UNIVERSITY
Statewide Review of Academic Programs

Summary Report

MDHE staff identified 19 programs that fell below the productivity threshold. The MDHE asked officials at Missouri Western State University to provide justifications for these programs:

| Programs identified for further review | | |
|--|--|---|
| Degree level | Program name | Average annual number of graduates for three previous years |
| Associate | Manufacturing Engineering Technology | 2.7 |
| Associate | Criminal Justice | 9.0 |
| Associate | Legal Assistant | 7.0 |
| Baccalaureate | Computer Science | 3.0 |
| Baccalaureate | Computer Information Systems | 6.0 |
| Baccalaureate | Electrical Engineering Technology | 7.0 |
| Baccalaureate | Electrical & Computer Engineering Technology | 1.5 |
| Baccalaureate | French | 1.6 |
| Baccalaureate | Spanish | 5.7 |
| Baccalaureate | Biochemical and Molecular Biology | 3.3 |
| Baccalaureate | Mathematics | 9.0 |
| Baccalaureate | Interdisciplinary Studies | 4.0 |
| Baccalaureate | Political Science | 9.7 |
| Baccalaureate | Art | 1.7 |
| Baccalaureate | English (Education) | 5.7 |
| Baccalaureate | Music (Education) | 4.0 |
| Baccalaureate | Speech and Theater (Education) | 1.5 |
| Baccalaureate | Art (Education) | 3.3 |
| Baccalaureate | French (Education) | None |
| Total | 19 | |

Of these, Missouri Western identified one program for deletion.

| Program identified by institution for deletion | |
|--|--------------|
| Degree level | Program name |
| Baccalaureate | Art |

MDHE staff accepted the justifications provided by Missouri Western for the programs listed in the table below.

| Program justifications accepted by MDHE | | |
|--|--------|--|
| Program title | Degree | Brief summary of justifications |
| Manufacturing Engineering Technology | AS | <ul style="list-style-type: none"> • Mission critical • Shared courses/faculty • Demand |
| Legal Assistant | AS | <ul style="list-style-type: none"> • Mission critical • Shared courses/faculty |
| Criminal Justice | AS | <ul style="list-style-type: none"> • Mission critical • Shared courses/faculty • Underserved access |
| Computer Information Systems | BS | <ul style="list-style-type: none"> • Mission critical • Supports general education |
| Electrical Engineering Technology | BS | <ul style="list-style-type: none"> • Mission critical • Supports general education • Unique need |
| Electrical and Computer Engineering Technology | BS | <ul style="list-style-type: none"> • Interdisciplinary • Shared courses/faculty • Other: Development plan |
| Spanish | BA | <ul style="list-style-type: none"> • Supports general education • Consortium |
| Biochemistry and Molecular Biology | BS | <ul style="list-style-type: none"> • Mission critical • Interdisciplinary • Unique need |
| Mathematics | BS | <ul style="list-style-type: none"> • Mission critical • Supports general education |
| Interdisciplinary Studies | BIS | <ul style="list-style-type: none"> • Interdisciplinary • Shared courses/faculty |
| Political Science | BS | <ul style="list-style-type: none"> • Supports general education |

MDHE staff recommends that the three programs listed below be retained and undergo a follow-up review in three years.

| Programs recommended for follow-up review in three years | | |
|--|--------|--|
| Program title | Degree | Brief summary of justifications |
| Computer Science | BS | <ul style="list-style-type: none"> • Mission critical • Supports other programs • Other: Development plan |
| French | BA | <ul style="list-style-type: none"> • Supports other programs • Consortium • Other: Development plan |
| English | BS ED | <ul style="list-style-type: none"> • Mission critical • Interdisciplinary • Shared courses/faculty |

MDHE staff has particular concerns about the programs listed below. As education programs at other institutions face challenges similar to Missouri Western's, it may be timely to conduct a statewide assessment of education programs generally and teacher preparation programs in particular. At this time, however, the MDHE does not recommend the outright elimination of these programs.

| Programs of concern | | |
|----------------------------|--------------------------------|--|
| Degree level | Program name | Average annual number of graduates for three previous years |
| Baccalaureate | French (Education) | None |
| Baccalaureate | Music (Education) | 4.0 |
| Baccalaureate | Speech and Theater (Education) | 1.5 |
| Baccalaureate | Art (Education) | 3.3 |

NORTHWEST MISSOURI STATE UNIVERSITY
Statewide Review of Academic Programs

Summary Report

MDHE staff identified 65 programs that fell below the productivity threshold. Ten programs should not have been included in the list, either because they had been approved within the past five years (and have not had sufficient time to demonstrate viability) or whose data had been misreported or miscoded.

The MDHE asked officials at Northwest Missouri State University to provide justifications for these programs:

| Programs identified for further review | | |
|--|--|---|
| Degree level | Program name | Average annual number of graduates for three previous years |
| Baccalaureate | Agricultural Economics | 1.0 |
| Baccalaureate | Agronomy | 6.7 |
| Baccalaureate | Alternative Energy | None |
| Baccalaureate | Animal Science (Pre-Vet option) | 2.5 |
| Baccalaureate | Art (K-12) | 4.0 |
| Baccalaureate | Biology | 1.3 |
| Baccalaureate | Business Economics | 2.7 |
| Baccalaureate | Chemistry | 8.0 |
| Baccalaureate | Clinical Laboratory Science | 2.7 |
| Baccalaureate | Computer Science | 4.7 |
| Baccalaureate | Economics | 2.7 |
| Baccalaureate | English (9-12) | 5.3 |
| Baccalaureate | Family and Consumer (Birth-12) | 3.3 |
| Baccalaureate | Foods and Nutrition: Food Service Systems Admin and Management | 8.7 |
| Baccalaureate | Foreign Language-Spanish (K-12) | 1.7 |
| Baccalaureate | Geology | 6.0 |
| Baccalaureate | Horticulture | 7.7 |
| Baccalaureate | Humanities | 2.0 |

| | | |
|---------------|---------------------------------------|------|
| Baccalaureate | International Business | 6.0 |
| Baccalaureate | Mathematics | 2.3 |
| Baccalaureate | Middle School | 8.3 |
| Baccalaureate | Music | 9.3 |
| Baccalaureate | Music | 2.7 |
| Baccalaureate | Office Information Systems | 6.0 |
| Baccalaureate | Organizational Communication | 7.0 |
| Baccalaureate | Philosophy | 3.3 |
| Baccalaureate | Physics | 1.0 |
| Baccalaureate | Public Administration | 2.3 |
| Baccalaureate | Sociology | 9.3 |
| Baccalaureate | Spanish | 5.0 |
| Baccalaureate | Speech and Theatre (9-12) | 2.3 |
| Baccalaureate | Speech Communication | 5.7 |
| Baccalaureate | Statistics | 1.0 |
| Baccalaureate | Theatre | 6.7 |
| Baccalaureate | Unified Science-Biology | 2.0 |
| Baccalaureate | Wildlife Ecology and Conservation | 9.3 |
| Baccalaureate | Agricultural Education (9-12) | 8.7 |
| Baccalaureate | Business Education (9-12) | 3.0 |
| Baccalaureate | Chemistry (9-12) | None |
| Baccalaureate | Mathematics (9-12) | 5.0 |
| Baccalaureate | Physics (9-12) | None |
| Masters | MS in Agriculture | 3.3 |
| Masters | Agriculture | 1.0 |
| Masters | Bilingual/Multilingual Education | 1.0 |
| Masters | Elementary Education – Self Contained | 3.3 |
| Masters | English | 1.0 |
| Masters | English | 3.7 |

| | | |
|--------------|-------------------------------|------|
| Masters | General Biology | n/a |
| Masters | History | 3.7 |
| Masters | Mathematics | 1.7 |
| Masters | Music | 3.3 |
| Masters | Quality | None |
| Masters | Special Education | 4.0 |
| Masters | Teaching: Early Childhood Ed. | 3.0 |
| Masters | Teaching Middle School | 1.7 |
| Total | 55 | |

Northwest Missouri State University identified the programs listed in the table below for deletion.

| Programs identified by institution for deletion | |
|---|------------------------|
| Degree level | Program name |
| Baccalaureate | Agricultural Economics |
| Baccalaureate | Humanities |
| Baccalaureate | Statistics |
| Baccalaureate | Physics |
| Baccalaureate | Sociology |
| Baccalaureate | Alternative Energy |
| Masters | Quality |

MDHE staff accepted the justifications provided by Northwest Missouri State University for the programs list in the table below.

| Program justifications accepted by MDHE | | |
|---|--------|---|
| Program title | Degree | Brief summary of justifications |
| Spanish | BA/BS | <ul style="list-style-type: none"> • Mission critical • Other: Meets multicultural requirement |
| Wildlife Ecology & Conservation | BA/BS | <ul style="list-style-type: none"> • Other: Meets threshold using 2009-2010 data |
| Animal Science | BS | <ul style="list-style-type: none"> • Mission critical • Shared courses • Other: Strong enrollments |

| | | |
|----------------------------|----------|---|
| Office Information Systems | BS | <ul style="list-style-type: none"> • Shared courses |
| Business Education (9-12) | BS Ed | <ul style="list-style-type: none"> • Shared resources • Unique need |
| History | MA/MS Ed | <ul style="list-style-type: none"> • Mission critical • Shared courses |
| Special Education | MS | <ul style="list-style-type: none"> • Mission critical • Supports general education • Other: Strong enrollments |

MDHE staff recommends that the programs listed below be retained and undergo a follow-up review in three years.

| Programs recommended for follow-up review in three years | | |
|--|--------|---|
| Program title | Degree | Brief summary of justifications |
| Music | BA | <ul style="list-style-type: none"> • Shared resources • Mission critical |
| Organizational Communication | BA | <ul style="list-style-type: none"> • Shared courses |
| Philosophy | BA | <ul style="list-style-type: none"> • Supports general education • Shared resources • Other: Collaboration |
| Geology | BA/BS | <ul style="list-style-type: none"> • Supports general education • Unique need (STEM) • Other: Strong enrollments |
| Mathematics | BA/BS | <ul style="list-style-type: none"> • Mission critical • Unique need • Shared courses |
| Speech | BA/BS | <ul style="list-style-type: none"> • Shared courses |
| Theatre | BA/BS | <ul style="list-style-type: none"> • Other Strong enrollments |
| Music | BME | <ul style="list-style-type: none"> • Shared resources • Internal review |
| Agronomy | BS | <ul style="list-style-type: none"> • Mission critical • Supports general education • Shared resources • Regional need |
| Business Economics | BS | <ul style="list-style-type: none"> • Other: Collaboration |
| Chemistry | BS | <ul style="list-style-type: none"> • Shared courses • Unique need (STEM) |
| Clinical Laboratory | BS | <ul style="list-style-type: none"> • Shared courses |
| Computer Science | BS | <ul style="list-style-type: none"> • Employer demand |
| Economics | BS | <ul style="list-style-type: none"> • Other: Collaboration |
| Foods and Nutrition | BS | <ul style="list-style-type: none"> • Unique need • Other: Will delete one option but keep other; enrollments are strong |
| Horticulture | BS | <ul style="list-style-type: none"> • Supports general education • Shared resources • Regional need |

| | | |
|--|----------|---|
| International Business | BS | <ul style="list-style-type: none"> Shared courses |
| Public Administration | BS | <ul style="list-style-type: none"> Shared courses Other: Program undergoing re-development |
| Agricultural Education (912) | BS Ed | <ul style="list-style-type: none"> Shared resources Unique need Interdisciplinary programs |
| Art (K-12) | BS Ed | <ul style="list-style-type: none"> Shared resources Mission critical |
| Biology | BS Ed | <ul style="list-style-type: none"> Mission critical Shared resources Unique need (STEM) |
| Chemistry (9-12) | BS Ed | <ul style="list-style-type: none"> Mission critical Shared resources Unique need (STEM) |
| English (9-12) | BS Ed | <ul style="list-style-type: none"> Mission critical Shared resources Meets regional need |
| Family and Consumer (Birth-12) | BS Ed | <ul style="list-style-type: none"> Unique need Other: Consortium |
| Foreign Language-Spanish (K-12) | BS Ed | <ul style="list-style-type: none"> Mission critical Shared resources Unique need |
| Mathematics (9-12) | BS Ed | <ul style="list-style-type: none"> Mission critical Unique need Shared resources |
| Middle School | BS Ed | <ul style="list-style-type: none"> Mission critical Interdisciplinary programs |
| Physics (9-12) | BS Ed | <ul style="list-style-type: none"> Internal review |
| Speech and Theatre (9-12) | BS Ed | <ul style="list-style-type: none"> Mission critical Shared resources Unique need |
| Unified Science-Biology Biology | BS Ed | <ul style="list-style-type: none"> Mission critical Shared resources Unique need (STEM) |
| Agriculture | MS Ed | <ul style="list-style-type: none"> Shared Resources Internal Review |
| Bilingual/Multilingual Education | MS | <ul style="list-style-type: none"> Unique need Review status of competency based program |
| General Biology | MS | <ul style="list-style-type: none"> Other: Strong enrollments; new cohort |
| MS in Agriculture | MS | <ul style="list-style-type: none"> Shared courses Internal review |
| Elementary Education - Self-Contained | MS Ed | <ul style="list-style-type: none"> Increased enrollments Internal review |
| Mathematics | MS Ed | <ul style="list-style-type: none"> Mission critical Unique need Shared resources |
| Music | MS Ed | <ul style="list-style-type: none"> Shared resources Unique access to geographic region |
| Teaching: Early Childhood Ed. (Joint MSSU) | MS Ed | <ul style="list-style-type: none"> Internal review Shared resources Joint program with MSSU |
| Teaching Middle School | MS Ed | <ul style="list-style-type: none"> Mission critical Supports other programs |
| English | MS Ed/MA | <ul style="list-style-type: none"> Shared courses Unique access Unique need in geographic region |

SOUTHEAST MISSOURI STATE UNIVERSITY
Statewide Review of Academic Programs

Summary Report

MDHE staff identified 33 programs that fell below the degree-appropriate productivity threshold. Five programs should not have been included in the list, either because they had been approved within the past five years (and have not had sufficient time to demonstrate viability) or whose data had been misreported or miscoded.

The MDHE asked officials at Southeast Missouri State University to provide justifications for these programs:

| Programs identified for further review | | |
|--|---|---|
| Degree level | Program name | Average annual number of graduates for three previous years |
| Associate | Child Care & Guidance | 6.0 |
| Associate | Computer Technology | 8.0 |
| Baccalaureate | French | 3.0 |
| Baccalaureate | Anthropology | 6.7 |
| Baccalaureate | German | 7.0 |
| Baccalaureate | Philosophy | 4.3 |
| Baccalaureate | Theatre and Dance | 2.7 |
| Baccalaureate | Music | 4.3 |
| Baccalaureate | History | 8.3 |
| Baccalaureate | Performing Arts | 6.7 |
| Baccalaureate | Environmental Science | 4.0 |
| Baccalaureate | Corporate Communication | None |
| Baccalaureate | Engineering Physics | 3.7 |
| Baccalaureate | Medical Technology | 3.0 |
| Baccalaureate | Family & Consumer Sciences Education | 4.7 |
| Baccalaureate | Economics | 9.0 |
| Baccalaureate | Administrative Systems Management | 6.3 |
| Baccalaureate | International Business | None |
| Baccalaureate | Mathematics Education | 8.0 |
| Baccalaureate | Secondary Education/Biology (Unified Science) | 7.0 |

| | | |
|---------------|--------------------------------|-----|
| Baccalaureate | Art Education | 4.0 |
| Baccalaureate | Business & Marketing Education | 3.7 |
| Baccalaureate | Secondary Education/French | 4.0 |
| Baccalaureate | Industrial Education | 4.7 |
| Masters | Exceptional Child Education | 2.7 |
| Masters | History | 4.0 |
| Masters | Nutrition & Exercise Science | 2.7 |
| Masters | Criminal Justice | 4.7 |
| Total | 28 | |

Of these, Southeast Missouri State University identified four programs for deletion.

| Programs identified by institution for deletion | |
|---|---|
| Degree level | Program name |
| Baccalaureate | Administrative Systems Management |
| Baccalaureate | French* |
| Baccalaureate | German* |
| Baccalaureate | Spanish (not on low-productivity list)* |

*Although Southeast Missouri State University intends to delete three foreign language programs, it also intends to submit a proposal for a new program in Global Cultures, with concentrations available in German, French, and Spanish.

MDHE staff accepted the justifications provided by Southeast Missouri State University for the programs listed in the table below.

| Program justifications accepted by MDHE | | |
|---|--------|--|
| Program title | Degree | Brief summary of justifications |
| Environmental Science | BS | <ul style="list-style-type: none"> • Interdisciplinary • Shared courses/faculty |
| Corporate Communication | BS | <ul style="list-style-type: none"> • Other: Development plan |
| Mathematics Education | BS Ed | <ul style="list-style-type: none"> • Shared courses/faculty • Unique need |
| Secondary Education/Biology (Unified Science) | BS Ed | <ul style="list-style-type: none"> • Shared courses/faculty • Unique need |
| Engineering Physics | BS | <ul style="list-style-type: none"> • Shared courses/faculty • Underserved access |

| | | |
|------------------------|------|---|
| | | <ul style="list-style-type: none"> • Unique need |
| Computer Technology | AAS | <ul style="list-style-type: none"> • Shared courses/faculty |
| Child Care & Guidance | AA | <ul style="list-style-type: none"> • Shared courses/faculty |
| Philosophy | BA | <ul style="list-style-type: none"> • Supports other Programs |
| Criminal Justice | MS | <ul style="list-style-type: none"> • Other: Recent collaboration w/ MSSU in delivery of this program |
| Performing Arts | BFA | <ul style="list-style-type: none"> • Mission critical • Shared courses/faculty |
| Theatre and Dance | BA | <ul style="list-style-type: none"> • Mission critical • Shared courses/faculty |
| Music | BA | <ul style="list-style-type: none"> • Mission critical • Shared courses/faculty • Unique need |
| Medical Technology | BS | <ul style="list-style-type: none"> • Shared courses/faculty |
| International Business | BSBA | <ul style="list-style-type: none"> • Shared courses/faculty |
| History | BA | <ul style="list-style-type: none"> • Supports other programs • Shared courses/faculty |
| History | MA | <ul style="list-style-type: none"> • Shared courses/faculty • Unique need |

MDHE staff recommends that the programs listed below be retained and undergo a follow-up review in three years.

| Programs recommended for follow-up review in three years | | |
|--|---------|--|
| Program title | Degree | Brief summary of justifications |
| Anthropology | BA | <ul style="list-style-type: none"> • Supports other programs • Consortium • Other: Reconfiguration of program |
| Economics | BS/BSBA | <ul style="list-style-type: none"> • Consortium |
| Exceptional Child Education | MA | <ul style="list-style-type: none"> • Unique need • Other: Development plan |
| Nutrition & Exercise Science | MS | <ul style="list-style-type: none"> • Interdisciplinary |
| Art Education | BS Ed | <ul style="list-style-type: none"> • Mission critical • Supports other programs • Shared courses/faculty • Unique need |
| Business & Marketing Education | BS Ed | <ul style="list-style-type: none"> • Shared courses/faculty • Other: Development plan |
| Family & Consumer Sciences Education | BS | <ul style="list-style-type: none"> • Shared courses/faculty • Other: Development plan |
| Industrial Education | BS Ed | <ul style="list-style-type: none"> • Shared courses/faculty • Other: Development plan |
| Secondary Education/French | BS Ed | <ul style="list-style-type: none"> • Shared courses/faculty • Other: Development plan |

MDHE staff has particular concerns about the education programs listed above. As education programs at other institutions face challenges similar to Southeast Missouri State's, it may be

timely to conduct a statewide assessment of education programs generally and teacher preparation programs in particular. At this time, however, the MDHE does not recommend the outright elimination of these programs.

TRUMAN STATE UNIVERSITY
Statewide Review of Academic Programs

Summary Report

MDHE staff identified eight programs that fell below the degree-appropriate productivity threshold. The institution provided MDHE with one additional program that was not on the original list (Art History). Two programs should not have been included in the list, either because they had been approved within the past five years (and have not had sufficient time to demonstrate viability) or whose data had been misreported or miscoded.

The MDHE requested officials at Truman State University to provide justifications for these programs:

| Programs identified for further review | | |
|--|--------------|---|
| Degree level | Program name | Average annual number of graduates for three previous years |
| Baccalaureate | Art History | 4.7 |
| Baccalaureate | Russian | 2.0 |
| Baccalaureate | German | 4.3 |
| Baccalaureate | Classics | 3.3 |
| Masters | Counseling | None |
| Masters | Biology | 2.0 |
| Masters | Music | 4.7 |
| Total | 7 | |

MDHE staff accepted the justifications provided by Truman State University for the programs listed in the table below.

| Program justifications accepted by MDHE | | |
|---|--------|--|
| Program title | Degree | Brief summary of justifications |
| Art History | BA | <ul style="list-style-type: none"> • Critical to mission • Supports general education • Shared courses between programs • Provides Unique need as highly-selective institution |
| German | BA | <ul style="list-style-type: none"> • Critical to mission |
| Counseling | MA | <ul style="list-style-type: none"> • Other: Program development |
| Music | MA | <ul style="list-style-type: none"> • Critical to mission |

MDHE staff recommends that the three programs listed below be retained and undergo a follow-up review in three years.

| Programs recommended for follow-up review in three years | | |
|--|--------|---|
| Program title | Degree | Brief summary of justifications |
| Biology | MS | <ul style="list-style-type: none"> • Supports other programs • Shared courses/faculty • Demand • Unique need • Other: Recent reconfiguration, external funding |
| Russian | BA | <ul style="list-style-type: none"> • Inaccurate data • Mission critical • Supports other programs • Unique need |
| Classics | BA | <ul style="list-style-type: none"> • Mission critical • Interdisciplinary • Unique need |

UNIVERSITY OF CENTRAL MISSOURI
Statewide Review of Academic Programs

Summary Report

MDHE staff identified 34 programs that fell below the productivity threshold. Six programs should not have been included in the list, either because they had been approved within the past five years (and have not had sufficient time to demonstrate viability) or whose data had been misreported or miscoded.

The MDHE asked officials at the University of Central Missouri to provide justifications for these programs:

| Programs identified for further review | | |
|--|---------------------------------|---|
| Degree level | Program name | Average annual number of graduates for three previous years |
| Baccalaureate | Spanish | 2.0 |
| Baccalaureate | Crisis & Disaster Management | 7.3 |
| Baccalaureate | Occupational Education | None |
| Baccalaureate | Mathematics | 5.0 |
| Baccalaureate | Chemistry | 3.3 |
| Baccalaureate | Studio Art | 9.7 |
| Baccalaureate | Medical Technology | 3.7 |
| Baccalaureate | Actuarial Science & Mathematics | 5.3 |
| Baccalaureate | Computer Science | 6.7 |
| Baccalaureate | Occupational Health & Safety | 4.3 |
| Baccalaureate | Economics | 9.0 |
| Masters | Industrial Hygiene | 3.3 |
| Masters | Mathematics | 2.7 |
| Masters | Psychology | 2.3 |
| Masters | Theatre | 4.3 |
| Masters | Music | 3.7 |
| Masters | History | 3.0 |
| Baccalaureate | Agricultural Technology | 7.7 |
| Baccalaureate | Journalism | 7.0 |

| | | |
|---------------|----------------------------|------|
| Baccalaureate | French | 3.7 |
| Baccalaureate | Industrial Technology | 8.3 |
| Baccalaureate | Speech Communication | 5.0 |
| Baccalaureate | Liberal Studies | 2.0 |
| Baccalaureate | General Recreation | 7.3 |
| Baccalaureate | Earth Science | 5.0 |
| Baccalaureate | Geography | 7.3 |
| Baccalaureate | Tourism | 8.0 |
| Specialist | Curriculum and Instruction | None |
| Total | 28 | |

Of these, the University of Central Missouri identified these programs listed in the table below for deletion:

| Programs identified by institution for deletion | |
|--|----------------------------|
| Degree level | Program name |
| Baccalaureate | Agricultural Technology |
| Baccalaureate | Journalism |
| Baccalaureate | French |
| Baccalaureate | Industrial Technology |
| Baccalaureate | Speech Communication |
| Baccalaureate | Liberal Studies |
| Baccalaureate | General Recreation |
| Baccalaureate | Earth Science |
| Baccalaureate | Geography |
| Baccalaureate | Tourism |
| Specialist | Curriculum and Instruction |

MDHE staff accepted the justifications provided by the University of Central Missouri University for the programs listed in the table below.

| Program justifications accepted by MDHE | | |
|---|--------|--|
| Program title | Degree | Brief summary of justifications |
| Computer Science | BS | <ul style="list-style-type: none"> • Shared courses/faculty • Other: Strong enrollments |
| Occupational Health & Safety | BS | <ul style="list-style-type: none"> • Shared courses/faculty • Unique need |
| Economics | BA, BS | <ul style="list-style-type: none"> • Shared courses/faculty • Other: Strong enrollments • Other: Participation in a multi-institution collaborative |

MDHE staff recommends that the programs listed below be retained and undergo a follow-up review in three years.

| Programs recommended for follow-up review in three years | | |
|--|--------|---|
| Program title | Degree | Brief summary of justifications |
| Spanish | BS ED | <ul style="list-style-type: none"> • Shared courses/faculty • Other: Collaboration |
| Crisis & Disaster Management | BS | <ul style="list-style-type: none"> • Shared courses/faculty • Other: Articulation agreements |
| Occupational Education | BS | <ul style="list-style-type: none"> • Critical to mission • Shared courses/faculty • Unique need • Interdisciplinary |
| Mathematics | BS | <ul style="list-style-type: none"> • Shared courses/faculty • Other: Development plan |
| Chemistry | BA, BS | <ul style="list-style-type: none"> • Shared courses/faculty • Other: Strong enrollments |
| Studio Art | BFA | <ul style="list-style-type: none"> • Shared courses/faculty • Other: Strong enrollments |
| Actuarial Science & Mathematics | BS | <ul style="list-style-type: none"> • Shared courses/faculty • Unique need • Other: Strong enrollments |
| Medical Technology | BS | <ul style="list-style-type: none"> • Shared courses/faculty • Unique need • Other: Conducting curriculum review |
| Industrial Hygiene | MS | <ul style="list-style-type: none"> • Shared courses/faculty • Unique need |
| Mathematics | MS | <ul style="list-style-type: none"> • Other: External funding |
| Psychology | MS | <ul style="list-style-type: none"> • Other: Development plan |
| Theatre | MA | <ul style="list-style-type: none"> • Other: Strong enrollments |
| Music | MA | <ul style="list-style-type: none"> • Other: Strong enrollments |
| History | MA | <ul style="list-style-type: none"> • Other: Strong enrollment |

UNIVERSITY OF MISSOURI–COLUMBIA
Statewide Review of Academic Programs

Summary Report

MDHE staff identified 58 programs that fell below the productivity threshold. The institution identified 16 additional programs below the productivity threshold. Five programs should not have been included, either because they had been approved within the past five years (and have not had sufficient time to demonstrate viability) or whose data had been misreported or miscoded.

The MDHE asked officials at the University of Missouri–Columbia to provide justifications for these programs:

| Programs identified for further review | | |
|---|------------------------------|--|
| Degree level | Program name | Average annual number of graduates for three previous years |
| Baccalaureate | Linguistics | 6.7 |
| Baccalaureate | Agricultural Journalism | 6.7 |
| Baccalaureate | Food Science and Nutrition | 9.7 |
| Baccalaureate | Russian | 5.3 |
| Baccalaureate | German | 7.7 |
| Baccalaureate | French | 6.0 |
| Baccalaureate | Environmental Geology | 2.0 |
| Baccalaureate | Clinical Laboratory Sciences | 6.3 |
| Baccalaureate | Computer Science | 9.3 |
| Baccalaureate | Educational Studies | 3.3 |
| Baccalaureate | Statistics | 7.3 |
| Baccalaureate | Geological Sciences | 6.0 |
| Doctoral | Neuroscience | 2.0 |
| Doctoral | Genetics Area Program | 1.0 |
| Doctoral | Pathobiology Area Program | 5.3 |
| Doctoral | Informatics | None |
| Doctoral | Food Science | 1.0 |
| Doctoral | Agricultural Education | 2.7 |
| Doctoral | Exercise Physiology | 0.3 |

| | | |
|----------|---|------|
| Doctoral | Industrial Engineering | 1.0 |
| Doctoral | Romance Language | 2.0 |
| Doctoral | Classical Studies | 0.7 |
| Doctoral | Biomedical Sciences | 2.7 |
| Doctoral | Nutrition Area Program | 1.0 |
| Doctoral | Soil, Environmental & Atmospheric Science | 2.0 |
| Doctoral | Geology | 1.0 |
| Doctoral | Anthropology | 2.5 |
| Doctoral | Art History and Archaeology | 1.5 |
| Doctoral | Sociology/Rural Sociology | 2.3 |
| Doctoral | Theatre | 2.0 |
| Doctoral | Communication Science & Disorders | None |
| Doctoral | Pharmacology | 1.0 |
| Doctoral | Forestry | 2.7 |
| Doctoral | Special Education | 1.7 |
| Doctoral | Accountancy | 2.0 |
| Masters | Agricultural Economics | 4.7 |
| Masters | Communication | 1.0 |
| Masters | Chemical Engineering | 1.0 |
| Masters | Computer Engineering | 4.0 |
| Masters | Personal Financial Planning | 3.3 |
| Masters | Textile & Apparel Mgmt | 2.3 |
| Masters | Biological Sciences | 3.7 |
| Masters | Biochemistry | 2.7 |
| Masters | Neuroscience | 1.0 |
| Masters | Pathology | 0.3 |
| Masters | Chemistry | 4.7 |
| Masters | Public Health | 1.3 |
| Masters | Natural Resources | None |

| | | |
|--------------|---|------|
| Masters | Exercise Physiology | 2.9 |
| Masters | Russian & Slavonic Studies | 2.0 |
| Masters | German | 3.7 |
| Masters | French | 3.3 |
| Masters | Spanish | 4.7 |
| Masters | Classical Languages | 3.7 |
| Masters | Architectural Studies | 4.0 |
| Masters | Microbiology (Medicine) | 1.3 |
| Masters | Physiology (Medicine) | 2.0 |
| Masters | Nutrition Area Program | 1.5 |
| Masters | Religious Studies | 3.0 |
| Masters | Anthropology | 4.3 |
| Masters | Geography | 3.7 |
| Masters | Rural Sociology | 3.7 |
| Masters | Theatre | 1.0 |
| Masters | Art | 3.7 |
| Masters | Pharmacology | None |
| Masters | Forestry | 4.0 |
| Post Bacc. | Educational Leadership (coop. W/UMR/CMSU) | None |
| Post Bacc. | Special Education | None |
| Post Bacc. | Career & Technical Education | None |
| Total | 69 | |

Of these, the University of Missouri-Columbia identified ten programs for deletion.

| Programs identified by institution for deletion | |
|---|--------------------------------|
| Degree level | Program name |
| Ed. Specialist | Special Education |
| Ed. Specialist | Career and Technical Education |
| Masters | Natural Resources |

| | |
|---------------|-----------------------------------|
| Doctoral | Communication Science & Disorders |
| Baccalaureate | Clinical Laboratory Sciences |
| Baccalaureate | Environmental Geology |

In addition, the institution intends to merge or discontinue the programs listed in the table below, contingent on the approval of a new program.

| Programs projected to be merged or discontinued | | |
|---|--------|--|
| Program name | Degree | Explanation/action taken |
| Exercise Physiology | MS | The Exercise Physiology MS and Nutritional Area Program MS will be discontinued contingent on the approval of a new MS program |
| French | BA | Will be discontinued contingent on approval of new Romance Languages BA |
| French | MA | Will be discontinued contingent on approval of new Romance Languages MA |
| Spanish | MA | Will be discontinued contingent on approval of new Romance Languages MA |
| Physiology (Medicine) | MS | The Pharmacology MS and the Physiology MS will be discontinued contingent on the approval of a new MS program |
| Nutrition Area Program | MS | The Exercise Physiology MS and Nutritional Area Program MS will be discontinued contingent on the approval of a new MS program |
| Pharmacology | PhD | The Pharmacology PhD and the Physiology PhD will be discontinued contingent on the approval of a new PhD program |
| Pharmacology | MS | The Pharmacology MS and the Physiology MS will be discontinued contingent on the approval of a new MS program |
| Forestry | MS | The Forestry MS, the Parks, Recreation & Tourism MS, and the SEAS MS will be discontinued contingent on the approval of a new MS program |
| Parks, Recreation, and Tourism | MS | The Forestry MS, the Parks, Recreation & Tourism MS, and the SEAS MS will be discontinued contingent on the approval of a new MS program |
| Soil, Environmental, and Atmospheric Sciences | MS | The Forestry MS, the Parks, Recreation & Tourism MS, and the SEAS MS will be discontinued contingent on the approval of a new MS program |
| Forestry | PhD | The Forestry PhD and the Soil, Environmental, and Atmospheric Sciences (SEAS) PhD will be discontinued contingent on the approval of a new PhD program |
| Soil, Environmental, and Atmospheric Sciences | PhD | The Forestry PhD and the Soil, Environmental, and Atmospheric Sciences (SEAS) PhD will be discontinued contingent on the approval of a new PhD program |

MDHE staff accepted the justifications provided by the University of Missouri-Columbia for the programs listed in the table below.

| Program justifications accepted by MDHE | | |
|---|--------|---|
| Program title | Degree | Brief summary of justifications |
| Agricultural Economics | MS | <ul style="list-style-type: none"> Masters program tied to a productive PhD program |
| Communication | MA | <ul style="list-style-type: none"> Masters program tied to a productive PhD program |
| Educational Leadership (coop. UMR/CMSU) | EDSP | <ul style="list-style-type: none"> Program tied to a productive PhD program |
| Chemical Engineering | MS | <ul style="list-style-type: none"> Masters program tied to a productive PhD program |
| Computer Engineering | MS | <ul style="list-style-type: none"> Masters program tied to a productive PhD program |
| Personal Financial Planning | MA,MS | <ul style="list-style-type: none"> Masters program tied to a productive PhD program |
| Textile & Apparel Mgmt | MA,MS | <ul style="list-style-type: none"> Masters program tied to a productive PhD program |
| Biological Sciences | MA | <ul style="list-style-type: none"> Masters program tied to a productive PhD program |
| Biochemistry | MS | <ul style="list-style-type: none"> Masters program tied to a productive PhD program |
| Pathology | MS | <ul style="list-style-type: none"> Masters program tied to a productive PhD program |
| Chemistry | MS | <ul style="list-style-type: none"> Masters program tied to a productive PhD program |
| Neuroscience | PhD | <ul style="list-style-type: none"> Interdisciplinary Shared courses/faculty |
| Neuroscience | MS | <ul style="list-style-type: none"> Interdisciplinary Shared courses/faculty |
| Genetics Area Program | PhD | <ul style="list-style-type: none"> Interdisciplinary Shared courses/faculty |
| Public Health | MS | <ul style="list-style-type: none"> Unique need Other: External Funding |
| Linguistics | BA | <ul style="list-style-type: none"> Interdisciplinary |
| Food Science and Nutrition | BS | <ul style="list-style-type: none"> Mission critical Reconfiguration underway |
| Industrial Engineering | PhD | <ul style="list-style-type: none"> Unique need Mission critical Other: Development plan |
| Romance Language | PhD | <ul style="list-style-type: none"> Other: Development plan |
| Russian | BA | <ul style="list-style-type: none"> Mission critical Unique need |
| Russian & Slavonic Studies | MA | <ul style="list-style-type: none"> Mission critical Unique need |
| German | BA | <ul style="list-style-type: none"> Shared courses/faculty Other: Development plan |
| German | MA | <ul style="list-style-type: none"> Shared courses/faculty Other: Supports study abroad; strong enrollments; developmental plan in place |

| | | |
|---------------------------|--------|--|
| Classical Studies | PhD | <ul style="list-style-type: none"> Other: Consortium agreement |
| Classical Languages | MA | <ul style="list-style-type: none"> Other: Consortium agreement |
| Architectural Studies | MA,MS | <ul style="list-style-type: none"> Masters program tied to strong PhD program Other: Strong enrollments |
| Microbiology (Medicine) | MS | <ul style="list-style-type: none"> Masters program tied to strong PhD program |
| Biomedical Sciences | PhD | <ul style="list-style-type: none"> External funding Other: strong enrollments |
| Nutrition Area Program | PhD | <ul style="list-style-type: none"> Interdisciplinary Unique need |
| Sociology/Rural Sociology | PhD | <ul style="list-style-type: none"> Incorrect data-meets productivity threshold Interdisciplinary |
| Rural Sociology | MS | <ul style="list-style-type: none"> Masters program tied to a productive PhD program |
| Religious Studies | MA | <ul style="list-style-type: none"> Interdisciplinary Supports general education Shared faculty Unique need |
| Computer Science | BACS | <ul style="list-style-type: none"> Shared courses Other: STEM field |
| Educational Studies | BS ED | <ul style="list-style-type: none"> Shared courses/faculty |
| Special Education | PhD,ED | <ul style="list-style-type: none"> Mission critical Unique need Other: Strong enrollments |
| Statistics | BA,BS | <ul style="list-style-type: none"> Other: Strong enrollments; plan for development |
| Accountancy | PhD | <ul style="list-style-type: none"> Mission critical Unique program |

MDHE staff recommends that the programs listed below be retained and undergo a follow-up evaluation in three years.

| Programs recommended for follow-up review in three years | | |
|--|--------|--|
| Program name | Degree | Brief summary of justifications |
| Agricultural Journalism | BS | <ul style="list-style-type: none"> Mission critical Reconfiguration underway |
| Food Science | PhD | <ul style="list-style-type: none"> Mission critical Reconfiguration underway |
| Agricultural Education | PhD | <ul style="list-style-type: none"> Program provides unique access Program meets a unique need |
| Exercise Physiology | PhD | <ul style="list-style-type: none"> Mission critical Unique Access Other: Reconfiguration/development plan |
| Geology | PhD | <ul style="list-style-type: none"> Other: Reconfiguration/development plan; external funding |
| Anthropology | PhD | <ul style="list-style-type: none"> Other: Development plan |
| Anthropology | MA | <ul style="list-style-type: none"> Other: Development plan |

| | | |
|-----------------------------|-------|---|
| Art History and Archaeology | PhD | <ul style="list-style-type: none"> • Other: Development plan |
| Geography | MA | <ul style="list-style-type: none"> • Mission critical • Unique need • Other: Reconfiguration/development plan |
| Theatre | PhD | <ul style="list-style-type: none"> • Shared courses/faculty • Graduated 21 PhD students and 11 MA students over past 10 years |
| Theatre | MA | <ul style="list-style-type: none"> • Shared courses/faculty • Graduated 21 PhD students and 11 MA students over past 10 years |
| Art | MFA | <ul style="list-style-type: none"> • Supports other programs • Other: Development plan |
| Geological Sciences | BA,BS | <ul style="list-style-type: none"> • Mission critical • Supports other programs |

UNIVERSITY OF MISSOURI-KANSAS CITY
Statewide Review of Academic Programs

Summary Report

MDHE staff identified 34 programs that fell below the productivity threshold. The MDHE asked officials at the University of Missouri–Kansas City to provide justifications for these programs:

| Programs identified for further review | | |
|--|----------------------------|---|
| Degree level | Program name | Average annual number of graduates for three previous years |
| Baccalaureate | American Studies | 2.3 |
| Baccalaureate | Art | 2.0 |
| Baccalaureate | Art History | 6.7 |
| Baccalaureate | French | 3.7 |
| Baccalaureate | Geography | 5.0 |
| Baccalaureate | Geology | 5.0 |
| Baccalaureate | German | 2.7 |
| Baccalaureate | Information Technology | 8.0 |
| Baccalaureate | Mathematics and Statistics | 9.6 |
| Baccalaureate | Medical Technology | 2.0 |
| Baccalaureate | Middle School Education | 9.3 |
| Baccalaureate | Music Composition | 6.0 |
| Baccalaureate | Pharmaceutical Sciences | 7.7 |
| Baccalaureate | Physics | 3.3 |
| Baccalaureate | Theatre | 6.7 |
| Baccalaureate | Urban Planning and Design | 6.0 |
| Baccalaureate | Urban Studies | 3.7 |
| Ed | Curriculum and Instruction | 2.5 |
| EdSp | Curriculum and Instruction | 2.0 |
| EdSp | Reading Education | 4.7 |
| Masters | Chemical Engineering | None |

| | | |
|--------------|---------------------------------|------|
| Masters | Chemistry | 1.3 |
| Masters | Dental Hygiene Education | 3.0 |
| Masters | Environmental and Urban Studies | 2.0 |
| Masters | Industrial Engineering | None |
| Masters | Nuclear Engineering | None |
| Masters | Oral Biology | 3.7 |
| Masters | Pharmaceutical Science | 1.7 |
| Masters | Physics | 3.7 |
| Masters | Political Science | 1.7 |
| Masters | Psychology | 3.7 |
| Masters | Sociology | 3.7 |
| Masters | Studio Art | 4.5 |
| Masters | Theatre | 4.0 |
| TOTAL | 34 | |

Of these, University of Missouri-Kansas City identified four programs for deletion and seven for inactivation. Programs that are inactivated will be deleted after five years unless the institution asks for them to be reactivated.

| Programs identified by institution for deletion | |
|--|--|
| Degree level | Program name |
| Baccalaureate | Pharmaceutical Sciences |
| Masters | Pharmaceutical Sciences |
| Baccalaureate | French |
| Baccalaureate | German |
| Baccalaureate | Spanish (not on low-productivity list) |

Although University of Missouri-Kansas City intends to delete three foreign language programs, it also intends to submit a proposal for a new program in Foreign Language, with concentrations available in German, French, and Spanish.

| Programs moved to inactive status (Institution must request reactivation and CBHE must approve. Will be deleted in five years if not reactivated.) | |
|---|----------------------------|
| Degree level | Program name |
| Baccalaureate | American Studies |
| Baccalaureate | Art |
| Baccalaureate | Medical Technology |
| Ed | Curriculum and Instruction |
| Masters | Chemical Engineering |
| Masters | Industrial Engineering |
| Masters | Nuclear Engineering |

MDHE staff accepted the justifications provided by University of Missouri-Kansas City for the programs listed in the table below.

| Program justifications accepted by MDHE | | |
|--|---------------|---|
| Program title | Degree | Brief summary of justifications |
| Art History | BA | <ul style="list-style-type: none"> • Mission critical • Supports other programs • Other: Collaboration with Nelson-Atkins Museum of Art and other prominent art institutions |
| Geography | BA/BS | <ul style="list-style-type: none"> • Mission critical • Supports other programs • Shared courses/faculty |
| Geology | BA | <ul style="list-style-type: none"> • Mission critical • Supports other programs • Shared courses/faculty |
| Mathematics and Statistics | BA/BS | <ul style="list-style-type: none"> • Mission critical • Supports other programs |
| Music Composition | BA | <ul style="list-style-type: none"> • Mission critical |
| Physics | BA/BS | <ul style="list-style-type: none"> • Mission critical • Supports other programs |
| Theatre | BA | <ul style="list-style-type: none"> • Mission critical |
| Urban Planning and Design | BA | <ul style="list-style-type: none"> • Mission critical • Supports other programs • Unique need |
| Urban Studies | BA | <ul style="list-style-type: none"> • Mission critical • Supports other programs • Interdisciplinary |

| | | |
|---------------------------------|------|--|
| | | <ul style="list-style-type: none"> Underserved access |
| Curriculum and Instruction | EdSp | <ul style="list-style-type: none"> Shared courses/faculty |
| Reading Education | EdSp | <ul style="list-style-type: none"> Shared courses/faculty Underserved access Other: Significant number of students already have an advanced degree and are therefore only seeking certification in this subject |
| Chemistry | MS | <ul style="list-style-type: none"> Mission critical Supports other programs |
| Dental Hygiene Education | MSDH | <ul style="list-style-type: none"> Shared courses/faculty Unique need |
| Environmental and Urban Studies | MS | <ul style="list-style-type: none"> Mission critical Supports other programs |
| Oral Biology | MS | <ul style="list-style-type: none"> Mission critical Supports other programs Interdisciplinary Unique need |
| Physics | MS | <ul style="list-style-type: none"> Interdisciplinary Shared courses/faculty |
| Studio Art | MA | <ul style="list-style-type: none"> Mission critical Other: MA students provide support to strong BA program, collaboration with Nelson-Atkins Museum of Art and other prominent institutions |
| Theatre | MA | <ul style="list-style-type: none"> Mission critical Shared courses/faculty |

MDHE staff recommends that the programs listed below be retained and undergo a follow-up review in three years.

| Programs recommended for follow-up review in three years | | |
|--|--------|--|
| Program title | Degree | Brief summary of justifications |
| Information Technology | BS | <ul style="list-style-type: none"> Mission critical Shared courses/faculty Unique need Other: Development plan; unique accreditation |
| Middle School Education | BS Ed | <ul style="list-style-type: none"> Shared courses/faculty Unique need |
| Political Science | MA | <ul style="list-style-type: none"> Supports other programs Interdisciplinary |
| Psychology | MA | <ul style="list-style-type: none"> Mission critical Supports other programs |
| Sociology | MA | <ul style="list-style-type: none"> Mission critical Supports other programs |

UNIVERSITY OF MISSOURI-ST. LOUIS
Statewide Review of Academic Programs

Summary Report

In the initial phase of the review, MDHE staff identified 16 programs that fell below the productivity threshold. Four programs should not have been included in the list, either because they had been approved within the past five years (and have not had sufficient time to demonstrate viability) or whose data had been misreported or miscoded. Two programs had been renamed, but the changes not been made in the MDHE program inventory.

The MDHE requested officials at the University of Missouri–St. Louis to provide justifications for these programs:

| Programs identified for further review | | |
|---|---------------------|---|
| Degree level | Program name | Average number of graduates for three previous years |
| Baccalaureate | Educational Studies | 6.0 |
| Baccalaureate | Music Education | 8.3 |
| Baccalaureate | German | 2.0 |
| Baccalaureate | French | 7.7 |
| Baccalaureate | Spanish | 8.7 |
| Baccalaureate | Philosophy | 7.3 |
| Baccalaureate | Physics | 6.3 |
| Masters | Sociology | 4.3 |
| Doctoral | Political Science | 2.3 |
| Baccalaureate | Music | 6.7 |
| TOTAL | 10 | |

Of these, University of Missouri–St. Louis identified five for deletion and one for inactivation.

| Programs identified by institution for deletion | |
|--|---------------------|
| Degree level | Program name |
| Baccalaureate | Music Education |
| Baccalaureate | German |
| Baccalaureate | French |
| Baccalaureate | Spanish |
| Baccalaureate | Music |

| Programs moved to inactive status (Institution must request reactivation and CBHE must approve. Will be deleted in five years if not reactivated) | |
|--|---------------------|
| Degree level | Program name |
| Masters | Sociology |

Although University of Missouri–St. Louis intends to delete three foreign language programs, it also intends to submit a proposal for a new program in Foreign Language, with concentrations available in German, French, and Spanish.

Additionally, University of Missouri–St. Louis intends to delete the programs in Music and Music Education but will also propose a new comprehensive program in Music and Music Education.

MDHE staff recommends that the Philosophy program justifications be accepted, but that the program undergo a follow-up review in three years. MDHE staff accepted the justifications provided by University of Missouri–St. Louis for the remaining programs (see table below).

| Program justifications accepted by MDHE | | |
|--|---------------|---|
| Program title | Degree | Brief summary of justifications |
| Educational Studies | BA | <ul style="list-style-type: none"> • Mission critical • Supports other programs • Shared faculty/courses • Other: no unique courses for program; helps attract international students; degree completion program for many returning students. |
| Physics | BA/BS | <ul style="list-style-type: none"> • Mission critical • Shared faculty/courses • Other: Development plan; curricular changes made; collaborating with other institutions course delivery |
| Philosophy | BA | <ul style="list-style-type: none"> • Mission critical • Supports other programs • Other: little or no savings if deleted |
| Political Science | PhD | <ul style="list-style-type: none"> • Mission critical • Other: averaged 3.2 over past six years; currently 40 majors. |

| Programs recommended for follow-up review in three years | |
|---|---------------|
| Program title | Degree |
| Philosophy | BA |

**Institutional
Summary
Reports**

2-year Sector

CROWDER COLLEGE
Statewide Review of Academic Programs

Summary Report

MDHE staff identified 42 programs that fell below the productivity threshold. Fourteen programs should not have been included in the list, either because they had been approved within the past five years and have not had sufficient time to demonstrate viability, or they had data that had been misreported or miscoded.

The MDHE asked officials at Crowder College to provide justifications for these programs:

| Programs identified for further review | | |
|--|---------------------------------------|---|
| Degree level | Program name | Average annual number of graduates for three previous years |
| Associate | Accounting | 1.7 |
| Associate | Agri-Business Technology | 0.3 |
| Associate | Agri-Equipment/ Diesel Technology | None |
| Associate | Automotive Technology | 1.7 |
| Associate | Computer & Network Support Technology | 1.0 |
| Associate | Construction Technology | 1.3 |
| Associate | Drafting and Design Technology | 3.3 |
| Associate | Environmental Health Technology | None |
| Associate | Fire Science Technology | 1.7 |
| Associate | Industrial Technology | None |
| Associate | Occupational Education | None |
| Associate | Paramedical Science | 1.3 |
| Associate | Poultry Science | None |
| Associate | Pre-Engineering Alternative Energy | 2.0 |
| Certificate | Auto Mechanics | 1.0 |
| Certificate | Construction Technology | None |
| Certificate | Diesel Technology | None |
| Certificate | Electronics Technology | None |
| Certificate | Emergency Medical Technician | None |

| | | |
|--------------|--|------|
| Certificate | Emergency Medical Technician | None |
| Certificate | Environmental Health | 0.3 |
| Certificate | Fire Science | None |
| Certificate | Hazardous Materials Technology | None |
| Certificate | Industrial Technology | 0.7 |
| Certificate | Office Administration-Office Assistant | 0.7 |
| Certificate | Office Administration-Office Assistant | 0.7 |
| Certificate | Teaching English to Speakers | None |
| Certificate | Water & Wastewater Technology | None |
| Total | 28 | |

Of these, Crowder College identified six programs for deletion.

| Programs identified by institution for deletion | |
|---|--------------------------------|
| Degree level | Program name |
| Associate | Agri-Business Technology |
| Associate | Construction Technology |
| Associate | Poultry Science |
| Certificate | Electronics Technology |
| Certificate | Hazardous Materials Technology |
| Certificate | Water & Wastewater Technology |

MDHE staff accepted the justifications provided by Crowder College for the programs listed in the table below.

| Program justifications accepted by MDHE | | |
|---|--------|--|
| Program title | Degree | Brief summary of justifications |
| Accounting | AAS | <ul style="list-style-type: none"> • Supports general education • Development plan |
| Automotive Technology | AAS | <ul style="list-style-type: none"> • Shared faculty/resources • Consortium |
| Computer & Network Support Technology | AAS | <ul style="list-style-type: none"> • Graduates reported under incorrect CIP |
| Drafting and Design Technology | AAS | <ul style="list-style-type: none"> • Shared faculty/resources • Consortium |
| Environmental Health Technology | AAS | <ul style="list-style-type: none"> • Unique need • Development plan |
| Fire Science Technology | AAS | <ul style="list-style-type: none"> • Shared faculty/resources • Consortium |
| Occupational Education | AAS | <ul style="list-style-type: none"> • Shared faculty/resources • Consortium |
| Pre-Engineering Alternative Energy | AS | <ul style="list-style-type: none"> • Shared faculty/resources |
| Office Administration-Office Assistant | C0 | <ul style="list-style-type: none"> • Shared faculty/resources |
| Construction Technology | C1 | <ul style="list-style-type: none"> • Shared faculty/resources |
| Fire Science | C1 | <ul style="list-style-type: none"> • Shared faculty/resources • Consortium |
| Office Administration-Office Assistant | C1 | <ul style="list-style-type: none"> • Shared faculty/resources |
| Environmental Health | C2 | <ul style="list-style-type: none"> • Unique need • Development plan |

MDHE staff recommends that the programs listed below be retained and undergo a follow-up review in three years.

| Programs recommended for follow-up review in three years | | |
|--|--------|--|
| Program title | Degree | Brief summary of justifications |
| Agri-Equipment/ Diesel Technology | AAS | <ul style="list-style-type: none"> • Other: Program has implemented strategic plans to improve program |
| Industrial Technology | AAS | <ul style="list-style-type: none"> • Other: Program has implemented strategic plans to improve program • Grant funds |
| Paramedical Science | AAS | <ul style="list-style-type: none"> • Other: Program has implemented strategic plans to improve program |

| | | |
|------------------------------|-----------------------|---|
| Emergency Medical Technician | C0 | <ul style="list-style-type: none"> Other: Program has implemented strategic plans to improve program |
| Auto Mechanics | C1 | <ul style="list-style-type: none"> Other: Program has implemented strategic plans to improve program Shared faculty/resources Unique to region |
| Diesel Technology | C1 | <ul style="list-style-type: none"> Market demand Other: Program has implemented strategic plans to improve program |
| Emergency Medical Technician | C1 | <ul style="list-style-type: none"> Other: Program has implemented strategic plans to improve program |
| Industrial Technology | C1 | <ul style="list-style-type: none"> Other: Program has implemented strategic plans to improve program Grant funds |
| Teaching English to Speakers | Post baccalaureate | <ul style="list-style-type: none"> Program recently reactivated |

EAST CENTRAL COLLEGE
Statewide Review of Academic Programs

Summary Report

MDHE staff identified 16 programs that fell below the productivity threshold. One program should not have been on the list because it had been approved within the past five years and had not had sufficient time to demonstrate viability.

The MDHE asked officials at East Central College to provide justifications for these programs:

| Programs identified for further review | | |
|--|-----------------------------------|---|
| Degree level | Program name | Average annual number of graduates for three previous years |
| Associate | Occupational Education | 0.7 |
| Associate | Para Educator | 0.3 |
| Associate | Apprenticeship Training | 0.3 |
| Associate | Radiologic Technology | 3.3 |
| Associate | Early Childhood Education | 0.3 |
| Associate | Criminal Justice | 0.7 |
| Associate, Certificate | Computer Information Systems | 2.3 |
| Associate, Certificate | Fire Technology | 3.7 |
| Associate, Certificate | Building Construction Technology | 2.7 |
| Associate, Certificate | Welding | 1.7 |
| Certificate | Medical Secretarial/Transcription | None |
| Certificate | Computer Integrated Manufacturing | None |
| Certificate | Floral Design | None |
| Certificate | Solution Developer | None |
| Associate | Nursing-LPN Bridge Program | None |
| Total | 15 | |

Of these, East Central College identified six programs for deletion.

| Programs identified by institution for deletion | |
|---|-----------------------------------|
| Degree level | Program name |
| Associate | Early Childhood Education |
| Associate | Criminal Justice |
| Certificate | Computer Integrated Manufacturing |
| Certificate | Floral Design |
| Certificate | Solution Developer |
| Associate | Nursing-LPN Bridge Program |

The MDHE requested follow-up material for the programs listed below but the materials have not yet been received. East Central College's review of academic programs is therefore incomplete.

| Programs requiring further review by MDHE Staff | |
|---|------------------------|
| Program title | Degree |
| Occupational Education | Associate |
| Para Educator | Associate |
| Apprenticeship Training | Associate |
| Radiologic Technology | Associate |
| Computer Information Systems | Associate, Certificate |
| Fire Technology | Associate, Certificate |
| Building Construction Technology | Associate, Certificate |
| Welding | Associate, Certificate |
| Medical Secretarial/Transcription | Certificate |

JEFFERSON COLLEGE
Statewide Review of Academic Programs

Summary Report

MDHE staff identified 10 programs that fell below the productivity threshold. The MDHE asked officials at the Jefferson College to provide justifications for these programs:

| Programs identified for further review | | |
|--|-------------------------------|---|
| Degree level | Program name | Average annual number of graduates for three previous years |
| Associate | Apprenticeship Training | 2.3 |
| Associate | Civil/Construction Technology | None |
| Associate | Engineering | 2.0 |
| Certificate | Accounting Technology | 4.7 |
| Certificate | Certified Nurse Aide | None |
| Certificate | Civil/Construction Technology | None |
| Certificate | Computer Information Systems | None |
| Certificate | Medication Technician | None |
| Certificate | Police Training Institute | None |
| Certificate | Unit Secretary | None |
| Total | 10 | |

Of these, Jefferson College identified five programs for deletion.

| Programs identified by institution for deletion | |
|---|-------------------------------|
| Degree level | Program name |
| Associate | Civil/Construction Technology |
| Certificate | Civil/Construction Technology |
| Certificate | Computer Information Systems |
| Certificate | Police Training Institute |
| Certificate | Unit Secretary |

MDHE staff accepted the justifications provided by Jefferson College for the programs listed in the table below.

| Program Justifications Accepted by MDHE | | |
|---|--------|---|
| Program title | Degree | Brief summary of justifications |
| Apprenticeship Training | AAS | <ul style="list-style-type: none"> • Supports general education • Unique need • Other: 15 students enrolled for the Spring 2011 semester |
| Engineering | AS | <ul style="list-style-type: none"> • Supports general education • Unique need |
| Certified Nurse Aide | C0 | <ul style="list-style-type: none"> • Unique need • Other: Program was recently reactivated on campus |
| Medication Technician | C0 | <ul style="list-style-type: none"> • Unique need |

MDHE staff recommends that the program listed below be retained and undergo a follow-up review in three years.

| Program recommended for follow-up review in three years | | |
|---|--------|--|
| Program title | Degree | Brief summary of justifications |
| Accounting Technology | C1 | <ul style="list-style-type: none"> • Supports general education • Shared courses/faculty |

LINN STATE TECHNICAL COLLEGE
Statewide Review of Academic Programs

Summary Report

MDHE staff identified four programs that fell below the productivity threshold. One program should not have been included because it had been approved within the past five years and has not had sufficient time to demonstrate viability.

The MDHE asked officials at Linn State Technical College to provide justifications for these programs:

| Programs identified for further review | | |
|--|-----------------------------------|---|
| Degree level | Program name | Average annual number of graduates for three previous years |
| Associate | Industrial Maintenance Technology | None |
| Associate | Occupational Education | None |
| Certificate | Aviation Maintenance Airframe | 2.0 |
| Total | 3 | |

Of these, Linn State Technical College identified one program for deletion.

| Programs to be deleted | |
|------------------------|------------------------|
| Degree level | Program name |
| Associate | Occupational Education |

MDHE staff accepted the justifications provided by Linn State Technical College for the remaining programs (see table below).

| Program justifications accepted by MDHE | | |
|---|--------|--|
| Program title | Degree | Brief summary of justifications |
| Industrial Maintenance Technology | AAS | <ul style="list-style-type: none"> • Cost recovery program • Local employer demand for the program |
| Aviation Maintenance Airframe | C1 | <ul style="list-style-type: none"> • Shared courses/faculty |

METROPOLITAN COMMUNITY COLLEGE
Statewide Review of Academic Programs

Summary Report

MDHE staff identified 33 programs that fell below the productivity threshold. Ten programs should not have been included in the list, either because they had been approved within the past five years and have not had sufficient time to demonstrate viability, or had data that had been misreported or miscoded.

The MDHE asked officials at Metropolitan Community College to provide justifications for these programs:

| Programs identified for further review | | |
|--|---|---|
| Degree level | Program name | Average annual number of graduates for three previous years |
| Associate | Apparel & Textiles - Design and Production | 3.3 |
| Associate | Apparel & Textiles- Merchandising and Marketing | 3.3 |
| Associate | Associate in Science, Biology | None |
| Associate | Associate in Science, Chemistry | None |
| Associate | Environmental Health & Safety | 1.0 |
| Associate | Land Surveying | 0.7 |
| Associate | Occupational Education | 0.3 |
| Associate | Paraprofessional Educator | None |
| Associate | Quality Assurance Technology | 0.3 |
| Associate | Telecommunications Technology | None |
| Certificate | Collision Repair Technology | 0.3 |
| Certificate | Computer Support Technician | None |
| Certificate | Computer Support Technology I | 2.0 |
| Certificate | Database Programming (ACCESS) | 0.3 |
| Certificate | Geographic Information Systems | None |
| Certificate | Interactive Digital Media I | None |
| Certificate | Interactive Digital Media I | None |
| Certificate | Interactive Digital Media II | None |

| | | |
|--------------|----------------------------------|------|
| Certificate | Land Surveying | 0.7 |
| Certificate | Telecommunications Technician I | None |
| Certificate | Telecommunications Technician II | None |
| Certificate | Youth Development Worker | None |
| Certificate | Youth Work | None |
| Total | 23 | |

Of these, Metropolitan Community College identified 11 programs for deletion.

| Programs identified by institution for deletion | |
|---|---|
| Degree level | Program name |
| Associate | Paraprofessional Educator |
| Associate | Quality Assurance Technology |
| Associate | Telecommunications Technology |
| Certificate | Computer Support Technician |
| Certificate | Computer Support Technology I |
| Certificate | Database Programming (ACCESS) Certificate |
| Certificate | Interactive Digital Media I |
| Certificate | Interactive Digital Media I |
| Certificate | Interactive Digital Media II |
| Certificate | Telecommunications Technician I |
| Certificate | Telecommunications Technician II |

MDHE staff accepted the justifications provided by Metropolitan Community College for the programs listed in the table below.

| Program justifications accepted by MDHE | | |
|---|--------|---|
| Program title | Degree | Brief summary of justifications |
| Apparel & Textiles- Merchandising and Marketing | AAS | <ul style="list-style-type: none"> Other: Program was reported under two CIP codes; when combined program exceeds threshold |
| Apparel & Textiles-Design and Production | AAS | <ul style="list-style-type: none"> Other: Program was reported under two CIP codes; when combined, program exceeds threshold |

| | | |
|---------------------------------|-----|--------------------------|
| Environmental Health & Safety | AAS | • Shared courses/faculty |
| Land Surveying | AAS | • Shared courses/faculty |
| Occupational Education | AAS | • Shared courses/faculty |
| Associate in Science, Biology | AS | • Shared courses/faculty |
| Associate in Science, Chemistry | AS | • Shared courses/faculty |
| Youth Development Worker | C0 | • Shared courses/faculty |
| Collision Repair Technology | C1 | • Shared courses/faculty |
| Geographic Information Systems | C1 | • Shared courses/faculty |
| Land Surveying | C1 | • Shared courses/faculty |
| Youth Work | C1 | • Shared courses/faculty |

MINERAL AREA COLLEGE
Statewide Review of Academic Programs

Summary Report

MDHE staff identified seven programs that fell below the productivity threshold. The MDHE asked officials at the Mineral Area College to provide justifications for these programs:

| Programs identified for further review | | |
|--|---|---|
| Degree level | Program name | Average annual number of graduates for three previous years |
| Associate | Agri-Business | 3.0 |
| Associate | Radio TV Broadcasting | 1.0 |
| Associate, Certificate | Culinary Arts | 0.3 |
| Associate, Certificate | Graphic Arts Printing Technology | 4.7 |
| Associate, Certificates | Horticulture Services/Operations Technology | 1.7 |
| Certificate | Floral Design | 1.3 |
| Certificate | Viticulture | None |
| Total | 7 | |

Of these, Mineral Area College identified three programs to be placed on inactive status.

| Programs moved to inactive status (Institution must request reactivation and CBHE must approve. Will be deleted in five years if not reactivated) | |
|--|---------------|
| Degree level | Program name |
| Associate, Certificate | Culinary Arts |
| Certificate | Floral Design |
| Certificate | Viticulture |

MDHE staff accepted the justifications provided by Mineral Area College for the programs listed in the table below.

| Program justifications accepted by MDHE | | |
|--|---------------|---|
| Program title | Degree | Brief summary of justifications |
| Agri-Business | AAS | <ul style="list-style-type: none"> • Supports general education • Shared courses/faculty |
| Radio TV Broadcasting | AAS | <ul style="list-style-type: none"> • Unique need • Other: Collaborative program with local area career and technology centers |
| Graphic Arts Printing Technology | AAS, C1 | <ul style="list-style-type: none"> • Unique need • Other: Collaborative program with local area career and technology centers |
| Horticulture Services/Operations Technician | AAS, C1 | <ul style="list-style-type: none"> • Supports general education. • Shared courses/faculty |

MISSOURI STATE UNIVERSITY--WEST PLAINS
Statewide Review of Academic Programs

Summary Report

MDHE staff identified 14 programs that fell below the productivity threshold. Four programs should not have been included in the list because they had been approved within the past five years and have not had sufficient time to demonstrate viability.

The MDHE asked officials at Missouri State University--West Plains to provide justifications for these programs:

| Programs identified for further review | | |
|--|-------------------------|---|
| Degree level | Program name | Average annual number of graduates for three previous years |
| Associate | Business | 4.7 |
| Associate | Computer Technology | 1.0 |
| Associate | Enology | None |
| Associate | Fire Science Technology | 0.7 |
| Associate | General Technology | 0.7 |
| Associate | Law Enforcement | 1.7 |
| Associate | Viticulture | None |
| Certificate | Enology | None |
| Certificate | Technology Management | None |
| Certificate | Viticulture | 0.3 |
| Total | 10 | |

Of these, Missouri State University--West Plains identified one program for inactivation.

| Programs moved to inactive status (Institution must request reactivation and CBHE must approve. Will be deleted in five years if not reactivated) | |
|--|-------------------------|
| Degree level | Program name |
| Associate | Fire Science Technology |

MDHE staff accepted the justifications provided by Missouri State University--West Plains for the programs listed in the table below.

| Program justifications accepted by MDHE | | |
|---|--------|---|
| Program title | Degree | Brief summary of justifications |
| Computer Technology | AAS | <ul style="list-style-type: none"> • Shared courses/faculty • Other: Development plan |
| Technology Management | C1 | <ul style="list-style-type: none"> • Other: Development plan |

The MDHE requested follow-up material for the programs listed below but the materials have not yet been received.

| Programs requiring further review by MDHE staff | |
|---|-------------|
| Program title | Degree |
| Business | Associate |
| Enology | Associate |
| General Technology | Associate |
| Law Enforcement | Associate |
| Viticulture | Associate |
| Enology | Certificate |
| Viticulture | Certificate |

MOBERLY AREA COMMUNITY COLLEGE
Statewide Review of Academic Programs

Summary Report

MDHE staff identified 10 programs that fell below the productivity threshold. Three programs should not have been included in the list, either because they had been approved within the past five years and have not had sufficient time to demonstrate viability, or had data that had been misreported or miscoded.

The MDHE asked officials at Moberly Area Community College to provide justifications for these programs:

| Programs identified for further review | | |
|--|--------------------------------|---|
| Degree level | Program name | Average annual number of graduates for three previous years |
| Associate | Business Accounting Technology | 4.3 |
| Associate | Drafting Design Technology | 3.3 |
| Associate | Marketing/Management | 2.3 |
| Associate | Welding and Metals Technology | 1.0 |
| Certificate | Drafting Design Technology | None |
| Certificate | Marketing/Management | 0.3 |
| Certificate | Welding and Metals Technology | None |
| Total | 7 | |

MDHE staff accepted the justifications provided by Moberly Area Community College for the programs listed below.

| Program justifications accepted by MDHE | | |
|---|--------|--|
| Program title | Degree | Brief summary of justifications |
| Drafting Design Technology | AAS | <ul style="list-style-type: none"> • Supports general education • Unique need |
| Welding and Metals Technology | AAS | <ul style="list-style-type: none"> • Other: Significant increase in enrollments • Demand |
| Drafting Design Technology | C1 | <ul style="list-style-type: none"> • Shared courses/faculty |
| Welding and Metals Technology | C1 | <ul style="list-style-type: none"> • Other: Significant increase in enrollments • Demand |

MDHE staff recommends that the three programs listed below be retained and undergo a follow-up review in three years.

| Programs recommended for follow-up review in three years | | |
|--|--------|---|
| Program title | Degree | Brief summary of justifications |
| Business Accounting Technology | AAS | <ul style="list-style-type: none"> • Supports general education • Other: Program expanded to a new site and began offering the program virtually in Fall 2009 |
| Marketing/Management | AAS | <ul style="list-style-type: none"> • Supports general education • Other: Program will be expanding to a new site and is now offering courses for the program web-synchronously • Other: Institution has recently implemented new strategies to assist in student retention |
| Marketing/Management | C1 | <ul style="list-style-type: none"> • Supports general education • Other: Program will be expanding to a new site and is now offering courses for the program web-synchronously • Other: Institution has recently implemented new strategies to assist in student retention |

NORTH CENTRAL MISSOURI COLLEGE
Statewide Review of Academic Programs

Summary Report

MDHE staff identified 29 programs that fell below the productivity threshold. Nine programs should not have been included in the list, either because they had been approved within the past five years and have not had sufficient time to demonstrate viability, or had data that had been misreported or miscoded.

The MDHE asked officials at North Central Missouri College to provide justifications for these programs:

| Programs identified for further review | | |
|--|--|---|
| Degree level | Program name | Average annual number of graduates for three previous years |
| Associate | Information Technologies | 3.7 |
| Certificate | Information Technologies | 3.0 |
| Associate | Manufacturing Skill Standards Council-Pro | 1.3 |
| Certificate | Manufacturing Skills Standards Council-Pro | None |
| Associate | Technical Teacher Education | 0.3 |
| Certificate | Equine Management | None |
| Certificate | Equine Management | None |
| Associate | Construction Technology | 0.3 |
| Certificate | Construction Technology | None |
| Associate | Criminal Justice | 4.7 |
| Certificate | Criminal Justice | None |
| Associate, Certificate | E-Business Management and Commerce | 0.3 |
| Associate | Business Technology | 1.7 |
| Certificate | Business Technology | 0.7 |
| Certificate | Marketing Management | None |
| Certificate | Medical Ins. & Billing Specialist | 1.3 |
| Certificate | Medical Transcriptionist | 3.0 |
| Certificate | Medical Assistant | 4.0 |
| Certificate | Medical Assistant | 0.3 |

| | | |
|--------------|------------------------------|-----|
| Associate | Emergency Medical Technology | 1.7 |
| Total | 20 | |

Of these, North Central Missouri College identified five programs for deletion and five for inactivation.

| Programs identified by institution for deletion | |
|---|--|
| Degree level | Program name |
| Associate | Manufacturing Skill Standards Council-Pro |
| Associate | Technical Teacher Education |
| Associate, Certificate | E-Business Management and Commerce |
| Certificate | Manufacturing Skills Standards Council-Pro |
| Certificate | Equine Management |

| Programs moved to inactive status (Institution must request reactivation and CBHE must approve. Will be deleted in five years if not reactivated.) | |
|---|--------------------------|
| Degree level | Program name |
| Associate | Information Technologies |
| Associate | Construction Technology |
| Certificate | Information Technologies |
| Certificate | Construction Technology |
| Certificate | Equine Management |

MDHE staff accepted the justifications provided by North Central Missouri College for the programs listed in the table below.

| Program justifications approved by MDHE | | |
|---|--------|--|
| Program title | Degree | Brief summary of justifications |
| Business Technology | AAS | <ul style="list-style-type: none"> Supports general education |
| Business Technology | C1 | <ul style="list-style-type: none"> Supports general education |
| Marketing Management | C1 | <ul style="list-style-type: none"> Shared courses/faculty |
| Medical Ins. & Billing Specialist | C1 | <ul style="list-style-type: none"> Supports general education/other programs Shared courses/faculty Unique need |

| | | |
|------------------------------|-----|---|
| Medical Transcriptionist | C1 | <ul style="list-style-type: none"> • Supports general education • Unique need |
| Medical Assistant | AAS | <ul style="list-style-type: none"> • Supports general education • Shared courses/faculty • Unique need |
| Medical Assistant | C1 | <ul style="list-style-type: none"> • Supports general education • Shared courses/faculty • Unique need |
| Emergency Medical Technology | AAS | <ul style="list-style-type: none"> • Supports general education • Shared courses/faculty • Unique need |

MDHE staff recommends that the programs listed below be retained and undergo a follow-up review in three years.

| Programs recommended for follow-up review in three years | | |
|--|------------------|---|
| Degree | Program title | Brief summary of justifications |
| Associate | Criminal Justice | <ul style="list-style-type: none"> • Other: Institution has created a plan to increase recruitment and retention |
| Certificate | Criminal Justice | <ul style="list-style-type: none"> • Other: Institution has created a plan to increase recruitment and retention |

OZARKS TECHNICAL COMMUNITY COLLEGE
Statewide Review of Academic Programs

Summary Report

MDHE staff identified 14 programs that fell below the productivity threshold. Ten programs should not have been included in the list, either because they had been approved within the past five years and have not had sufficient time to demonstrate viability, or they had data that had been misreported or miscoded. One program had previously been renamed, but the change had not been made in the MDHE program inventory.

The MDHE asked officials at Ozarks Technical Community College to provide justifications for these three programs:

| Programs identified for further review | | |
|--|-----------------------------------|---|
| Degree level | Program name | Average annual number of graduates for three previous years |
| Associate | Industrial Electronics Technology | 3.0 |
| Certificate | Industrial Electronics Technology | 3.0 |
| Certificate | Certified Nurse Aide | None |
| Total | 3 | |

Of these, Ozarks Technical Community College identified the Industrial Electronics Technology program for deletion.

| Programs identified by institution for deletion | |
|---|-----------------------------------|
| Degree level | Program name |
| Associate | Industrial Electronics Technology |
| Certificate | Industrial Electronics Technology |

MDHE staff accepted the justifications provided by Ozarks Technical Community College for the remaining program.

| Program justifications accepted by MDHE | | |
|---|-------------|--|
| Program title | Degree | Brief summary of justifications |
| Certified Nurse Aide | Certificate | <ul style="list-style-type: none"> • Non-credit bearing course; no EMSAS data • Institutional data indicates that program meets average graduate threshold |

ST. CHARLES COMMUNITY COLLEGE
Statewide Review of Academic Programs

Summary Report

MDHE staff identified 28 programs that fell below the productivity threshold. Seven programs should not have been included in the list, either because they have been approved within the past five years and have not had sufficient time to demonstrate viability, or they had data that had been misreported or miscoded.

The MDHE asked officials at St. Charles Community College to provide justifications for these programs:

| Programs identified for further review | | |
|--|--|---|
| Degree level | Program name | Average annual number of graduates for three previous years |
| Associate | Environmental Science | None |
| Associate | Education Paraprofessional | 0.7 |
| Associate | Pre-engineering | 2.3 |
| Associate | Electronics Engineering Technology | 0.3 |
| Associate | Criminal Justice | 2.7 |
| Associate | Technology | 0.3 |
| Associate | Human Services Assistant | 2.0 |
| Associate | Industrial Maintenance Technology | None |
| Associate | Skilled Trades industrial Apprenticeship | 1.3 |
| Associate | Graphic Design | None |
| Associate | Medical Transcription | None |
| Associate | Massage Therapy | None |
| Associate | Computer Science | None |
| Certificate | Programming Languages | None |
| Certificate | Network Design | None |
| Certificate | Computer Applications | None |
| Certificate | Criminal Justice | 0.3 |
| Certificate | Customer Service | None |

| | | |
|--------------|---------------------|------|
| Certificate | Desktop Publishing | None |
| Certificate | Clerical Assistant | None |
| Certificate | Advanced Networking | None |
| TOTAL | 21 | |

Of these, St. Charles Community College identified five programs for deletion.

| Programs identified by institution for deletion | |
|---|------------------------------------|
| Degree level | Program name |
| Associate | Environmental Science |
| Associate | Electronics Engineering Technology |
| Associate | Industrial Maintenance Technology |
| Associate | Medical Transcription |
| Associate | Massage Therapy |

MDHE staff accepted the justifications provided by St. Charles Community College for the programs listed in the table below.

| Program justifications accepted by MDHE | | |
|--|--------|--|
| Program title | Degree | Brief summary of justifications |
| Education Paraprofessional | AAS | <ul style="list-style-type: none"> Shared courses/faculty |
| Criminal Justice | AAS | <ul style="list-style-type: none"> Shared courses/faculty Unique need |
| Technology | AAS | <ul style="list-style-type: none"> Shared courses/faculty |
| Human Services Assistant | AAS | <ul style="list-style-type: none"> Shared courses/faculty Other: External funding would be jeopardized by program closure. |
| Skilled Trades industrial Apprenticeship | AAS | <ul style="list-style-type: none"> Shared courses/faculty (no unique courses) Other: Articulation agreements |
| Graphic Design | AAS | <ul style="list-style-type: none"> Shared courses/faculty Other: External funding would be jeopardized by program closure. |
| Pre-engineering | AS | <ul style="list-style-type: none"> Enrollment numbers |
| Programming Languages | C1 | <ul style="list-style-type: none"> Shared courses/faculty. |
| Network Design | C1 | <ul style="list-style-type: none"> Shared courses/faculty |
| Computer Applications | C1 | <ul style="list-style-type: none"> Shared courses/faculty |

| | | |
|---------------------|-----|---|
| Criminal Justice | C1 | <ul style="list-style-type: none"> • Shared courses/faculty • Unique need |
| Customer Service | C1 | <ul style="list-style-type: none"> • Shared courses/faculty |
| Desktop Publishing | C1 | <ul style="list-style-type: none"> • Shared courses/faculty |
| Clerical Assistant | C1 | <ul style="list-style-type: none"> • Shared courses/faculty |
| Computer Science | AAS | <ul style="list-style-type: none"> • Other: reported under wrong CIP code |
| Advanced Networking | C1 | <ul style="list-style-type: none"> • Other: reported under wrong CIP code |

ST. LOUIS COMMUNITY COLLEGE
Statewide Review of Academic Programs

Summary Report

MDHE staff identified 28 programs that fell below the productivity threshold. One program should not have been included in the list because it had been approved within the past five years and has not had sufficient time to demonstrate viability.

The MDHE asked officials at St. Louis Community College to provide justifications for these programs:

| Programs identified for further review | | |
|--|--|---|
| Degree level | Program name | Average annual number of graduates for three previous years |
| Associate | Occupational Education (collab. CMSU, SMSU) | None |
| Associate | Civil Engineering Technology | 1.3 |
| Associate | Electrical/Electronic Engineering Technology | 4.3 |
| Associate | Robotics Technology | 0.3 |
| Associate | Manufacturing Technology | 1.3 |
| Associate | Mechanical Engineering Technology | 1.7 |
| Associate | Construction Management Technology | 2.0 |
| Associate | Chemical Technology | 4.7 |
| Associate | Skilled Trades Industrial Apprenticeship | 0.7 |
| Associate, Certificate | Information Reporting Technology, | 3.3 |
| Associate, Certificate | Building Inspection & Code Enforcement | 3.3 |
| Associate, Certificate | Diesel Technology, Diesel Technology | 2.3 |
| Associate, Certificate | Sales | 3.7 |
| Certificate | Multimedia | 1.0 |
| Certificate | Information Reporting Technology | 1.3 |
| Certificate | Microcomputer Applications (110301) | 2.0 |
| Certificate | Database Developer | 1.0 |
| Certificate | Microcomputer Applications (110601) | None |
| Certificate | Web Development | 2.0 |

| | | |
|--------------|--|------|
| Certificate | Voice Data Communications, Voice Data Communications Analyst | 0.3 |
| Certificate | Information Technology-Network Administrator | 3.3 |
| Certificate | Computer Aided Design | 3.3 |
| Certificate | Technical Business Communications | None |
| Certificate | Lead Maintenance Mechanic | None |
| Certificate | Medical Transcription | 1.7 |
| Certificate | Phlebotomy | 3.3 |
| Certificate | Construction Office Management | 3.0 |
| Total | 27 | |

Of these, St. Louis Community College identified one program for deletion, and identified six programs it will consider placing on inactive status.

| Programs identified by institution for deletion | |
|---|--|
| Degree level | Program name |
| Associate | Skilled Trades Industrial Apprenticeship |

| Programs to be considered by institution for inactivation (Institution must request reactivation and CBHE must approve. Will be deleted in five years if not reactivated) | |
|--|--|
| Degree level | Program name |
| Certificate | Multimedia |
| Certificate | Microcomputer Applications |
| Certificate | Database Developer |
| Certificate | Microcomputer Applications |
| Certificate | Voice Data Communications, Voice Data Communications Analyst |
| Certificate | Medical Transcription |

MDHE staff accepted the justifications provided by St. Louis Community College for the programs listed in the table below.

| Program justifications approved by MDHE | | |
|---|---------|---------------------------------|
| Program title | Degree | Brief summary of justifications |
| Chemical Technology | AAS | • Other: Employer demand |
| Information Reporting Technology | AAS, C1 | • Other: Employer demand |
| Web Development | C0 | • Shared courses/faculty |
| Construction Office Management | C0 | • Shared courses/faculty |

MDHE staff recommends that the programs listed below be retained and undergo a follow-up review in three years.

| Programs recommended for follow-up review in three years | | |
|--|--------|---------------------------------|
| Program title | Degree | Brief summary of justifications |
| Information Technology-Network Administrator | C1 | • Shared courses/faculty |

The MDHE requested additional documentation and justification for the programs listed below. St. Louis Community College’s response indicated that these programs would undergo an internal review in the coming year. The MDHE’s review is therefore incomplete, pending the outcome of the institution’s internal review.

| Programs requiring further review by MDHE Staff | |
|---|-------------|
| Program title | Degree |
| Civil Engineering Technology | AAS |
| Electrical/Electronic Engineering Technology | AAS |
| Robotics Technology | AAS |
| Manufacturing Technology | AAS |
| Mechanical Engineering Technology | AAS |
| Construction Management Technology | AAS |
| Occupational Education (collab. CMSU, SMSU) | AAS |
| Sales | AAS, C0 |
| Diesel Technology, Diesel Technology | AAS, C0, C1 |

| | |
|---|---------|
| Building Inspection & Code Enforcement | AAS, C1 |
| Building Inspection & Code Enforcement | AAS, C1 |
| Computer Aided Design | C0 |
| Lead Maintenance Mechanic | C0 |
| Phlebotomy | C0 |
| Technical/Bus Communications, Technical Business Communications | C1 |

There is a discrepancy in the program inventory of St. Louis Community College and the MDHE program inventory regarding the program listed below. The MDHE and St. Louis Community College are working to resolve the discrepancy.

| Program inventory discrepancy | |
|---|---------------|
| Program title | Degree |
| Occupational Education (collab. CMSU, SMSU) | AAS |

STATE FAIR COMMUNITY COLLEGE
Statewide Review of Academic Programs

Summary Report

MDHE staff identified 10 programs that fell below the productivity threshold. Two programs should not have been included in the list because they had been approved within the past five years and have not had sufficient time to demonstrate viability.

The MDHE asked officials at State Fair Community College to provide justifications for these programs:

| Programs identified for further review | | |
|--|----------------------------------|---|
| Degree level | Program name | Average annual number of graduates for three previous years |
| Associate | Web Development | 3.0 |
| Associate | Occupational Education | None |
| Associate | Fire Science Technology | None |
| Associate | Building Materials Merchandising | 0.7 |
| Associate, Certificate | Marine Technology | 0.7 |
| Associate, Certificate | Machine Tool Technology | 3.3 |
| Certificate | Welding Technology | 4.0 |
| Certificate | Industrial Management | None |
| TOTAL | 8 | |

Of these, State Fair Community College identified three programs for deletion.

| Programs identified by institution for deletion | |
|---|-------------------------|
| Degree level | Program name |
| Associate | Occupational Education |
| Associate | Fire Science Technology |
| Certificate | Industrial Management |

MDHE staff accepted the justifications provided by State Fair Community College for the programs listed in the table below.

| Program justifications accepted by MDHE | | |
|---|---------|---|
| Program title | Degree | Brief summary of justifications |
| Web Development | AAS | <ul style="list-style-type: none"> • Shared courses/faculty • Critical to mission • Supports general education |
| Building Materials Merchandising | AAS | <ul style="list-style-type: none"> • Shared courses/faculty • Demand |
| Marine Technology | AAS, C1 | <ul style="list-style-type: none"> • Other: Collaboration |
| Welding Technology | C1 | <ul style="list-style-type: none"> • Enrollment |
| Machine Tool Technology | AAS, C1 | <ul style="list-style-type: none"> • Enrollment |

THREE RIVERS COMMUNITY COLLEGE
Statewide Review of Academic Programs

Summary Report

MDHE staff identified 17 programs that fell below the productivity threshold. Three programs should not have been included in the list, either because they had been approved within the past five years and have not had sufficient time to demonstrate viability, or they had data that had been misreported or miscoded.

The MDHE asked officials at Three Rivers Community College to provide justifications for these programs:

| Programs identified for further review | | |
|--|----------------------------------|---|
| Degree level | Program name | Average annual number of graduates for three previous years |
| Associate | Agricultural Systems | 3.0 |
| Associate | Applied Technology | 1.0 |
| Associate | Occupational Education | 0.3 |
| Associate, Certificate | EMS - Paramedic | 2.0 |
| Certificate | Accounting | 0.7 |
| Certificate | Advanced Health Care Technician | None |
| Certificate | Automated Office Certificate | 3.0 |
| Certificate | Electrical Technician | 3.3 |
| Certificate | Hospitality and Tourism | 1.3 |
| Certificate | Information Publishing | 1.0 |
| Certificate | Management and Supervision | 1.7 |
| Certificate | Microcomputer Support Technology | 2.0 |
| Certificate | Quality Control Technician | 1.7 |
| Certificate | Surveying | 4.3 |
| TOTAL | 14 | |

Of these, Three Rivers Community College identified two programs for deletion.

| Programs identified by institution for deletion | |
|---|---------------------------------|
| Degree level | Program name |
| Associate | Occupational Education |
| Certificate | Advanced Health Care Technician |

MDHE staff accepted the justifications provided by Three Rivers Community College for the programs listed in the table below.

| Program justifications accepted by MDHE | | |
|---|---------|---|
| Program title | Degree | Brief summary of justifications |
| Applied Technology | AAS | <ul style="list-style-type: none"> Shared courses/faculty |
| EMS – Paramedic | AAS, C0 | <ul style="list-style-type: none"> Other: Program has been inactive at the institution, but will be reactivated in summer 2011 |
| Accounting | C0 | <ul style="list-style-type: none"> Shared courses/faculty |
| Automated Office Certificate | C0 | <ul style="list-style-type: none"> Shared courses/faculty |
| Electrical Technician | C0 | <ul style="list-style-type: none"> Shared courses/faculty |
| Hospitality and Tourism | C0 | <ul style="list-style-type: none"> Shared courses/faculty |
| Information Publishing | C0 | <ul style="list-style-type: none"> Shared courses/faculty |
| Management and Supervision | C0 | <ul style="list-style-type: none"> Shared courses/faculty |
| Microcomputer Support Technology | C0 | <ul style="list-style-type: none"> Shared courses/faculty |
| Quality Control Technician | C0 | <ul style="list-style-type: none"> Shared courses/faculty |
| Surveying | C0 | <ul style="list-style-type: none"> Shared courses/faculty |

MDHE staff recommends that the program listed below be retained and undergo a follow-up review in three years.

| Program recommended for follow-up review in three years | | |
|---|--------|---|
| Program title | Degree | Brief summary of justifications |
| Agricultural Systems | AAS | <ul style="list-style-type: none"> Shared courses/faculty Other: Institution has plans to improve recruitment and/or retention in development |

Appendices

Appendix A: Governor Nixon's Remarks at Higher Education Summit, August 17, 2010

Once again, thank you for joining your colleagues and me this evening for this higher education summit meeting.

I asked you here for two reasons.

First, having you over for dinner gives me the chance to personally thank you for your **extraordinary** efforts of the past two years.

During some of the most tumultuous economic times in memory, you agreed to hold the line and keep tuition flat for two consecutive years.

No one else in the country managed to do what we have done.

At the same time, all around us, public and private universities were increasing tuition - often by double digits and sometimes by as much as 30 percent. Missouri stood apart from the pack and stood up for affordability and improved student access.

It's not an exaggeration to say that for **thousands** of Missouri families, you kept the dream of a college education alive.

As a result, enrollments surged, creating the challenge of educating **more** students with **fewer** resources. You met that challenge with careful planning, creative problem-solving and old-fashioned elbow grease.

On behalf of all those Missouri families and kids, whose dreams you fulfilled, thank you for doing your job so well.

My second reason for calling you together is to let you know my expectations for 2012 and beyond. The presentations you heard this afternoon from Budget Director Linda Luebbering, Dr. Carol Twigg and Dewayne Matthews reflect some of my priorities, and provide context for my charge to you tonight. As Linda explained earlier, about \$900 million of federal stabilization funds for Missouri will run out at the end of this fiscal year.

Even with the additional federal health care money that was just approved by Congress, we are looking at an overall budget gap in fiscal year 2012 of 400 to 500 million dollars.

Although we're starting to see an uptick in the economy - including six straight months of job growth - the pace of the recovery is expected to be slow.

And it certainly will not be robust enough to close the gap between revenue and expenses for at least a few more years.

Because of some tough decisions we made in Missouri over the past couple of years, we have not suffered the catastrophic problems experienced by other states from California to New York.

In the 20 months that I have been Governor, I have restricted or vetoed \$1.5 billion in spending; eliminated twenty-five hundred positions; and reined in expenses across state government.

That fiscal discipline has paid off. We have kept our budget in balance and Missouri is the only state in the Midwest with a spotless Triple A credit rating from all three credit rating agencies.

Contrast that to our neighbor to the east. Illinois is buried in a 13 billion dollar budget hole, and the state owes its public colleges and universities more than a billion dollars.

But while Missouri is weathering the economic downturn better than many others, state revenue is expected to lag for some time.

That means that the potential cuts in FY 2012 across state government - including higher education - will be **substantial**.

Given these fiscal realities, I understand that tuition increases may be necessary at your institutions for the 2012 academic year. But at the same time, we need to acknowledge the financial strain that many Missouri families are experiencing. I know you share my concern about the rising cost of higher education, and the levels of debt that some students take on to pay for their education. Tuition increases must be reasonable, so that we can maintain the quality education our students deserve, at a price their families can afford. Any tuition changes must follow the guidelines set by Missouri's Higher Education Student Funding Act.

I also want to share with you what I believe Missouri's institutions of higher education need to accomplish **now** to stand us in good stead for the future.

Missouri has a proud history of leadership in higher education - both public and private. St. Louis University, founded in 1818, is the oldest university west of the Mississippi.

The University of Missouri, founded in 1839, is the first public university west of the Mississippi.

Today, Missouri is one of the few states that can claim two member institutions in the prestigious Association of American Universities. They are the University of Missouri at Columbia and Washington University in St. Louis.

I'd like to thank Chancellor Mark Wrighton for being with us this evening. Under his leadership, Washington University has become one of the most influential research institutions in the nation.

Missouri should be proud of Washington University's perennial ranking as one of the top American research universities.

Likewise, for its part, the University of Missouri ranked number 2 among all institutions in the Association of American Universities in the growth of federal research funding between 1995 and 2005. Like all of you here tonight, I am deeply committed to **strong public education**. I am a product of Missouri's public education system, as are all the members of my family. Today, higher education is at a crossroads - not just in Missouri - but across America. To survive and thrive, higher education must make fundamental changes in its business model, including how instruction is delivered, how degree programs are organized, and how remedial education is achieved.

The higher education agenda for Missouri must focus on ambitious goals that are attuned to the workforce needs and economic development opportunities of our state.

At the same time, our agenda will be tempered by the economic constraints under which we will continue to operate for some time.

Against this backdrop, I am calling on you to adopt an agenda focused on four key areas:

First: attainment;

Second: academic program review;

Third: cooperation and collaboration;

and Fourth: funding.

First, let's talk about attainment.

If Missouri's children are to keep pace with their peers around the world, we must dramatically ramp up the preparation we give them - from pre-school through graduate school.

While Missouri institutions of higher education must continue to enroll more students who are well-prepared to succeed in college, our sights must be focused on promoting attainment.

We want more students in our institutions with high aspirations - students who are deeply invested in learning, and who can help create a culture of excellence and achievement. And we want more students who will persevere all the way to the goal line, and complete their degrees. That is what attainment is all about.

Attainment should be rooted first in common core standards. Missouri must align its K-12 curriculum with college entrance standards in order to increase the likelihood that students graduating from high school will succeed at college.

I support, and Missouri has now adopted, the Common Core Standards. I expect us to move forward swiftly with their implementation.

These standards are rigorous and set high expectations. When more dedicated teachers in Missouri's classrooms implement them, more students will be up-to-speed and prepared for college.

In addition, we need to make sure more students in 2- and 4-year colleges and universities stay in school, make steady progress toward graduation, and earn their degrees. Currently, only about 37 percent of the young adults in Missouri hold a post-secondary degree.

That puts us slightly below average among our Midwestern peers.

Earlier today, you heard Dewayne Matthews talk about Lumina's "Big Goal" of 60 percent by two thousand twenty five.

Similar goals are being set by business and industry and, most recently, by the National Governor's Association with its "Complete to Compete" agenda.

If Missouri expects to compete in a global economy, we can - and we must - do better.

Meeting the national goal of 60 percent by 2020 will take extraordinary determination and creativity by all of us.

Second: a statewide review of all academic programs.

In 2009, the number of new academic programs launched at our public institutions outpaced discontinued programs by a ratio of five to one. While some of these new programs were, no doubt, good additions, the pace of growth - especially in this economy - is simply unsustainable.

We must take a hard and unsentimental look at all academic programs, and cull those that are of low productivity, low priority, or duplicative.

We simply cannot afford the luxury of supporting programs that are not connected strategically to state needs and priorities.

Likewise, this is a time when we have to decide how best to focus institutional missions rather than expand them.

You've all heard the term "mission creep." The ambition for institutions to enlarge their missions is understandable, but it is just not viable in the long run.

I believe that the productivity of Missouri higher education will be strengthened by supporting institutions that deliver improved performance on clear, distinct missions, rather than by allowing institutional missions to "creep" in undisciplined ways.

At the same time we scrutinize programs that may not be sufficiently productive to continue, we need to identify areas where academic expansion makes sense strategically and financially.

The Missouri Department of Economic Development is working with a statewide team of leaders in education, business, and industry to create a 5-year-plan for economic growth.

I anticipate that this plan will recommend a number of academic areas - at two-year, four-year, and graduate levels - where Missouri must increase degree opportunities in order to prepare the workforce that will be essential for the state's economic success.

My support for Caring for Missourians and Training for Tomorrow - two programs created to meet industry-specific needs for a skilled workforce in life sciences and technology - are prime examples of the strategic investments that I know we will need to continue.

This academic review process is already underway at some of your institutions, and I appreciate the rigor you are bringing to this undertaking.

I have instructed the Missouri Department of Higher Education to collaborate closely with your institutions to develop and conduct a state-wide, systematic review of all degree programs at our public institutions.

This review will be informed and guided by existing policy, established by the Coordinating Board for Higher Education, which stipulates the minimum criteria for "critical mass" for degree programs.

I've also discussed the parameters of this review with David Russell and Mike Nietzel and have told them that I expect a report from CBHE to be submitted to me and the General Assembly by February first of 2011.

Third: Increased cooperation and collaboration.

This initiative has two facets: administrative and academic.

Let's talk about the easier one first.

Administrative efficiencies.

I want each of your institutions to prepare a list of administrative services that could be provided more cheaply and efficiently through outsourcing, shared delivery, or other means.

If there are more efficient and less expensive ways to run the business side of your institutions, you need to get those in place as soon as possible.

Sharing best practices will allow us to get more savings faster system-wide.

Now the harder one: **Academic programs.**

This will start with an inventory of existing **cooperative** and **collaborative** academic programs in all our state institutions.

Then we must take a critical and clear-eyed look at the performance of these academic programs, to see whether they are actually meeting the goals set for them when they were launched.

Following this, I want your recommendations on how best to expand, improve, or discontinue these collaborations in order to serve students better and meet academic goals.

I anticipate that your lists of collaborative programs will be lengthy, and may pleasantly surprise a lot of people. Because, candidly, your institutions have been too modest about the strides you have already taken in this area; share the good news.

Still, there is much more that can be and needs to be done. For example:

Sharing faculty;

Expanding the use of early college opportunities, like dual credit and Advanced Placement;

One-year associate degrees and three-year bachelor's degrees;

Statewide virtual or on-line delivery of selected degree programs;

Shared or consolidated low-enrollment degree programs across multiple institutions;

Shared libraries; equipment and core research facilities.

Earlier today you heard from Carol Twigg. Her pioneering work on course redesign resulted in both improved student performance and cost savings when it was implemented at UMSL, the

University of Iowa, Virginia Tech, Carnegie Mellon, and a large number of community colleges across the nation.

I think it has great potential, and should be studied carefully for possible applications across Missouri.

And finally, number four, funding. We need a robust and realistic discussion of how we plan to fund higher education going forward.

Our institutions need a multi-year, sustainable funding model that strikes the right balance among state budget appropriations, tuition and cost reductions.

That will make your budgeting process less crisis-driven, and your funding levels more predictable.

As part of this discussion, we must begin to consider the revised funding formula that many of you were involved in developing, which was approved by CBHE in 2008.

I understand that this funding model prioritizes three components:

1. A new approach to **core** funding;
2. Strategic initiatives, such as Caring for Missourians; and
3. Performance funding.

This model departed from the business as usual approach of across-the-board funding changes. No doubt, in light of the major economic changes we have experienced, it will need a second look and possible revision. For example, I believe it needs to put more emphasis on specific institutional missions and performance and less on existing costs.

In our rapidly changing society, on our ever-shrinking planet, education is a high-stakes enterprise. We are competing in a global marketplace of ideas and goods.

The jobs and industries of the future will demand more highly skilled workers than ever before.

Already, Missouri continues to see steady growth in the number of jobs requiring a bachelor's degree or better in science and technology. We cannot afford to fall behind other states - and other nations - in the number of degreed students who are ready to work in these key sectors of our economy.

Quite simply, the future demands that we deliver a smart, sustainable and forward-looking public agenda for higher education. When you leave here tonight, I want you to know that I am fully committed to working with you - and with the Legislature - to find solutions that will serve your institutions well in the short run, and strengthen higher education in our state for many years to come.

I am an optimist by nature; always have been, always will be. But my optimism isn't unfounded.

It's based in my confidence in you. You were called to this summit because you're the A-team. There is no group anywhere who knows more, or cares more, about higher education than you do.

Each one of you brings experience and ideas that are invaluable to this critical endeavor. Whether you are a college president, a provost, an administrator or a board member, your knowledge and insight will make this partnership a success.

We have our work cut out for us. Some of these initiatives can begin almost immediately; others will take more planning and time. Because I want to stay well-informed about your progress, I am instructing the Coordinating Board of Higher Education to provide me with monthly updates on the process and implementation of the four key areas I have identified tonight.

I will rely on David Russell and Mike Nietzel to brief me about these status reports, and I expect to see significant progress in each area over the next year.

You won't be on your own.

This is partnership in every sense of the word. I will bring to bear all the resources of my office, my administration, legislators, the business community and the state as a whole to inform this process and make real progress.

Because when we look back at this summit, I want it to mark a turning point, a defining moment.

Yes, I want it to be remembered as the time Missouri's leaders in higher education met serious fiscal challenges with discipline and ingenuity. But I also want it to be the moment when the leaders in higher education took to heart the old adage: "Fortune befriends the bold."

This is the time for **bold** thinking and **bold** action.

Tonight, I am giving you a **bold** new charge.

We must ensure that missions of Missouri's colleges and universities are focused, and that these institutions are driving forward to meet the changing needs of our students, our state and our world.

How well we carry out that mission will determine how well-prepared Missouri students are to compete for the jobs of the 21st Century... and to become successful community leaders and global citizens.

I have great confidence in your ability to meet and surmount the challenges that lie ahead of us, and I look forward to a strong and productive partnership.

Appendix B: CBHE Statutory Authority for Program Review

Missouri Revised Statutes

Chapter 173

Department of Higher Education

Section 173.005(7) CBHE statutory responsibility to collect the necessary information and develop comparable data for all institutions of higher education in the state . . .

Section 173.020(4) CBHE statutory responsibility for designing a coordinated plan for higher education in the state...

Section 173.030(2) CBHE statutory responsibility for recommending to governing boards of any institutions in the state the development, consolidation, or elimination of programs, degree offerings, physical facilities or policy changes where that action is deemed . . . in the best interests of the institution . . . and or the general requirements of the state.

Appendix C: CBHE Policy on Academic Program Review

III. B. 2. Academic Programs Review Policies

Existing Program Review

In 1983 the Coordinating Board for Higher Education directed its staff and the state's public institutions of higher education to initiate a systematic review of academic programs. The statewide review has resulted in a two-tier process: (1) a review by each four-year public institution of approximately 20 percent of its programs over a five-year cycle; and (2) state-level reviews of selected program areas as needed. The former process has been labeled campus-based reviews to distinguish it from review efforts that involve a statewide effort for a particular set of disciplines.

State Level Review (Adopted by the board September 10, 1983)

Criteria for State Level Instructional Program Review

The criteria for state level review are:

- Contribution of Program to Institutional Mission
- Statewide Needs
- Access
- Program Expenditures

Contribution to Institutional Mission

The extent to which a program relates directly to the institution's mission and role in the state system of higher education is particularly important in state level review. The diversity of the institutions according to mission suggests different objectives among similar kinds of programs as well as different funding needs.

An important public policy goal of the Coordinating Board is to encourage differential missions for institutions and that includes differential standards for qualitative performance. Thus, the quality criterion is combined with the contribution to mission criterion for the purposes of state level review.

Statewide Needs

In statewide planning there are two kinds of instructional needs to consider: (1) the enrollment demands of students; and, (2) the overall market demand for educated persons. The two kinds of instructional needs may at times be different; they may even be in conflict with each other. In addition, there are other needs to determine. What are the research needs of the state, and how are those needs related to instructional programs? What are the public service needs? What are the student aid needs? These cannot be considered entirely apart from instructional needs.

Access

The differences in mission and purpose between institutions should permit access to students of varying abilities, interests, and career goals. The availability of instructional programs within

the state and bordering states and financial access for Missouri citizens are the major statewide access concerns. Articulation between programs and institutions is a particularly important access issue at the state level.

Program Expenditures

The Coordinating Board's responsibility to recommend state general revenue support for instruction, research, public service, student aid, and institutional support is made in light of expenditure levels, the state's needs, and institutional pricing factors. Because state level program review must be accomplished within the context of statewide needs, one necessary data element is that of expenditure analysis of programs in terms of the distinctive role of a public college or university in the state system of higher education. The efficient use of state resources requires an analysis of instructional programs in the context of their congruence with institutional mission, and productivity

3. Criteria for Degree Programs

(Adopted by the board December 10, 1992; reaffirmed April 18, 1996)

Degree programs (i.e., majors) offered by Missouri's public institutions shall, at a minimum, satisfy the following criteria:

- Demonstrate centrality to the sponsoring institution's mission.
- Provide objective evidence of success in addressing statewide needs and/or contributing toward the attainment of statewide goals.
- Maintain a critical mass of majors and graduate annually an average, calculated over the prior three years, of at least 10 majors at the associate or baccalaureate degree level, 5 majors at the master's degree level, and 3 majors at the doctoral degree level, unless there is sufficient justification for exceptions, particularly in the arts and sciences.
- Regularly produce highly qualified graduates as demonstrated in the following areas:
 - Performance on assessments of general education, including measures of oral and written communication skills and critical thinking;
 - Performance on nationally normed tests, licensure or certification examinations, and/or other measures of achievement in the major;
 - Average placement rates of those seeking employment which take into account general economic conditions;
 - Alumni and employer satisfaction rates

Appendix D: MDHE Methodology for Special Statewide Academic Program Review

Four-Year Sector

1. Programs will be reviewed according to their Classification of Instructional Program (CIP) number. In most cases the four-digit CIP number will be the appropriate level of analysis, but some programs will have to be reviewed at the six-digit level.
2. Baccalaureate programs that have not graduated an average of 10 students over the three previous years, master's programs that have not graduated an average of five students over the three previous years, and doctoral programs that have not graduated an average of three students over the three previous years will be flagged for further review by the MDHE. These thresholds had been identified previously by the CBHE as minimum levels of productivity and written into board policy.
3. Certificate programs will not be included in this review, but will be included in the final report to highlight their contributions as a no-cost means of preparing students for the workforce.
4. MDHE will identify and send to each institution a preliminary list of programs that appear to be below the appropriate thresholds. The institutions will review the list to verify the accuracy of the MDHE's data and to identify programs not on the MDHE list. MDHE staff will work with the institutions to reconcile the data to obtain an accurate list of programs for further review.
5. After this process of reconciliation is complete, the MDHE will provide each institution with an official list of programs that are below the productivity thresholds and flagged for further review, including a separate list of programs that do not meet the productivity thresholds at the six-digit CIP level. The institutions will use an MDHE-designed electronic form to respond to each flagged program and indicate what action they intended to take. (See Attachment A)
6. MDHE staff will review and assess the institutions' justifications for the action they intend to take for each program identified in the official list. MDHE staff will analyze the institutions' responses for maintaining a program based on data and documentation provided by the institutions and qualitative measures contained in existing CBHE policy.
7. The MDHE will provide to each institution a preliminary report of the department's initial review of each institution's proposed action. The institutions will have an opportunity to respond to this report and, if requested, provide additional data, documentation, and information to the MDHE for review.

Two-Year Sector

1. Programs will be reviewed according to their Classification of Instructional Program (CIP) number. In most cases the four-digit CIP number will be the appropriate level of analysis, but some programs will be reviewed at the six-digit level.
2. Associate of Arts programs that have not graduated an average of 10 students over the three previous years, and all Associate of Science, Associate of Applied Science, and Certificate programs that have not graduated an average of five students over the three previous years, will be flagged for further review.
3. MDHE will identify and send to each institution a preliminary list of programs that appear to be below the appropriate thresholds. The institutions will review the list to verify the accuracy of the MDHE's data and to identify programs not on the MDHE list. MDHE staff will work with the institutions to reconcile the data to obtain an accurate list of programs for further review.
4. The MDHE will send to each institution an official list of programs that did not meet the productivity thresholds and have been flagged for further review, including programs that did not meet the productivity thresholds at the six-digit CIP level. The institutions will use an MDHE-designed electronic form to respond to each flagged program and indicate what action they intended to take. (See Attachment B)
5. MDHE staff will review and assess the institutions' justifications for the action they intend to take for each program. MDHE staff will analyze the institutions' responses for maintaining a program based on data and documentation provided by the institutions and qualitative measures contained in existing CBHE policy.
6. The MDHE will provide to each institution a preliminary report of the department's initial review to each institution's proposed action. The institutions will have an opportunity to respond to this report and, if requested, provide additional data, documentation, and information to the MDHE for review.

Appendix E: MDHE Program Response Form, Four-Year Institutions

Missouri Department of Higher Education
EXISTING ACADEMIC PROGRAM REVIEW

REQUEST FOR PRODUCTIVITY INFORMATION AND JUSTIFICATIONS

4Y Page1

| | | |
|---|---|--|
| Program Inventory Name(s) <input style="width: 95%; height: 20px;" type="text"/> | Degree Designation (e.g. AA, BS, MA, PhD, etc.) <input style="width: 95%; height: 20px;" type="text"/> | Date of Original Program Approval (MM/DD/YY) <input style="width: 95%; height: 20px;" type="text"/> |
| CIP Code(s) (#####, no decimal) <input style="width: 95%; height: 20px;" type="text"/> | Degree Level Code and Name <input style="width: 95%; height: 20px;" type="text"/> | Date of Last Internal Review (MM/DD/YY) <input style="width: 95%; height: 20px;" type="text"/> |

CHECK ANY OF THE FOLLOWING TO DESCRIBE ACTION(S) THE INSTITUTION WILL TAKE CONCERNING THIS PROGRAM AND ATTACH REQUIRED DOCUMENTATION (X all that apply)

- Program has been or will be voluntarily terminated** (submit copy of MDHE program deletion form or other official documentation that program elimination is in process)
- MDHE data are inaccurate; program meets criteria/standards for productivity** (document discrepancy in data and identify source)
- New program approved within the past five years and is exempt from program review process** (provide documentation with program initiation date)
- Program is critical to mission and will be retained** (provide supporting documentation)
- Program contains courses that support general education and/or other programs** (provide documentation to show how the low-productivity program supports other programs)
- Program shares a substantial number of courses and faculty with other similar programs** (provide CIP codes for other programs and evidence of shared resources)
- Student or employer demand, or demand for intellectual property is high and external funding will be jeopardized by program closure** (provide evidence and cite sources of demand or funding)
- Program provides unique access to an underserved population or geographical area** (provide justification)
- Program meets a Unique need in the region, state, or nation** (provide justification)
- Joint/consortium program in which combined number of graduates meets productivity standards** (provide copy of consortium agreement and enrollments in other programs)
- Other** (e.g., development plan to increase completion rate with specific date for results; revenue-producing program; potential for collaborative program: program being put on inactive status; master's program in same discipline as a PhD with sufficient graduates, etc.)
- # of additional documents attached: (Use convention: initials_cipcode_deglevcode_doc#; e.g. UMC__1)

Provide sufficient context and describe pertinent factors and other special considerations as needed to justify the proposed action. Use separate attachment if necessary.

Appendix F: MDHE Program Response Form, Two-Year Institutions

Missouri Department of Higher Education
EXISTING ACADEMIC PROGRAM REVIEW

REQUEST FOR PRODUCTIVITY INFORMATION AND JUSTIFICATIONS

2Y Page1

| | | |
|--|--|---|
| Program Inventory Name(s) <input style="width: 95%; height: 20px;" type="text"/> | Degree Designation (e.g. AA, BS, MA, PhD, etc.) <input style="width: 95%; height: 20px;" type="text"/> | Date of Original Program Approval (MM/DD/YY) <input style="width: 95%; height: 20px;" type="text"/> |
| CIP Code(s) (#####, no decimal) <input style="width: 95%; height: 20px;" type="text"/> | Degree Level Code and Name <input style="width: 95%; height: 20px;" type="text"/> | Date of Last Internal Review (MM/DD/YY) <input style="width: 95%; height: 20px;" type="text"/> |

CHECK ANY OF THE FOLLOWING TO DESCRIBE ACTION(S) THE INSTITUTION WILL TAKE CONCERNING THIS PROGRAM AND ATTACH REQUIRED DOCUMENTATION (X all that apply)

- Program has been or will be voluntarily terminated** (submit copy of MDHE program deletion form or other official documentation that program elimination is in process)
- MDHE data are inaccurate; program meets criteria/standards for productivity** (document discrepancy in data and identify source)
- New program approved within the past five years and is exempt from program review process** (provide documentation with program initiation date)
- Program is critical to mission** (provide supporting documentation)
- Program contains courses that support general education and/or other programs** (provide documentation to show how the low-productivity program supports other programs)
- Cost-recovery based program for workforce development and/or specialized population** (provide justification)
- Program shares a substantial number of courses and faculty with other similar programs** (provide CIP codes for other programs and evidence of shared resources)
- Student or employer demand, or demand for intellectual property is high and external funding will be jeopardized by program closure** (provide evidence and cite sources of demand or funding)
- Program provides unique access to an underserved population or geographical area** (provide justification)
- Program meets a Unique need in the region, state, or nation** (provide justification)
- Joint/consortium program in which combined number of graduates meets productivity standards** (provide copy of consortium agreement and enrollments in other programs)
- Other** (e.g., development plan to increase completion rate with specific date for results; revenue-producing program; potential for collaborative program: program being put on inactive status; master's program in same discipline as a PhD with sufficient graduates, etc.)
- #N/A

Provide sufficient context and describe pertinent factors and other special considerations as needed to justify the proposed action. Use separate attachment if necessary.

Appendix G:

Program Review Feedback Instruments Instructions

Program Review List and Feedback Instrument Instructions

Below Threshold List

The list of programs with completions below the established threshold is based on the reconciliation of EMSAS completions and Program Inventory information provided by institutions in the prior round of analysis. Programs were aggregated at the 6-digit CIP level, regardless of award level. Also included are programs with no completions over the past three years of data reports. These were retained because it is difficult to determine whether these are new programs which have yet to generate completions, or if they are programs maintained in the MDHE Program Inventory which are no longer relevant and need to be deactivated or deleted from the inventory. Programs already identified as “new” during the reconciliation process have been excluded.

Some certificates and degrees “linked” by institutions as embEded may not have been listed together if they did not share the same CIP. If cross-CIP linkages exist, please indicate that on the program feedback response form.

Feedback Response Form

- Complete the institutional information tab
- Use the forms on the Survey tab. There are 50 blank forms available, page down to find the next blank one.
- Program Inventory name: List any Programs, as titled in the Program Inventory included in the 4-digit category
- CIP Code: List all 6-digit CIP codes associated with the category. Do not include decimal (e.g. 102014). A pull down menu is included for single CIPs. Overwrite for more than one.
- Degree Designation: List all degrees associated with the CIP and level (e.g. AA and AAT)
- Degree Level Code: Indicate the degree level for the program as shown on the Below Threshold List (pull down menu included)
- Date of original Program Approval: by MDHE
- Date of Last Internal Review: by institution
- Use the pull-down menu to check (X) all appropriate descriptions of institutional proposed actions related to each program on the Below Threshold List .
- Each of the responses requests additional documentation and justification. If these comments may be provided in a paragraph or less, please include them in the text box at the bottom of the page. If more extended documentation is required, attach the documentation to the same email as the feedback response workbook. Please use the following naming convention for the documentation: # of additional documents attached: initials_cipcode_deglevcode_doc#; (e.g. MSSU_0101_PL_1).
- Indicate the number of documents for the CIP Form which are attached to the email



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