

COORDINATING BOARD FOR HIGHER EDUCATION

TIME: **2:05 PM**
Wednesday
July 30, 2008

PLACE: Conference Call*
(573) 526-5622
Toll Free: **(866) 630-9348**

AGENDA

I. Introduction

- | | |
|-------------------|---------------------|
| A. Call to Order | Kathryn Swan, Chair |
| B. Confirm Quorum | Board Secretary |

II. Items for Discussion, Consideration, and Possible Vote

- A. Coordinated Plan – Recommendations for Changes

** Due to limited phone ports (approximately 20 additional), institution representatives wanting to call in are encouraged to do so from centralized meeting points. The Missouri Department of Higher Education will provide a phone port in the Large Annex Conference room at the MDHE offices (3515 Amazonas Drive, Jefferson City, MO 65109). Those in other locations are encouraged to identify centralized locations.*

Executive Session

Portions of this meeting may be closed pursuant to Section 610.021 RSMo.

RSMo 610.021(1) relating to “legal actions, causes of action or litigation involving a public governmental body and any confidential or privileged communications between a public governmental body or its representatives and its attorneys.”

RSMo 610.021(3) relating to “hiring, firing, disciplining or promoting of particular employees by a public governmental body when personal information about the employee is discussed or recorded.”

Other matters that may be discussed in closed meetings, as set forth in RSMo 610.021.

Individuals needing special accommodations relating to a disability should contact Laura Vedenhaupt, at the Missouri Department of Higher Education, 3515 Amazonas Drive, Jefferson City, MO 65109 or at (573) 751-2361.

AGENDA ITEM SUMMARY

AGENDA ITEM

Coordinated Plan – Recommendations for Changes
Coordinating Board for Higher Education
July 30, 2008

DESCRIPTION

The Coordinating Board for Higher Education (CBHE) and the Missouri Department of Higher Education (MDHE) have worked with presidents, chancellors, and other stakeholders on a coordinated plan for higher education, the development of which is mandated by state law.

Careful progress over the last two years resulted in the adoption of a provisional coordinated plan at the June 12, 2008 CBHE meeting in Cape Girardeau. At that meeting, the CBHE directed presidents and chancellors to work through and across their sector organizations and to submit a coordinated set of revisions to the provisional plan for consideration by the board. The board also made a commitment to meet soon after July 12, 2008 to review any recommended changes, and to remove the provisional status of the plan. The intent of this board item is to update the CBHE on the recommendations of the sector organizations and to provide the MDHE's recommendations for final revisions to Coordinated Plan for its first year of implementation.

Background and Timeline

- April 2006 - The CBHE agreed to make a higher education accountability system a priority for future work through strategic planning.
- June 2006 - The CBHE established a standing Strategic Planning Committee that would use a consensus-driven process to develop a new coordinated plan for Missouri higher education.
- Fall 2006 - Institutions worked with MDHE staff to develop a revised accountability framework that would be driven by the new coordinated plan.
- Jan. – May 2007 - Demands related to the passage and implementation of SB 389 forced a slowdown on progress in the development of the coordinated plan.
- October 2007 - A draft framework of a new coordinated plan was reviewed by the CBHE and the Presidential Advisory Committee (PAC). It was agreed that any new plan would serve as a guide to institutions as they balance individual aspirations with a system that is responsive to statewide goals and educational needs.

Coordinating Board for Higher Education
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- February 2008 - The CBHE adopted an initial draft of *Imperatives for Change: Building a Higher Education System for the 21st Century*. *Imperatives for Change* was the conceptual document used in the development of goals and measures for the coordinated plan (the “Plan”). The Plan included three major strategic issues: Increase Educational Attainment; Develop a 21st Century Society and Global Economy; and Enhance Resources through Increased Investment, Stewardship, and Responsibility.
- April 2008 - MDHE staff presented presidents, chancellors, and the CBHE with a set of draft goals and indicators to be used as catalysts for discussion of how the state should measure progress toward achieving critical goals and objectives.
- May 2008 - Presidents, chancellors, and institutional representatives provided critiques and constructive suggestions on each set of draft goals, objectives, and indicators of progress submitted by the MDHE for review. Although great strides were made in the development of a consensus document, several challenges and disagreements lingered.
- June 2008 - MDHE staff incorporated several editorial and format changes, as well as some substantive changes, to earlier drafts of the Plan. The latest version identified particularly challenging areas that required further discussion with PAC and the CBHE for resolution.
- MDHE staff recommended that FY 2007 or the most recent year in which data is available be established as the baseline year for all data points included in the Plan.
- The CBHE and PAC discussed the challenges remaining in the Plan. After discussion, the CBHE adopted the Plan in a provisional status (Attachment A). Institutions were directed to work with their respective sector organizations to develop and submit a coordinated set of recommendations for revision to the Plan. The CBHE would review recommendations at a sole-purpose meeting and finalize the Plan for its first year of implementation.
- July 2008 - COPHE and MCCA provided the MDHE with a joint set of recommendations for revision of the Plan (Attachment B).

MDHE Staff Review and Recommendations

The recommended changes submitted by COPHE and MCCA can be grouped into four categories as follows:

- I. Placement of objective or indicators in the document: one objective and several indicators were moved to different goals in the document for logical flow. In addition, some

indicators were moved to contributing factors while some contributing factors were moved to indicators.

II. Recommended wording changes (both editorial and substantive)

III. Addition of new indicators

IV. Deletion of indicators

It is important to note that categories I and II are not mutually exclusive, i.e., in some cases, movement as well as wording changes for a particular indicator were recommended.

Staff Recommendations

The majority of changes recommended by COPHE/MCCA have MDHE staff support. In a few places MDHE staff has included recommendations that differ from the COPHE/MCCA document. Collectively, the new document presented to the CBHE for review and approval results in a stronger document with greater clarity. All changes are referenced in the strike/add attachment including editorial changes. A summary of major changes for each goal in the Plan is provided below. Changes recommended by COPHE/MCCA are indicated as well as separate changes recommended by staff.

Goal 1

COPHE/MCCA recommended major organizational restructuring:

- Separation of “*Increase college attendance rate of high school students and Non-traditional students*” into separate objectives.
- Relocation of learning outcomes objective/indicators from goal 3 to goal 1

COPHE/MCCA recommended additional indicators/contributing factors

- Percent change in state appropriations for higher education
- Enrollment in New Jobs Training, Customized Training, and related training programs

COPHE/MCCA recommended rewording - further adjusted by DHE staff:

- Total student financial aid awarded to Missouri students from all sources including both restricted and unrestricted institutional funds
- Demonstration of student learning gains

COPHE/MCCA recommended deletions but DHE staff recommended to retain:

- Cohort analysis of persistence from fall semester to fall semester
- College attendance rates of the 9th grade cohort of Missouri students, disaggregated by demographic group
- Percent of Missouri 9th graders who take the ACT within four years

COPHE/MCCA deletions:

- Total enrollment in credit bearing outreach courses and programs

- Number of degree programs newly offered in underserved locations

Dr. Kent King, Commissioner of Education has agreed for DESE staff to work collaboratively with MDHE staff on definitional measures for objectives and indicators that involve K-12 pipeline issues.

Goal 2

COPHE/MCCA rewording of Objective

Missouri's higher education system will increase the number of graduate degrees awarded in critical fields ~~and the number of graduate degrees newly offered in underserved areas.~~ (Specific fields to be determined.)

COPHE/MCCA recommended organizational restructuring:

- Split into two indicators: Number(Percentage) of students participating in “high-impact” learning activities such as internships, study abroad, student-faculty research, and institutionally sponsored education outreach programs (e.g., ESL, TRIO, ABE)

COPHE/MCCA recommended deletions:

- Number of declared majors in METS-related fields, including METS-related teacher education
- Number of graduate students enrolled in master's level and above programs in METS-related fields
- Number of declared majors in health practitioner fields
- Number of graduate students enrolled in master's level and above programs in health practitioner fields
- Total number of students, graduate and undergraduate, engaged in research activities beyond regular classroom requirements
- Number of direct service relationships between higher education institutions and community/charitable organizations
- Number of community service hours contributed by postsecondary students, faculty, and staff in association with their institution

Goal 3

COPHE/MCCA additional indicators/contributing factors

- State public higher education appropriations per \$1,000 of personal income compared to contiguous states and the national average
- Per capita state appropriations for public higher education compared to contiguous states and the national average.
- Total state appropriations received for higher education as a percentage of total state general revenue appropriations

COPHE/MCCA recommended rewording - DHE staff recommendation to change wording:

- COPHE/MCCA recommended restricting objective on funding to public institutions only. MDHE staff recommended keeping objective generic to all institutions with disaggregation of data for publics.
- MDHE staff also recommended focusing on appropriations received rather than simply appropriations in HB 3 (accounts for withholdings)

COPHE/MCCA recommended organizational restructuring:

- Relocation of learning outcomes objective/indicators from Goal 3 to goal 1

COPHE/MCCA deletions:

- Average time to completion by program level, including the 42 hour block, for college-ready students
- Total educational revenue per FTE student

COPHE/MCCA recommended deletions but DHE staff recommended to retain:

- Total federal non-student aid dollars received by Missouri higher education institutions

Conclusion

Most recommendations presented by COPHE and MCCA were accepted in whole or in part by MDHE staff. However, the MDHE believes it is important to continue to include issues related to the student pipeline; it is also important to acknowledge that higher education is not solely responsible for progress on those issues and that the MDHE will continue to work with the Department of Elementary and Secondary Education (DESE) in order to make progress.

Measuring student learning also remains a major challenge not only in Missouri but across the nation. The MDHE is recommending that institutions continue to work with staff on meaningful sets of measures for nationally-normed tests and/or samples of student work as evaluated by statewide committees of faculty. This approach will help to ensure that data is generated both for accountability and for improvement.

Another challenging issue is the extent to which the Coordinated Plan should incorporate measures relevant to independent institutions. Board members have expressed support for the creation of a Coordinated Plan that sets out a public agenda for all of higher education. Identifying and tracking resources for all institutions is consistent with that directive.

Missouri's postsecondary institutions have risen to the challenge of focusing on the needs of the state's system of higher education. Through intense, collaborative work both within and across sectors, institutions and department staff have developed a strategic document with enormous potential for students, for institutions, and for Missouri. MDHE staff will continue to work with institutions on the next phase of the Coordinated Plan, which will include clarifying data definitions and setting target goals.

STATUTORY REFERENCE

Section 173.020 (4), RSMo. The coordinating board's responsibilities include identifying higher education need in the state and designing a coordinated plan for higher education.

RECOMMENDED ACTION

It is recommended that the Coordinating Board adopt the revisions to the Coordinated Plan as documented in Attachment C and to remove the provisional status of the Coordinated Plan. It is further recommended that institutional representatives continue to work with MDHE staff on the development of clear operational measures, baselines, benchmarks, and targets.

Finally, it is recommended that the Coordinating Board direct the Commissioner and MDHE staff to continue the important work of collecting contextual information, establishing baseline data, clarifying data definitions, and setting target goals for the Coordinated Plan and that this phase of the Plan will be presented to the CBHE for review and action at its September 2008 meeting.

ATTACHMENTS

- Attachment A: Imperatives for Change: Building a Higher Education System for the 21st Century (Provisional Status)
- Attachment B: COPHE / MCCA Recommendations for Deletion of Indicators and Contributing Factors
- Attachment C: MDHE Recommendations for Revisions to the Coordinated Plan

*Imperatives for Change:
Building a Higher Education System for the
21st Century*

**A Coordinated Plan for the Missouri Higher
Education System**

**Coordinating Board for Higher Education
June 12, 2008**

***Imperatives for Change:
Building a Higher Education System for the 21st Century***

Introduction

The rapidly changing social and economic environment presents profound challenges to all states and nations. More than ever, in the knowledge-based economy of the 21st century, higher education is the gateway to an improved standard of living for Missouri's citizens. The imperative for change is clear: those educational systems that adapt to the new environment will be positioned to lead their states to succeed in a globally competitive world.

The collective challenge to the higher education system is to understand the key components of the environment and to devise effective strategies that will capitalize on strengths while addressing weaknesses in challenging financial times. Providing the vision, the stable and sufficient resources, and the collective action to support a higher education system that ensures the future prosperity of Missouri citizens, the state of Missouri, and the nation is necessary to address the most important challenges of the day.

Imperatives for Change provides a vision that has been developed collaboratively by Missouri's higher education institutions and the Coordinating Board for Higher Education. This plan will serve for the next three to five years as a foundation for prioritizing goals, justifying an increased resource base, allocating resources, and implementing dynamic strategies to provide Missouri citizens with the educational opportunities they need to be competitive on a global scale.

Mission Statement

The Coordinating Board for Higher Education, the Missouri Department of Higher Education, and the state's institutions of higher education will work collaboratively to support a diverse system of affordable, accessible, high-quality educational institutions that demonstrate student learning and development, encourage and support innovation, foster civic engagement, enhance the cultural life of Missourians, and contribute to economic growth.

Vision Statement

Missouri's higher education will be an innovative and coordinated system of diverse postsecondary institutions that benefits Missouri and the nation by equipping all Missouri citizens for personal and professional success in the 21st century and that is moving towards becoming one of the best in the nation.

Basic Values

Missouri's higher education community is united in its commitment to the following core values.

- ❖ Higher education in Missouri serves many purposes and constituencies, but first and foremost the system is focused on students, learning, and each individual's realization of their full educational potential.
- ❖ Qualified students should be able to attend the higher education institution that best fits their educational goals and needs regardless of cost.
- ❖ Access without success is an empty promise. Missouri's higher education institutions are dedicated to providing nationally and internationally competitive educational programs, research, and extension services to ensure their students have the knowledge and skills necessary for success in the 21st century, including the ability to think critically, to communicate effectively, and to be life-long learners.
- ❖ Diversity of institutional missions is a strength of the system that must be preserved.
- ❖ Higher education is a public good as well as a private benefit, contributing both to economic development and civic engagement.
- ❖ Basic and applied research, the creation of knowledge, and the application of information to solve problems are basic functions of the higher education system that must be recognized and supported.
- ❖ The higher education community is dedicated to making decisions based on reliable and transparent data.
- ❖ The higher education community values the appropriate use of technology to enhance programs, services, research, and administration.
- ❖ Public accountability for learning outcomes and stewardship of public funds are priorities for Missouri's higher education institutions.
- ❖ Ensuring the continued affordability and effectiveness of Missouri's higher education system requires a partnership among the institutions, the state, and other stakeholders.

Strategic Issues, Goals, and Action Steps

Strategic Issue: *Increase Educational Attainment*

GOAL 1: Missouri's higher education system will improve educational attainment, including certificate and degree production at all levels, to enhance the quality of Missouri's workforce and the quality of life of its citizens.

Objective 1A: *Increase the percent of Missouri citizens who possesses a postsecondary credential.*

Indicators

- 1) Percentage of the population aged 25 to 64 who hold a degree or certificate, for the state as a whole and disaggregated by demographic groups and regions
- 2) Number of degrees and certificates awarded, disaggregated by demographic groups

Contributing Factors

- a) Number of postsecondary credit hours delivered
- b) Community college transfer student success rate

These action steps may be taken as appropriate:

- ✓ Raise the aspirations of those who do not see postsecondary education within their reach;
- ✓ Increase postsecondary access for, and success of, historically under-represented groups;
- ✓ Develop incentives that reward institutions that increase degree production and retention rates while demonstrably sustaining quality within programs;
- ✓ Expand opportunities for non-traditional learners through course redesign, alternative methods of program delivery, and better coordination of distance education; and
- ✓ Create incentives and standards for seamless student transitions between educational institutions.

NOTE: This section requires further discussion.

Objective 1B: *Net cost of postsecondary education as a percent of average family income will not increase.*

Indicators

- 1) Percentage of state average family income required to pay for college after grant and scholarship aid, for the “average student” and disaggregated by demographic groups, educational sector, and income levels (for public institutions, this indicator will also include changes in state operating appropriations)
- 2) Total financial aid dollars awarded to Missouri students for need-based financial aid and for other forms of financial assistance, disaggregated by educational sector

Contributing Factors

- a) On-time FAFSAs files by income and EFC level

These action steps may be taken as appropriate:

- ✓ Implement the Higher Education Student Funding Act;
- ✓ Support the growth of the Access Missouri Student Financial Assistance Program;
- ✓ Carry out a sustained statewide public information campaign on the value of higher education and the steps prospective students must take to prepare academically and financially; and
- ✓ Increase state funding and external funding sufficient to enable institutions to minimize tuition increases and maintain quality undergraduate and graduate programs and services.

NOTE: Prior to adoption of this section, there should be exploration with DESE, the State Board of Education, P-12 organizations to obtain joint agreement.

Objective 1C: *Increase college attendance rate of high school students and non-traditional students.*

Indicators

- 1) College attendance rates of the 9th grade cohort of Missouri students, disaggregated by demographic group
- 2) College attendance rates of spring Missouri high school graduates
- 3) Percentage of the population and number of students aged 18 to 24 enrolled in postsecondary education, disaggregated by demographic group
- 4) Percentage of the population, and number of students over the age of 25 enrolled in postsecondary education, disaggregated by demographic group

5) Total enrollment in credit-bearing outreach courses and programs

Contributing Factors

a) Percent of Missouri 9th graders who take the ACT within four years

b) Number of degree programs newly offered in underserved locations

c) Percent of Missouri high school graduates enrolling in postsecondary education that require remedial coursework

d) Cohort analysis of persistence from fall semester to fall semester

These action steps may be taken as appropriate:

- ✓ Implement appropriate early intervention strategies at the school district level;
 - ✓ Implement the Curriculum Alignment Project;
 - ✓ Support the activities of the P-20 Coalition;
 - ✓ Provide incentives for attracting adult students, particularly in underserved regions;
 - ✓ Provide incentives for the delivery of degrees (especially graduate degrees) in underserved geographic areas
 - ✓ Provide institutional support for the additional costs associated with non-traditional course delivery methods; and
 - ✓ Review and, if necessary, strengthen CBHE oversight to assure the effectiveness of non-traditional programming.
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Strategic Issues, Goals, and Action Steps

Strategic Issue: *Develop a 21st Century Society and Global Economy*

GOAL 2: Missouri's higher education system will contribute to a dynamic, information-based, globally competitive society and economy by collaborating with government and business.

Objective 2A: *Missouri's higher education system will demonstrate improvement in meeting the workforce needs of Missouri.*

Indicators

- 1) Number of direct educational partnerships with Missouri businesses, including MBEs
- 2) Number of credentials awarded in key non-METS fields (fields to be determined)
- 3) Number of students passing certification and licensure examinations in high demand fields (fields to be determined)
- 4) Increases in personal income from degree attainment

Contributing Factors

- a) Employer surveys regarding new teachers

These action steps may be taken as appropriate:

- ✓ Develop corporate links to access training and learning opportunities;
- ✓ Expand customized education and training opportunities where the business community and higher education institutions work together;
- ✓ Offer more access for place-bound or time-bound learners;
- ✓ Establish employer-based feedback mechanisms to evaluate the quality and preparedness of the graduates of postsecondary programs; and
- ✓ Support programs to recruit well-prepared, new and experienced teachers in high need areas.

Objective 2B: *Missouri's higher education system will increase the number of degrees and certificates awarded in METS-related and health practitioner fields. (Specific fields to be determined)*

Indicators

- 1) Number of degrees and certificates awarded in METS-related fields, including METS-related teacher education
- 2) Number of degrees and certificates awarded in health practitioner fields

Contributing Factors

- a) Number of declared majors in METS-related fields, including METS-related teacher education
- b) Number of credit hours delivered in METS-related fields
- c) Number of METS-related graduates who transferred from a community college
- d) Number of graduate students enrolled in master's level and above programs in METS-related fields
- e) Number of declared majors in health practitioner fields
- f) Number of health practitioner graduates who transferred from a community college
- g) Number of graduate students enrolled in master's level and above programs in health practitioner fields

These action steps may be taken as appropriate:

- ✓ Work with elementary and secondary schools to increase student interest in mathematics and science while improving overall educational preparation in mathematics and science;
- ✓ Invest in increased institutional capacity in health practitioner programs;
- ✓ Increase the number of postsecondary students completing courses in METS-related fields; and
- ✓ Offer funding incentives to institutions for increasing graduates in METS and health practitioner fields while demonstrating sustained quality programs.

Objective 2C:

Missouri's higher education system will increase the number of graduate degrees awarded in critical fields and the number of graduate degrees newly offered in underserved areas. (Specific fields to be determined.)

Indicators

- 1) Number of graduate and professional degrees awarded in critical fields, disaggregated by demographic group
- 2) Number of graduate and professional programs newly offered in underserved locations

These action steps may be taken as appropriate:

- ✓ Foster increased access to graduate and professional programs for historically underserved populations;
 - ✓ Provide incentives to expand access to graduate and professional programs in underserved areas using cooperative arrangements, resource sharing, and technology whenever possible; and
 - ✓ Expand access to high-quality continuing professional development opportunities in underserved areas using cooperative arrangements, resource sharing, and technology whenever possible.
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Objective 2D: *Missouri's higher education system will increase the amount and scope of campus research and development activity.*

Indicators

- 1) Total expenditures on research and development at Missouri higher education institutions as a percentage of gross state product
- 2) Total number of external grants awarded to researchers connected to Missouri higher education
- 3) Total number of students, graduate and undergraduate, engaged in research activities beyond regular classroom requirements
- 4) Number of new business start-ups linked to research or development incubators associated with Missouri higher education institutions

Contributing Factors

- a) Number of invention disclosures and patents awarded in connection with a Missouri higher education institution
- b) Missouri's New Economy Index

These action steps may be taken as appropriate:

- ✓ Develop public relations efforts to inform the public about the benefits of research activities;
 - ✓ Establish competitive grant programs to expand research capacity in higher education institutions;
 - ✓ Establish competitive grant programs for collaborative research projects;
 - ✓ Improve cooperation between the Department of Economic Development and higher education institutions;
 - ✓ Establish and utilize a state-supported data inventory for identifying expertise and opportunities that result from research and development activities on campuses;
 - ✓ Provide extension programs and innovation centers with technical guidance to encourage the development of new companies, economy clusters, and partnerships;
 - ✓ Provide incentives to institutions that transfer new technologies to the marketplace.
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Objective 2E: *Missouri institutions will increase learning experiences beyond the classroom and service activities beyond the campus.*

Indicators

- 1) Number of students participating in “high-impact” learning activities such as internships, study abroad, student-faculty research, and institutionally sponsored education outreach programs (e.g., ESL, TRIO, ABE)
- 2) Number of direct service relationships between higher education institutions and community/charitable organizations
- 3) Number of community service hours contributed by postsecondary students, faculty, and staff in association with their institution

These action steps may be taken as appropriate:

- ✓ Encourage and reward institutions to emphasize and assess student gains in critical thinking, creative problem solving, and effective communication in all academic programs;
- ✓ Provide incentives to institutions to provide their students increased access to “high-impact” learning opportunities;
- ✓ Use technology and alternative delivery mechanisms to increase opportunities for lifelong learning by all Missouri citizens;
- ✓ Foster increased cultural literacy, international understanding, and appreciation for diversity in all students through appropriate learning opportunities; and
- ✓ Establish learning communities within institutions that encourage the development of engaged citizens among students, faculty, staff, and the surrounding community.

Strategic Issues, Goals, and Action Steps

Strategic Issue: *Enhance Resources through Increased Investment, Stewardship, and Responsibility*

GOAL 3: Missouri's higher education system will increase external financial support for higher education by demonstrating its value to key stakeholders and public policy-makers while providing a globally competitive workforce, creating valuable new knowledge and products, and enriching the quality of life of all Missourians.

NOTE: This section requires further discussion.

Objective 3A: *Missouri institutions will demonstrate continual improvement or sustained excellence in student learning outcomes.*

Indicators

- 1) Results of annual assessments of student learning in general education
- 2) Results of annual major field assessments
- 3) Pass rates on licensure and certification examinations
- 4) Developmental student success rate in collegiate-level courses

Contributing Factors

- a) Results of student engagement and satisfaction surveys

These action steps may be taken as appropriate:

- ✓ Continue to experiment with VSA and/or similar template for reporting of assessment of student learning gains;
- ✓ Evaluate need for and potential structure of policy in student assessment and placement, especially as a natural outgrowth of Curriculum Alignment Initiative
- ✓ Evaluate potential revisions to statewide data collection to better illustrate the scope and magnitude of postsecondary assessment
- ✓ Inventory instruments currently used to assess general education, major field, and professional certification / licensure

Objective 3B: *Missouri's higher education system will increase the efficiency with which students move to graduation.*

Indicator

- 1) Average time to completion by program level, including the 42 hour block, for college-ready students

Contributing Factors

- a) Three-year and six-year graduation rates of college-ready students
- b) Number of transfer students who graduate from any institution with a baccalaureate degree

These action steps may be taken as appropriate:

- ✓ Use appropriate technology to improve the delivery of instruction, the sharing of knowledge, and the accomplishment of managerial tasks;
- ✓ Incorporate considerations of institutional efficiency in the implementation of the Higher Education Student Funding Act;
- ✓ Establish current agreed-upon missions (between each institution and the CBHE) and reinstitute five-year mission reviews;
- ✓ Provide incentives to and recognize institutions for maintaining distinctive missions;
- ✓ Provide consistent, comparable, and transparent information on the student experience to key higher education stakeholders, including prospective students and their families, public policy makers, and campus faculty and staff;
- ✓ Provide consistent, illustrative, and transparent information on research activities and accomplishments to key higher education stakeholders, public policy makers, and the general public;
- ✓ Pursue continuous improvement and demonstrate accountability for student learning and development; and
- ✓ Facilitate inter-institutional partnerships that increase revenues and decrease expenses.

Objective 3C: *Missouri higher education system will annually attract additional resources.*

Indicators

- 1) Total educational revenue per FTE student
- 2) Total state appropriations for higher education operations
 - i. State appropriations for targeted investments in higher education
 - ii. State appropriations for performance funding in higher education

- 3) Total state appropriations for capital improvements
- 4) Total federal non-student aid dollars received by Missouri higher education institutions

Contributing Factors

- a) State higher education operating appropriations compared to surrounding states and the national average
- b) State higher education appropriations for capital projects compared to surrounding states and national averages

These action steps may be taken as appropriate:

- ✓ Develop new coherent, complementary and coordinated policy-driven funding strategies for increased public support that will help ensure national competitiveness;
- ✓ Measure progress in achieving strategic initiatives;
- ✓ Maximize non-state resource development through increased external grants, additional contracts for services, expanded development activities, and additional entrepreneurial activities; and
- ✓ Reward institutions for innovations in efficiency and demonstrated improvement in delivering quality educational programs and services.

Appendix A - Data Sources

Objective 1A

Percentage of the population aged 25 to 64 who hold a degree or certificate, for the state as a whole and disaggregated by demographic groups and regions

- U.S. Census Bureau American Community Survey

Number of degrees and certificates awarded, disaggregated by demographic groups

- IPEDS - Data are available which detail the total number of the various degrees and certificates conferred by both Public and Independent Institutions disaggregated by gender and ethnicity in the state of Missouri for FY 2007.

Number of postsecondary credit hours delivered

- EMSAS, DHE-02 - Total credits enrolled by students *in college-level* coursework can be calculated for public institutions from EMSAS data. Comprehensive independent institutions report similar information on the DHE-02 fall enrollment supplement survey.

Community college transfer student success rate

- National Community College Benchmarking Project, Clearinghouse, EMSAS

Objective 1B

Percentage of state average family income required to pay for college after grant and scholarship aid, for the “average student” and disaggregated by demographic groups, educational sector, and income levels (for public institutions, this indicator will also include changes in state operating appropriations)

- *Measuring Up - The National Report Card on Higher Education* (2006). Available tables detail the percentage of income needed to pay for college expenses. Available tables also disaggregate by institutional sector with inclusion of data on other states and the national average (located in the technical guide under ‘Affordability 2006’).

Total financial aid dollars awarded to Missouri students for need-based financial aid and for other forms of financial assistance, disaggregated by educational sector

- DHE-14 report.

On-time FAFSAs files by income and EFC level

- DHE FAMOUS system.

Objective 1C

College attendance rates of the 9th grade cohort of Missouri students, disaggregated by demographic group

- At this time there is insufficient and reliable data for this measure. Additional student-level data in development by DESE may enable this analysis in the future.

College attendance rates of spring Missouri high school graduates

- Data published by NCHEMS (National Center for Higher Education Management Systems) details high school enrollment percentages for the state of Missouri and the nation for high school graduates enrolling in college immediately following graduation.

Percentage of the population and number of students aged 18 to 24 enrolled in postsecondary education, disaggregated by demographic group

- *Measuring Up - The National Report Card on Higher Education* details the percentage of students aged 18 to 24 enrolled in postsecondary education, along with the national average and the top 6 states' average (located in Missouri State Report 2006 Participation).

Percentage of the population, and number of students over the age of 25 enrolled in postsecondary education, disaggregated by demographic group

- *Measuring Up - The National Report Card on Higher Education* details data on working age adults that are enrolled part-time in postsecondary education. This information reflects enrollment of adults aged 25-49, rather than 25 and over, and does not include a demographic breakdown (located in Missouri State Report 2006 Participation).

Total enrollment in credit-bearing outreach courses and programs

- Would require new data collection.

Percent of Missouri 9th graders who take the ACT within four years

- ACT

Number of degree programs newly offered in underserved locations

- MDHE program review/approval process.

Percent of Missouri high school graduates enrolling in postsecondary education that require remedial coursework

- MDHE High School Graduates Report (public high schools and colleges only).

Cohort analysis of persistence from fall semester to fall semester

- EMSAS

Objective 2A**Number of direct educational partnerships with Missouri businesses, including MBEs**

- A new survey instrument would need to be developed.

Number of credentials awarded in key non-METS fields (fields to be determined)

- IPEDS

Number of students passing certification and licensure examinations in high demand fields (fields to be determined)

- Performance Indicator Survey - The MDHE currently collects aggregate information from public institutions detailing the number of students taking nationally-normed general education and major field assessments, as well as licensure and certification exams. The annual Performance Indicators Survey also reports student success according to basic benchmarks, e.g. number of students passing or scoring above the 50th percentile.

Increases in personal income from degree attainment

- Data published by the U.S. Census Bureau from the 2006 American Community Survey details median earnings for 2005-2006 for the general populace age 25 and older by gender and disaggregated by level of education. Could also be incorporated into the MDHE collaboration with DOLIR.

Employer surveys regarding new teachers

- A new survey instrument would be required.

Objective 2B**Number of degrees and certificates awarded in METS-related fields, including METS-related teacher education**

- IPEDS - Data contains the total number of the various degrees and certificates conferred by Public 2yr, Public 4yr and Independent Institutions disaggregated by institution and METS-related fields in the state of Missouri.

Number of degrees and certificates awarded in health practitioner fields

- IPEDS - Data contains the total number of the various degrees and certificates conferred by Public 2yr, Public 4yr and Independent Institutions disaggregated by institution in health-related fields in the state of Missouri.

Number of declared majors in METS-related fields, including METS-related teacher education

- EMSAS

Number of credit hours delivered in METS-related fields

- EMSAS data would detail credit hours enrolled by students with declared METS *majors*, but there is no currently available data source detailing total credit hours delivered to students (majors or non-majors) in METS *courses*.

Number of METS-related graduates who transferred from a community college

- EMSAS (public institutions only)

Number of graduate students enrolled in master's level and above programs in METS-related fields

- EMSAS

Number of declared majors in health practitioner fields

- EMSAS

Number of health practitioner graduates who transferred from a community college

- EMSAS (public institutions only)

Number of graduate students enrolled in master's level and above programs in health practitioner fields

- EMSAS

Objective 2C**Number of graduate and professional degrees awarded in critical fields, disaggregated by demographic group**

- IPEDS - Data details the number of master's, doctoral, and first professional degrees conferred by Missouri public and comprehensive independent institutions, by discipline, gender and ethnicity. Additional definition of "critical fields" would be required.

Number of graduate and professional programs newly offered in underserved locations

- MDHE program review/approval process.

Objective 2D**Total expenditures on research and development at Missouri higher education institutions as a percentage of gross state product**

- MERIC, IPEDS - According to the Department of Economic Development's Missouri Economic Research and Information Center (MERIC), the state had an estimated gross domestic product of \$225,876,000,000 in 2006. Based on that figure, FY2007 research expenditures can be reported for public and comprehensive baccalaureate independent institutions, both in total, and as a percentage of gross domestic product.

Total number of external grants awarded to researchers connected to Missouri higher education

- IPEDS - Research grants do not break out in available data, but data is available on federal, state, and local operating grants and contracts with public institutions, and federal, state, and local contracts with comprehensive independent institutions. (Accounting standards differ for public and independent institutions, and these totals may include student Pell grants for independent institutions depending on institutional accounting). Though not specifically restricted as research revenues, this information may provide an additional proxy in measuring annual "development activity". Reference Table 7.2.

Total number of students, graduate and undergraduate, engaged in research activities beyond regular classroom requirements

- Would require new reporting.

Number of new business start-ups linked to research or development incubators associated with Missouri higher education institutions

- Would require new reporting.

Number of invention disclosures and patents awarded in connection with a Missouri higher education institution

- Would require new reporting.

Missouri's New Economy Index

- Ewing Marion Kauffman Foundation and the Information Technology and Innovation Foundation

Objective 2E

Number of students participating in "high-impact" learning activities such as internships, study abroad, student-faculty research, and institutionally sponsored education outreach programs (e.g., ESL, TRIO, ABE)

- Additional survey development would be required.

Number of direct service relationships between higher education institutions and community/charitable organizations

- Additional survey development would be required.

Number of community service hours contributed by postsecondary students, faculty, and staff in association with their institution

- Additional survey development would be required.

Objective 3A

Results of annual assessments of student learning in general education

- Performance Indicator Survey - The MDHE currently collects aggregate information from public institutions detailing the number of students taking nationally-normed general education and major field assessments, as well as licensure and certification exams. The annual Performance Indicators Survey also reports student success according to basic benchmarks, e.g. number of students passing or scoring above the 50th percentile.

Results of annual major field assessments

- Performance Indicator Survey - The MDHE currently collects aggregate information from public institutions detailing the number of students taking nationally-normed general education and major field assessments, as well as licensure and certification exams. The annual Performance Indicators Survey also reports student success according to basic benchmarks, e.g. number of students passing or scoring above the 50th percentile.

Pass rates on licensure and certification examinations

- Performance Indicator Survey - The MDHE currently collects aggregate information from public institutions detailing the number of students taking nationally-normed general education and major field assessments, as well as licensure and certification exams. The annual Performance Indicators Survey also reports student success according to basic benchmarks, e.g. number of students passing or scoring above the 50th percentile.

Developmental student success rate in collegiate-level courses

- NCCBP

Results of student engagement and satisfaction surveys

- VSA, NCCBP, UCAN

Objective 3B

Average time to completion by program level, including the 42 hour block, for college-ready students

- IPEDS - Data details four-, five-, and six-year graduation rates for first-time, full-time *baccalaureate* degree-seeking students at public and comprehensive independent institutions. Time-to-degree data for students pursuing other awards (e.g. associate's or graduate / first-professional degrees) would be available from EMSAS data for public institutions. No statewide data currently exists detailing completion of the 42-hour block, although "time-to-42-hours" could be calculated as a proxy for public institutions using EMSAS data.

Three-year and six-year graduation rates of college-ready students

- IPEDS

Number of transfer students who graduate with a baccalaureate degree

- EMSAS (public institutions only)

Objective 3C

Total educational revenue per FTE student

- Several options including IPEDS, SHEEO Finance, Grapevine

Total state appropriations for higher education operations

State appropriations for targeted investments in higher education

State appropriations for performance funding in higher education

- Several options including IPEDS, SHEEO Finance, Grapevine

Total state appropriations for capital improvements

- Several options including IPEDS, SHEEO Finance, Grapevine

Total federal non-student aid dollars received by Missouri higher education institutions

- Several options including IPEDS, SHEEO Finance, Grapevine

State higher education operating appropriations compared to surrounding states and the national average

- Several options including IPEDS, SHEEO Finance, Grapevine

State higher education appropriations for capital projects compared to surrounding states and national averages

- Several options including IPEDS, SHEEO Finance, Grapevine

Appendix B – Illustration of Contextual Information for Setting Targets

Objective 1A Context Information

Missouri is currently at 30.5%, compared to the nation at 37.4% in percent of the population 25 and over with a credential. Top performing state / districts include the District of Columbia (49.8%), Massachusetts (44.7%), and Colorado (41.9%).

Objective 1B Context Information

Missouri is currently at or below the national average in terms of the percent of income needed to pay for college expenses minus financial aid in the community college, and public and private university sectors.

<i>Community colleges:</i>	<i>MO (23%); national avg (24%); HI (17%)</i>
<i>Public Four-Year:</i>	<i>MO (31%); national avg (31%); UT (18%)</i>
<i>Independent Four-Year:</i>	<i>MO (54%); national avg (72%); UT (22%)</i>

Objective 1C Context Information

High school freshmen enrolling w/in 4 years, any state (2002)

Missouri 39%; national avg 38%; top state 62% (ND)

Percent ages 18-24 enrolling in college (2002-2004)

Missouri 33%; national avg 35%; top states 42% (CT / MI)

Percent ages 25-49 enrolled part-time in some postsecondary education (2003)

Missouri 4.0%; national avg 3.9%; top state 6.1% (NM)

Coordinated Plan Indicators and Contributing Factors Recommended for Deletion by COPHE/MCCA

Objective 1A: *Increase the percent of Missouri citizens who possesses a postsecondary credential.*

Deleted Indicators:

Community college transfer student success rate

Objective 1C(a): *Increase college attendance rate of high school students*

Deleted Indicators:

College attendance rates of the 9th grade cohort of Missouri students, disaggregated by demographic group

Total enrollment in credit-bearing outreach courses and programs

Deleted Contributing Factors:

Percent of Missouri 9th graders cohort who take the ACT within four years

College attendance rates of the 9th grade cohort of Missouri students, disaggregated by demographic group

Cohort analysis of persistence from fall semester to fall semester

Objective 1C(b): *Increase postsecondary attendance rate of non-traditional students.*

Deleted Indicator:

Number of degree programs newly offered in underserved locations

Objective 2B: *Missouri's higher education system will increase the number of degrees and certificates awarded in METS-related and health practitioner fields. (Specific fields to be determined)*

Deleted Contributing Factors:

Number of declared majors in METS-related fields, including METS-related teacher education

Number of METS-related graduates who transferred from a community college

Number of graduate students enrolled in master's level and above programs in METS-related fields

Number of declared majors in health practitioner fields

Objective 2D: *Missouri's higher education system will increase the amount and scope of basic and applied research and development activity to the extent consistent with institutional missions.*

Deleted Indicator:

Total number of students, graduate and undergraduate, engaged in research activities beyond regular classroom requirements

Objective 2E: *Missouri institutions will increase learning experiences beyond the classroom and service activities beyond the campus in support of promoting civic engagement, understanding international and inter-cultural issues, and improving critical thinking.*

Deleted Indicators:

Number of direct service relationships between higher education institutions and community/charitable organizations

Number of community service hours contributed by postsecondary students, faculty, and staff in association with their institution

Objective 3B: *Missouri's higher education system will increase the efficiency with which students move to graduation.*

Deleted Contributing Factors:

Average time to completion by program level, including the 42 hour block, for college-ready students

Number of transfer students who graduate from any institution with a baccalaureate degree

Objective 3C: *Missouri's public higher education system will attract additional state support for operations and capital.*

Deleted Indicators:

Total educational revenue per FTE student

Total federal non-student aid dollars received by Missouri higher education institutions

*Imperatives for Change:
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**A Coordinated Plan for the Missouri Higher
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**Coordinating Board for Higher Education
July 30, 2008**

***Imperatives for Change:
Building a Higher Education System for the 21st Century***

Introduction

The rapidly changing social and economic environment presents profound challenges to all states and nations. More than ever, in the knowledge-based economy of the 21st century, higher education is the gateway to an improved standard of living for Missouri's residents. The imperative for change is clear: those educational systems that adapt to the new environment will be positioned to lead their states to succeed in a globally competitive world.

The collective challenge to the higher education system is to understand the key components of the environment and to devise effective strategies that will capitalize on strengths while addressing weaknesses in challenging financial times. Providing the vision, the stable and sufficient resources, and the collective action to support a higher education system that ensures the future prosperity of Missouri residents, the state of Missouri, and the nation is necessary to address the most important challenges of the day.

Imperatives for Change provides a vision that has been developed collaboratively by Missouri's higher education institutions and the Coordinating Board for Higher Education. This plan will serve for the next three to five years as a foundation for prioritizing goals, justifying an increased resource base, allocating resources, and implementing dynamic strategies to provide Missouri residents with the educational opportunities they need to be competitive on a global scale.

Mission Statement

The Coordinating Board for Higher Education, the Missouri Department of Higher Education, and the state's institutions of higher education will work collaboratively to support a diverse system of affordable, accessible, high-quality educational institutions that demonstrate student learning and development, encourage and support innovation, foster civic engagement, enhance the cultural life of Missourians, and contribute to economic growth.

Vision Statement

Missouri's higher education will be an innovative and coordinated system of diverse postsecondary institutions that benefits Missouri and the nation by equipping all Missouri residents for personal and professional success in the 21st century and that is moving towards becoming one of the best in the nation.

Basic Values

Missouri's higher education community is united in its commitment to the following core values.

- ❖ Higher education in Missouri serves many purposes and constituencies, but first and foremost the system is focused on students, learning, and each individual's realization of their full educational potential.
- ❖ Qualified students should be able to attend the higher education institution that best fits their educational goals and needs regardless of cost.
- ❖ Access without success is an empty promise. Missouri's higher education institutions are dedicated to providing nationally and internationally competitive educational programs, research, and extension services to ensure their students have the knowledge and skills necessary for success in the 21st century, including the ability to think critically, to communicate effectively, and to be life-long learners.
- ❖ Diversity of institutional missions is a strength of the system that must be preserved.
- ❖ Higher education is a public good as well as a private benefit, contributing both to economic development and civic engagement.
- ❖ Basic and applied research, the creation of knowledge, and the application of information to solve problems are basic functions of the higher education system that must be recognized and supported.
- ❖ The higher education community is dedicated to making decisions based on reliable and transparent data.
- ❖ The higher education community values the appropriate use of technology to enhance programs, services, research, and administration.
- ❖ Public accountability for learning outcomes and stewardship of public funds are priorities for Missouri's higher education institutions.
- ❖ Ensuring the continued affordability and effectiveness of Missouri's higher education system requires a partnership among the institutions, the state, and other stakeholders.

Strategic Issues, Goals, and Action Steps

Strategic Issue: *Increase Educational Attainment*

GOAL 1: Missouri's higher education system will improve educational attainment, including certificate and degree production at all levels, to enhance the quality of Missouri's workforce and the quality of life of its residents.

Objective 1A: *Increase the percent of Missouri residents who possesses a postsecondary credential.*

Indicators

- 1) Percentage of the population aged 25 to 64 who hold a degree or certificate, for the state as a whole and disaggregated by demographic groups and regions
- 2) Number of transfer students who graduate from any institution with a baccalaureate degree
- 3) Increases in personal income from degree attainment

Contributing Factors

- a) Number of postsecondary credit hours delivered
- b) Number of degrees and certificates awarded, disaggregated by demographic groups
- c) Cohort analysis of persistence from fall semester to fall semester

These action steps may be taken as appropriate:

- ✓ Raise the aspirations of those who do not see postsecondary education within their reach;
- ✓ Increase postsecondary access for, and success of, historically under-represented groups;
- ✓ Develop incentives that reward institutions that increase degree production and retention rates while demonstrably sustaining quality within programs;
- ✓ Expand opportunities for non-traditional learners through course redesign, alternative methods of program delivery, and better coordination of distance education; and
- ✓ Create incentives and standards for seamless student transitions between educational institutions.

Objective 1B: *Missouri's system of higher education will become more affordable to more Missourians.*

Indicators

- 1) Percentage of family income required to pay for college after grant and scholarship aid by income quintiles
- 2) Total student financial aid awarded to Missouri students from all sources including both restricted and unrestricted institutional funds

Contributing Factors

- a) Missouri resident on-time FAFSAs files by income and EFC level
- b) Percent change in state appropriations for higher education

These action steps may be taken as appropriate:

- ✓ Implement the Higher Education Student Funding Act;
 - ✓ Support the growth of the Access Missouri Student Financial Assistance Program;
 - ✓ Carry out a sustained statewide public information campaign on the value of higher education and the steps prospective students must take to prepare academically and financially; and
 - ✓ Increase state funding and external funding sufficient to enable institutions to minimize tuition increases and maintain quality undergraduate and graduate programs and services.
-

Objective 1C: *Missouri's higher education system will demonstrate continual improvement or sustained excellence in student learning outcomes.*

Indicators

- 1) Results of assessments of student learning in general education (Institutions will be provided the option of using national normed tests and/or participation in an MDHE administered project involving samples of student work evaluated by a statewide committee of faculty). Data generated should serve dual purposes of accountability, i.e., demonstration of learning gains, and improvement, i.e., use by faculty to make changes in curriculum content and delivery.
- 2) Results of assessments of student learning of major fields
- 3) Pass rates on licensure and certification examinations
- 4) Developmental student success rate in collegiate-level courses

Contributing Factor

- a) Results of student engagement and/or satisfaction surveys

These action steps may be taken as appropriate:

- ✓ Continue to experiment with VSA and/or similar template for reporting of assessment of student learning gains;
- ✓ Evaluate need for and potential structure of policy in student assessment and placement, especially as a natural outgrowth of Curriculum Alignment Initiative
- ✓ Evaluate potential revisions to statewide data collection to better illustrate the scope and magnitude of postsecondary assessment
- ✓ Inventory instruments currently used to assess general education, major field, and professional certification / licensure

NOTE: Prior to implementation of this section, there should be exploration with DESE, the State Board of Education, and P-12 organizations to obtain joint agreement.

Objective 1D: *Increase college attendance rate of high school students.*

Indicators

- 1) Same year fall college attendance rates of spring Missouri high school graduates
- 2) Percentage of the population and number of students aged 18 to 24 enrolled in postsecondary education, disaggregated by demographic group

Contributing Factors

- a) Percent of Missouri 9th graders who take the ACT within four years
- b) Percent of Missouri high school graduates enrolled in postsecondary education that were placed in remedial coursework
- c) College attendance rates of the 9th grade cohort of Missouri students, disaggregated by demographic group

Objective 1E: *Increase college attendance rate of non-traditional students.*

Indicator

- 1) Percentage of the population, and number of students over the age of 24 enrolled in postsecondary education, disaggregated by demographic group

Contributing Factor

- a) Enrollment in New Jobs Training, Customized Training, and related training programs

These action steps may be taken as appropriate:

- ✓ Implement appropriate early intervention strategies at the school district level;
 - ✓ Implement the Curriculum Alignment Project;
 - ✓ Support the activities of the P-20 Coalition;
 - ✓ Provide incentives for attracting adult students, particularly in underserved regions;
 - ✓ Provide incentives for the delivery of degrees (especially graduate degrees) in underserved geographic areas
 - ✓ Provide institutional support for the additional costs associated with non-traditional course delivery methods;
 - ✓ Review and, if necessary, strengthen CBHE oversight to assure the effectiveness of non-traditional programming and;
 - ✓ Work with DESE to explore requiring collegiate level placement testing such as the ACT, Work Keys, Accuplacer, Compass, etc. in the 11th grade.
-

Strategic Issues, Goals, and Action Steps

Strategic Issue: *Develop a 21st Century Society and Global Economy*

GOAL 2: Missouri's higher education system will contribute to a dynamic, information-based, globally competitive society and economy by collaborating with government and business.

Objective 2A: *Missouri's higher education system will demonstrate improvement in meeting the workforce needs of Missouri.*

Indicators

- 1) Number of direct educational partnerships with Missouri employers, including MBEs
- 2) Number of degrees and certificates awarded in key non-METS fields (fields to be determined)
- 3) Number of students passing certification and licensure examinations in high demand fields (fields to be determined)

Contributing Factor

- a) Employer follow-up surveys of appropriate categories of degree and/or certificate completers

These action steps may be taken as appropriate:

- ✓ Develop corporate links to access training and learning opportunities;
- ✓ Expand customized education and training opportunities where the business community and higher education institutions work together;
- ✓ Offer more access for place-bound or time-bound learners;
- ✓ Establish employer-based feedback mechanisms to evaluate the quality and preparedness of the graduates of postsecondary programs; and
- ✓ Support programs to recruit well-prepared, new and experienced teachers in high need areas.

Objective 2B: *Missouri's higher education system will increase the number of degrees and certificates awarded in METS-related and health practitioner fields. (Specific fields to be determined)*

Indicators

- 1) a. Number of degrees and certificates awarded in METS-related fields, including METS-related teacher education
b. Number of METS-related degree and certificate recipients who transferred from a community college
- 2) a. Number of degrees and certificates awarded in health practitioner fields
b. Number of health practitioner degree and certificate recipients who transferred from a community college

Contributing Factor

- a) Number of credit hours delivered in METS-related fields

These action steps may be taken as appropriate:

- ✓ Work with elementary and secondary schools to increase student interest in mathematics and science while improving overall educational preparation in mathematics and science;
- ✓ Invest in increased institutional capacity in health practitioner programs;
- ✓ Increase the number of postsecondary students completing courses in METS-related fields; and
- ✓ Offer funding incentives to institutions for increasing graduates in METS and health practitioner fields while demonstrating sustained quality programs.

Objective 2C: *Missouri's higher education system will increase the number of graduate degrees awarded in critical fields. (Specific fields to be determined.)*

Indicator

- 1) Number of graduate and professional degrees awarded in critical fields, disaggregated by demographic group and geographic location

These action steps may be taken as appropriate:

- ✓ Foster increased access to graduate and professional programs for historically underserved populations;
- ✓ Increase the number of graduate and professional programs newly offered in underserved locations
- ✓ Provide incentives to expand access to graduate and professional programs in underserved areas using cooperative arrangements, resource sharing, and technology whenever possible; and

- ✓ Expand access to high-quality continuing professional development opportunities in underserved areas using cooperative arrangements, resource sharing, and technology whenever possible.
-

Objective 2D: *Missouri's higher education system will increase the amount and scope of basic and applied research and development activity to the extent consistent with institutional missions.*

Indicators

- 1) Total expenditures on research and development at Missouri higher education institutions as a percentage of gross state product
- 2) Total number and value of external grants awarded to researchers connected to Missouri higher education
- 3) Number of invention disclosures and patents awarded in connection with a Missouri higher education institution
- 4) Number of new business start-ups linked to research or development incubators associated with Missouri higher education institutions

Contributing Factor

- a) Missouri's New Economy Index

These action steps may be taken as appropriate:

- ✓ Develop public relations efforts to inform the public about the benefits of research activities;
 - ✓ Establish competitive grant programs to expand research capacity in higher education institutions;
 - ✓ Establish competitive grant programs for collaborative research projects;
 - ✓ Improve cooperation between the Department of Economic Development and higher education institutions;
 - ✓ Establish and utilize a state-supported data inventory for identifying expertise and opportunities that result from research and development activities on campuses;
 - ✓ Provide extension programs and innovation centers with technical guidance to encourage the development of new companies, economy clusters, and partnerships;
 - ✓ Provide incentives to institutions that transfer new technologies to the marketplace.
-

Objective 2E: *Missouri institutions will increase learning experiences beyond the classroom and service activities beyond the campus in support of*

promoting civic engagement, understanding international and cultural issues, and improving critical thinking.

Indicator

- 1) Percentage of students participating in “high-impact” learning activities such as internships, study abroad, student-faculty research, and service learning
- 2) Number of direct education outreach programs and program participants (e.g., ESL, TRIO, ABE)

These action steps may be taken as appropriate:

- ✓ Encourage and reward institutions to emphasize and assess student gains in critical thinking, creative problem solving, and effective communication in all academic programs;
- ✓ Provide incentives to institutions to provide their students increased access to “high-impact” learning opportunities;
- ✓ Use technology and alternative delivery mechanisms to increase opportunities for lifelong learning by all Missouri citizens;
- ✓ Foster increased cultural literacy, international understanding, and appreciation for diversity in all students through appropriate learning opportunities; and
- ✓ Establish learning communities within institutions that encourage the development of engaged citizens among students, faculty, staff, and the surrounding community.

Strategic Issues, Goals, and Action Steps

Strategic Issue: *Enhance Resources through Increased Investment, Stewardship, and Shared Responsibility*

GOAL 3: Missouri's higher education system will increase external financial support for higher education by demonstrating its value to key stakeholders and public policy-makers while understanding that shared responsibility is necessary for providing a globally competitive workforce, creating valuable new knowledge and products, and enriching the quality of life of all Missourians.

Objective 3A: *Missouri's higher education system will increase the efficiency with which students move to graduation.*

Indicator

- 1) Three-year and six-year graduation rates of college-ready students

These action steps may be taken as appropriate:

- ✓ Use appropriate technology to improve the delivery of instruction, the sharing of knowledge, and the accomplishment of managerial tasks;
 - ✓ Incorporate considerations of institutional efficiency in the implementation of the Higher Education Student Funding Act;
 - ✓ Establish current agreed-upon missions (between each institution and the CBHE) and reinstitute five-year mission reviews;
 - ✓ Provide incentives to and recognize institutions for maintaining distinctive missions;
 - ✓ Provide consistent, comparable, and transparent information on the student experience to key higher education stakeholders, including prospective students and their families, public policy makers, and campus faculty and staff;
 - ✓ Provide consistent, illustrative, and transparent information on research activities and accomplishments to key higher education stakeholders, public policy makers, and the general public;
 - ✓ Pursue continuous improvement and demonstrate accountability for student learning and development; and
 - ✓ Facilitate inter-institutional partnerships that increase revenues and decrease expenses.
-

Objective 3B: *Missouri's higher education system will annually attract additional resources.*

Indicators

- 1) Total state appropriations received for higher education operations
 - i. State appropriations for strategic investments in higher education
 - ii. State appropriations for performance funding in higher education
 - iii. State higher education operating appropriations received per FTE compared to contiguous states and the national average
- 2) Total state appropriations received for capital improvements
 - i. State higher education capital appropriations received per FTE compared to surrounding states and the national average
- 3) Total federal non-student aid dollars received by Missouri higher education institutions
- 4) Total state appropriations received for higher education as a percentage of total state general revenue appropriations
- 5) State public higher education appropriations per \$1,000 of personal income compared to contiguous states and the national average
- 6) Per capita state appropriations for public higher education compared to contiguous states and the national average

These action steps may be taken as appropriate:

- ✓ Develop new coherent, complementary and coordinated policy-driven funding strategies for increased public support that will help ensure national competitiveness;
- ✓ Measure progress in achieving strategic initiatives;
- ✓ Maximize non-state resource development through increased external grants, additional contracts for services, expanded development activities, and additional entrepreneurial activities; and
- ✓ Reward institutions for innovations in efficiency and demonstrated improvement in delivering quality educational programs and services.

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The collective challenge to the higher education system is to understand the key components of the environment and to devise effective strategies that will capitalize on strengths while addressing weaknesses in challenging financial times. Providing the vision, the stable and sufficient resources, and the collective action to support a higher education system that ensures the future prosperity of Missouri ~~citizens~~²residents², the state of Missouri, and the nation is necessary to address the most important challenges of the day.

Imperatives for Change provides a vision that has been developed collaboratively by Missouri's higher education institutions and the Coordinating Board for Higher Education. This plan will serve for the next three to five years as a foundation for prioritizing goals, justifying an increased resource base, allocating resources, and implementing dynamic strategies to provide Missouri ~~citizens~~³residents³ with the educational opportunities they need to be competitive on a global scale.

Mission Statement

The Coordinating Board for Higher Education, the Missouri Department of Higher Education, and the state's institutions of higher education will work collaboratively to support a diverse system of affordable, accessible, high-quality educational institutions that demonstrate student learning and development, encourage and support innovation, foster civic engagement, enhance the cultural life of Missourians, and contribute to economic growth.

Vision Statement

¹ Staff recommended rewording

² Staff recommended rewording

³ Staff recommended rewording

Missouri's higher education will be an innovative and coordinated system of diverse postsecondary institutions that benefits Missouri and the nation by equipping all Missouri ~~citizens~~ residents⁴ for personal and professional success in the 21st century and that is moving towards becoming one of the best in the nation.

Basic Values

Missouri's higher education community is united in its commitment to the following core values.

- ❖ Higher education in Missouri serves many purposes and constituencies, but first and foremost the system is focused on students, learning, and each individual's realization of their full educational potential.
- ❖ Qualified students should be able to attend the higher education institution that best fits their educational goals and needs regardless of cost.
- ❖ Access without success is an empty promise. Missouri's higher education institutions are dedicated to providing nationally and internationally competitive educational programs, research, and extension services to ensure their students have the knowledge and skills necessary for success in the 21st century, including the ability to think critically, to communicate effectively, and to be life-long learners.
- ❖ Diversity of institutional missions is a strength of the system that must be preserved.
- ❖ Higher education is a public good as well as a private benefit, contributing both to economic development and civic engagement.
- ❖ Basic and applied research, the creation of knowledge, and the application of information to solve problems are basic functions of the higher education system that must be recognized and supported.
- ❖ The higher education community is dedicated to making decisions based on reliable and transparent data.
- ❖ The higher education community values the appropriate use of technology to enhance programs, services, research, and administration.
- ❖ Public accountability for learning outcomes and stewardship of public funds are priorities for Missouri's higher education institutions.
- ❖ Ensuring the continued affordability and effectiveness of Missouri's higher education system requires a partnership among the institutions, the state, and other stakeholders.

⁴ Staff recommended rewording

Strategic Issues, Goals, and Action Steps

Strategic Issue: *Increase Educational Attainment*

GOAL 1: Missouri's higher education system will improve educational attainment, including certificate and degree production at all levels, to enhance the quality of Missouri's workforce and the quality of life of its ~~citizens~~residents⁵.

Objective 1A: *Increase the percent of Missouri ~~citizens~~residents⁶ who possesses a postsecondary credential.*

Indicators

- 1) Percentage of the population aged 25 to 64 who hold a degree or certificate, for the state as a whole and disaggregated by demographic groups and regions
- 2) ~~Number of degrees and certificates awarded, disaggregated by demographic groups~~⁷
- 3) Number of transfer students who graduate from any institution with a baccalaureate degree⁸
- 4) Increases in personal income from degree attainment⁹

Contributing Factors

- a) Number of postsecondary credit hours delivered
- b) ~~Community college transfer success rate~~¹⁰
- c) Number of degrees and certificates awarded, disaggregated by demographic groups^{see fn7}
- d) Cohort analysis of persistence from fall semester to fall semester¹¹

These action steps may be taken as appropriate:

- ✓ Raise the aspirations of those who do not see postsecondary education within their reach;
- ✓ Increase postsecondary access for, and success of, historically under-represented groups;

⁵ Staff recommended rewording.

⁶ Staff recommended rewording

⁷ COPHE/MCCA relocated to contributing factor

⁸ COPHE/MCCA reworded and relocated from Goal 3

⁹ COPHE/MCCA recommended relocation from Goal 2

¹⁰ COPHE/MCCA recommended deletion and consolidation in indicator "number of transfer students..."

¹¹ Deletion suggested by COPHE/MCCA, Staff recommend keeping contributing factor and movement to this location

- ✓ Develop incentives that reward institutions that increase degree production and retention rates while demonstrably sustaining quality within programs;
- ✓ Expand opportunities for non-traditional learners through course redesign, alternative methods of program delivery, and better coordination of distance education; and
- ✓ Create incentives and standards for seamless student transitions between educational institutions.

Objective 1B: *Net cost of postsecondary education as a percent of average family income will not increase. Missouri's system of higher education will become more affordable to more Missourians.*¹²

Indicators

- 1) Percentage of ~~state average~~ family income required to pay for college after grant and scholarship aid by income quintiles, ~~for the "average student" and disaggregated by demographic groups, educational sector, and income levels (for public institutions, this indicator will also include changes in state operating appropriations)~~¹³
- 2) ~~Total financial aid dollars awarded to Missouri students for need-based financial aid and for other forms of financial assistance, disaggregated by educational sector~~ Total student financial aid awarded to Missouri students from all sources including both restricted and unrestricted institutional funds¹⁴

Contributing Factors

- a) Missouri resident¹⁵ on-time FAFSAs files by income and EFC level
- a)b) Percent change in state appropriations for higher education¹⁶

These action steps may be taken as appropriate:

- ✓ Implement the Higher Education Student Funding Act;
- ✓ Support the growth of the Access Missouri Student Financial Assistance Program;
- ✓ Carry out a sustained statewide public information campaign on the value of higher education and the steps prospective students must take to prepare academically and financially; and

¹² COPHE/MCCA recommended rewording

¹³ COPHE/MCCA recommended rewording

¹⁴ COPHE/MCCA suggested only looking at institutional aid, new language concisely captures all aid with visibility for institutional aid

¹⁵ Staff recommended rewording

¹⁶ COPHE/MCCA recommended addition

- ✓ Increase state funding and external funding sufficient to enable institutions to minimize tuition increases and maintain quality undergraduate and graduate programs and services.

Objective 1C: *Missouri's ~~institutions~~ higher education system will demonstrate continual improvement or sustained excellence in student learning outcomes.¹⁷*

Indicators

- 1) Results of ~~annual~~ assessments of student learning in general education (Institutions will be provided the option of using national normed tests and/or participation in an MDHE administered project involving samples of student work evaluated by a statewide committee of faculty). Data generated should serve dual purposes of accountability, i.e., demonstration of learning gains, and improvement, i.e., use by faculty to make changes in curriculum content and delivery.¹⁸
- 2) Results of assessments of student learning of major fields.¹⁹ ~~annual~~ major field assessments
- 3) Pass rates on licensure and certification examinations
- 4) Developmental student success rate in collegiate-level courses

Contributing Factors

- a) Results of student engagement and or²⁰ satisfaction surveys

These action steps may be taken as appropriate:

- ✓ Continue to experiment with VSA and/or similar template for reporting of assessment of student learning gains;
- ✓ Evaluate need for and potential structure of policy in student assessment and placement, especially as a natural outgrowth of Curriculum Alignment Initiative
- ✓ Evaluate potential revisions to statewide data collection to better illustrate the scope and magnitude of postsecondary assessment
- ✓ Inventory instruments currently used to assess general education, major field, and professional certification / licensure

¹⁷ COPHE/MCCA recommended rewording and relocation from Goal 3

¹⁸ COPHE/MCCA suggest removal of “annual” and use of sampling techniques; Staff recommend methodological design to be determined along with definition of measures.

¹⁹ Staff recommended rewording and COPHE/MCCA recommend deletion of annual

²⁰ COPHE/MCCA recommended rewording

NOTE: Prior to ~~adoption-implementation~~²¹ of this section, there should be exploration with DESE, the State Board of Education, P-12 organizations to obtain joint agreement.

Objective 1DC: *Increase college attendance rate of high school students ~~and non-traditional students~~²².*

Indicators

- ~~1) College attendance rates of the 9th grade cohort of Missouri students, disaggregated by demographic group²³~~
- ~~2) Same year fall college attendance rates of spring Missouri high school graduates²⁴ College attendance rates of spring Missouri high school graduates~~
- ~~3) 1) _____ Percentage of the population and number of students aged 18 to 24 enrolled in postsecondary education, disaggregated by demographic group~~
- ~~4) Percentage of the population, and number of students over the age of 25 enrolled in postsecondary education, disaggregated by demographic group²⁵~~
- ~~5) Total enrollment in credit bearing outreach courses and programs²⁶~~

Contributing Factors

- ~~a) Percent of Missouri 9th graders who take the ACT within four years²⁷~~
- ~~b) Number of degree programs newly offered in underserved locations²⁸~~
- ~~c) Percent of Missouri high school graduates ~~enrolling~~ enrolled in postsecondary education that ~~require~~ were placed in²⁹ remedial coursework~~
- ~~d) Cohort analysis of persistence from fall semester to fall semester³⁰~~
- ~~d) College attendance rates of the 9th grade cohort of Missouri students, disaggregated by demographic group^{see fn23}~~

²¹ Staff recommended rewording

²² COPHE/MCCA recommended separate objectives for high school, v. non-traditional

²³ COPHE/MCCA recommended deletion, staff recommends moving to contributing factor

²⁴ Staff recommended rewording

²⁵ COPHE/MCCA recommended move to separate objective

²⁶ COPHE/MCCA recommended deletion

²⁷ COPHE/MCCA recommended deletion, staff recommend retention

²⁸ COPHE/MCCA suggests deletion

²⁹ Staff recommended rewording

³⁰ COPHE/MCCA recommended deletion, Staff recommend relocating to contributing factor under “increased number of degree holders”.

Objective 1E: *Increase college attendance rate of non-traditional students.*³¹

Indicator

1) Percentage of the population, and number of students over the age of 24 enrolled in postsecondary education, disaggregated by demographic group³²

Contributing Factor

a) Enrollment in New Jobs Training, Customized Training, and related training programs³³

These action steps may be taken as appropriate:

- ✓ Implement appropriate early intervention strategies at the school district level;
- ✓ Implement the Curriculum Alignment Project;
- ✓ Support the activities of the P-20 Coalition;
- ✓ Provide incentives for attracting adult students, particularly in underserved regions;
- ✓ Provide incentives for the delivery of degrees (especially graduate degrees) in underserved geographic areas
- ✓ Provide institutional support for the additional costs associated with non-traditional course delivery methods; ~~and~~
- ✓ Review and, if necessary, strengthen CBHE oversight to assure the effectiveness of non-traditional programming ~~and~~:-
- ✓ Work with DESE to explore requiring collegiate level placement testing such as the ACT, Work Keys, Accuplacer, Compass, etc. in the 11th grade.³⁴

Strategic Issues, Goals, and Action Steps

Strategic Issue: *Develop a 21st Century Society and Global Economy*

GOAL 2: Missouri's higher education system will contribute to a dynamic, information-based, globally competitive society and economy by collaborating with government and business.

Objective 2A: *Missouri's higher education system will demonstrate improvement in meeting the workforce needs of Missouri.*

³¹ COPHE/MCCA recommended separate objectives for high school, v. non-traditional

³² Relocated from previous indicator (see fn25), Staff recommended rewording

³³ COPHE/MCCA recommended addition

³⁴ COPHE/MCCA recommended addition

Indicators

- 1) Number of direct educational partnerships with Missouri businesses/employers³⁵, including MBEs
- 2) Number of credentials—degrees and certificates³⁶ awarded in key non-METS fields (fields to be determined)
- 3) Number of students passing certification and licensure examinations in high demand fields (fields to be determined)
- ~~4) Increases in personal income from degree attainment³⁷~~

Contributing Factors

- a) Employer follow-up surveys of appropriate categories of degree and/or certificate completers regarding new teachers³⁸

These action steps may be taken as appropriate:

- ✓ Develop corporate links to access training and learning opportunities;
- ✓ Expand customized education and training opportunities where the business community and higher education institutions work together;
- ✓ Offer more access for place-bound or time-bound learners;
- ✓ Establish employer-based feedback mechanisms to evaluate the quality and preparedness of the graduates of postsecondary programs; and
- ✓ Support programs to recruit well-prepared, new and experienced teachers in high need areas.

Objective 2B: *Missouri's higher education system will increase the number of degrees and certificates awarded in METS-related and health practitioner fields. (Specific fields to be determined)*

Indicators

- 1) a. Number of degrees and certificates awarded in METS-related fields, including METS-related teacher education
b. Number of METS-related degree and certificate recipients who transferred from a community college³⁹

³⁵ Staff recommended rewording

³⁶ Staff recommended rewording

³⁷ Moved to objective 1A

³⁸ COPHE/MCCA recommended rewording to broaden factor

³⁹ COPHE/MCCA relocation from contributing factor and rewording

- 2) a. Number of degrees and certificates awarded in health practitioner fields
b. Number of health practitioner degree and certificate recipients who transferred from a community college⁴⁰

Contributing Factors

- ~~a) Number of declared majors in METS-related fields, including METS-related teacher education~~⁴¹
- b)a) _____ Number of credit hours delivered in METS-related fields
- ~~c) Number of METS-related graduates who transferred from a community college~~^{see fn39}
- ~~d) Number of graduate students enrolled in master's level and above programs in METS-related fields~~⁴²
- ~~e) Number of declared majors in health practitioner fields~~⁴³
- ~~f) Number of health practitioner graduates who transferred from a community college~~^{see fn40}
- ~~g) Number of graduate students enrolled in master's level and above programs in health practitioner fields~~⁴⁴

These action steps may be taken as appropriate:

- ✓ Work with elementary and secondary schools to increase student interest in mathematics and science while improving overall educational preparation in mathematics and science;
- ✓ Invest in increased institutional capacity in health practitioner programs;
- ✓ Increase the number of postsecondary students completing courses in METS-related fields; and
- ✓ Offer funding incentives to institutions for increasing graduates in METS and health practitioner fields while demonstrating sustained quality programs.

Objective 2C: *Missouri's higher education system will increase the number of graduate degrees awarded in critical fields ~~and the number of graduate degrees newly offered in underserved areas~~⁴⁵. (Specific fields to be determined.)*

⁴⁰ COPHE/MCCA relocation from contributing factor and rewording

⁴¹ COPHE/MCCA recommended deletion

⁴² COPHE/MCCA recommended deletion

⁴³ COPHE/MCCA recommended deletion

⁴⁴ COPHE/MCCA recommended deletion

⁴⁵ COPHE/MCCA recommended deletion, conceptually retained in addition of "geographic location in indicator 1"

Indicators

- 1) Number of graduate and professional degrees awarded in critical fields, disaggregated by demographic group and geographic location⁴⁶
- ~~2) Number of graduate and professional programs newly offered in underserved locations⁴⁷~~

These action steps may be taken as appropriate:

- ✓ Foster increased access to graduate and professional programs for historically underserved populations;
- ✓ Increase the number of graduate and professional programs newly offered in underserved locations
- ✓ Provide incentives to expand access to graduate and professional programs in underserved areas using cooperative arrangements, resource sharing, and technology whenever possible; and
- ✓ Expand access to high-quality continuing professional development opportunities in underserved areas using cooperative arrangements, resource sharing, and technology whenever possible.

Objective 2D: *Missouri's higher education system will increase the amount and scope of ~~campus~~ basic and applied research and development activity to the extent consistent with institutional missions⁴⁸.*

Indicators

- 1) Total expenditures on research and development at Missouri higher education institutions as a percentage of gross state product
- 2) Total number and value⁴⁹ of external grants awarded to researchers connected to Missouri higher education
- ~~3) Number of invention disclosures and patents awarded in connection with a Missouri higher education institution⁵⁰~~

⁴⁶ COPHE/MCCA recommended addition, see fn45

⁴⁷ COPHE/MCCA recommended relocation to potential action step see fn45

⁴⁸ COPHE/MCCA recommended rewording

⁴⁹ COPHE/MCCA recommended rewording

⁵⁰ COPHE/MCCA recommended relocation from contributing factor

- ~~3) Total number of students, graduate and undergraduate, engaged in research activities beyond regular classroom requirements⁵¹~~
- 4) Number of new business start-ups linked to research or development incubators associated with Missouri higher education institutions

Contributing Factors

- ~~a) Number of invention disclosures and patents awarded in connection with a Missouri higher education institution^{see fn50}~~
- ~~b)a) _____ Missouri's New Economy Index~~

These action steps may be taken as appropriate:

- ✓ Develop public relations efforts to inform the public about the benefits of research activities;
- ✓ Establish competitive grant programs to expand research capacity in higher education institutions;
- ✓ Establish competitive grant programs for collaborative research projects;
- ✓ Improve cooperation between the Department of Economic Development and higher education institutions;
- ✓ Establish and utilize a state-supported data inventory for identifying expertise and opportunities that result from research and development activities on campuses;
- ✓ Provide extension programs and innovation centers with technical guidance to encourage the development of new companies, economy clusters, and partnerships;
- ✓ Provide incentives to institutions that transfer new technologies to the marketplace.

Objective 2E: *Missouri institutions will increase learning experiences beyond the classroom and service activities beyond the campus in support of promoting civic engagement, understanding international and cultural issues, and improving critical thinking⁵².*

Indicators

- ~~1) Number-Percentage⁵³ of students participating in “high-impact” learning activities such as internships, study abroad, student-faculty research, and service learning institutionally sponsored education outreach programs (e.g., ESL, TRIO, ABE)⁵⁴~~
- ~~1)2) Number of direct education outreach programs and program participants (e.g., ESL, TRIO, ABE)^{see fn54}~~

⁵¹ COPHE/MCCA recommended deletion

⁵² COPHE/MCCA recommended rewording

⁵³ COPHE/MCCA recommended rewording

⁵⁴ COPHE/MCCA recommended separation into two indicators

- ~~2) Number of direct service relationships between higher education institutions and community/charitable organizations⁵⁵~~
- ~~3) Number of community service hours contributed by postsecondary students, faculty, and staff in association with their institution⁵⁶~~

These action steps may be taken as appropriate:

- ✓ Encourage and reward institutions to emphasize and assess student gains in critical thinking, creative problem solving, and effective communication in all academic programs;
- ✓ Provide incentives to institutions to provide their students increased access to “high-impact” learning opportunities;
- ✓ Use technology and alternative delivery mechanisms to increase opportunities for lifelong learning by all Missouri citizens;
- ✓ Foster increased cultural literacy, international understanding, and appreciation for diversity in all students through appropriate learning opportunities; and
- ✓ Establish learning communities within institutions that encourage the development of engaged citizens among students, faculty, staff, and the surrounding community.

⁵⁵ COPHE/MCCA recommended deletion

⁵⁶ COPHE/MCCA recommended deletion

Strategic Issues, Goals, and Action Steps

Strategic Issue: *Enhance Resources through Increased Investment, Stewardship, and Shared⁵⁷ Responsibility*

GOAL 3: Missouri's higher education system will increase external financial support for higher education by demonstrating its value to key stakeholders and public policy-makers while understanding that shared responsibility is necessary for⁵⁸ providing a globally competitive workforce, creating valuable new knowledge and products, and enriching the quality of life of all Missourians.

Objective 3A:⁵⁹ ~~Missouri institutions will demonstrate continual improvement or sustained excellence in student learning outcomes.~~

Indicators

- ~~5) Results of annual assessments of student learning in general education~~
- ~~6) Results of annual major field assessments~~
- ~~7) Pass rates on licensure and certification examinations~~
- ~~8) Developmental student success rate in collegiate level courses~~

Contributing Factors

- ~~b) Results of student engagement and satisfaction surveys~~

These action steps may be taken as appropriate:

- ~~✓ Continue to experiment with VSA and/or similar template for reporting of assessment of student learning gains;~~
- ~~✓ Evaluate need for and potential structure of policy in student assessment and placement, especially as a natural outgrowth of Curriculum Alignment Initiative~~

⁵⁷ COPHE/MCCA recommended rewording

⁵⁸ COPHE/MCCA recommended rewording

⁵⁹ COPHE/MCCA recommended relocation of entire objective 3A to Goal1 (some rewording see goal 1)

- ~~✓ Evaluate potential revisions to statewide data collection to better illustrate the scope and magnitude of postsecondary assessment~~
 - ~~✓ Inventory instruments currently used to assess general education, major field, and professional certification / licensure~~
-

Objective 3AB: *Missouri's higher education system will increase the efficiency with which students move to graduation.*

Indicator

- ~~1) Average time to completion by program level, including the 42-hour block, for college-ready students⁶⁰~~
- 1) Three-year and six-year graduation rates of college-ready students⁶¹

Contributing Factors

- ~~a) Three-year and six-year graduation rates of college-ready students^{see fn 61}~~
- ~~b) Number of transfer students who graduate from any institution with a baccalaureate degree⁶²~~

These action steps may be taken as appropriate:

- ✓ Use appropriate technology to improve the delivery of instruction, the sharing of knowledge, and the accomplishment of managerial tasks;
 - ✓ Incorporate considerations of institutional efficiency in the implementation of the Higher Education Student Funding Act;
 - ✓ Establish current agreed-upon missions (between each institution and the CBHE) and reinstitute five-year mission reviews;
 - ✓ Provide incentives to and recognize institutions for maintaining distinctive missions;
 - ✓ Provide consistent, comparable, and transparent information on the student experience to key higher education stakeholders, including prospective students and their families, public policy makers, and campus faculty and staff;
 - ✓ Provide consistent, illustrative, and transparent information on research activities and accomplishments to key higher education stakeholders, public policy makers, and the general public;
 - ✓ Pursue continuous improvement and demonstrate accountability for student learning and development; and
 - ✓ Facilitate inter-institutional partnerships that increase revenues and decrease expenses.
-

Objective 3BC: *Missouri's higher education system will annually attract additional resources.⁶³*

⁶⁰ COPHE/MCCA recommended deletion

⁶¹ COPHE/MCCA recommended relocation from contributing factor

⁶² COPHE/MCCA recommended relocation to Goal 1 see fn8

⁶³ Staff recommended rewording; recommends retaining "generic" wording of objective

Indicators

- ~~1) Total educational revenue per FTE student⁶⁴~~
- 2)1) Total state appropriations received⁶⁵ for higher education operations
 i. State appropriations for targeted—strategic⁶⁶ investments in higher education
 ii. State appropriations for performance funding in higher education
 ii.iii. State higher education operating appropriations received per FTE compared to contiguous states and the national average⁶⁷
- 2) Total state appropriations received⁶⁸ for capital improvements
 i. State higher education capital appropriations received per FTE compared to surrounding states and the national average⁶⁹
- 3) Total federal non-student aid dollars received by Missouri higher education institutions⁷⁰
- 4) Total state appropriations received for higher education as a percentage of total state general revenue appropriations⁷¹
- 5) State public higher education appropriations per \$1,000 of personal income compared to contiguous states and the national average⁷²
- 3)6) Per capita state appropriations for public higher education compared to contiguous states and the national average⁷³

Contributing Factors

- a) ~~State higher education operating appropriations compared to surrounding states and the national average^{see fn67}~~
- b) ~~State higher education appropriations for capital projects compared to surrounding states and national averages^{see fn69}~~

⁶⁴ COPHE/MCCA recommended deletion

⁶⁵ Staff recommended rewording, COPHE/MCCA recommended limiting to “public” system, Staff recommend broader measure

⁶⁶ COPHE/MCCA recommended rewording

⁶⁷ COPHE/MCCA recommended rewording and relocation from contributing factor

⁶⁸ Staff recommended rewording, COPHE/MCCA recommended limiting to “public” system, Staff recommend broader measure

⁶⁹ COPHE/MCCA suggested rewording and moving from contributing factor

⁷⁰ COPHE/MCCA recommended deleting, Staff recommend retention

⁷¹ COPHE/MCCA recommended rewording, further staff rewording

⁷² COPHE/MCCA addition, staff recommend split into two indicators

⁷³ COPHE/MCCA addition, staff recommend split into two indicators

These action steps may be taken as appropriate:

- ✓ Develop new coherent, complementary and coordinated policy-driven funding strategies for increased public support that will help ensure national competitiveness;
- ✓ Measure progress in achieving strategic initiatives;
- ✓ Maximize non-state resource development through increased external grants, additional contracts for services, expanded development activities, and additional entrepreneurial activities; and
- ✓ Reward institutions for innovations in efficiency and demonstrated improvement in delivering quality educational programs and services.

Strategic Issues, Goals, and Action Steps

Strategic Issue: *Increase Educational Attainment*

GOAL 1: Missouri's higher education system will improve educational attainment, including certificate and degree production at all levels, to enhance the quality of Missouri's workforce and the quality of life of its citizens.

Objective 1A: *Increase the percent of Missouri citizens who possesses a postsecondary credential.*

Indicators

- 1) Percentage of the population aged 25 to 64 who hold a degree or certificate, for the state as a whole and disaggregated by demographic groups and regions
- 2) ~~Number of degrees and certificates awarded, disaggregated by demographic groups~~
- 3) Number of transfer students who graduate from any institution with a baccalaureate degree
- 4) **Increases in personal income from degree attainment**

Contributing Factors

- a) Number of postsecondary credit hours delivered
- b) ~~Community college transfer student success rate~~
- c) **Number of degrees and certificates awarded, disaggregated by demographic groups**

These action steps may be taken as appropriate:

- ✓ Raise the aspirations of those who do not see postsecondary education within their reach;
- ✓ Increase postsecondary access for, and success of, historically under-represented groups;
- ✓ Develop incentives that reward institutions that increase degree production and retention rates while demonstrably sustaining quality within programs;
- ✓ Expand opportunities for non-traditional learners through course redesign, alternative methods of program delivery, and better coordination of distance education; and
- ✓ Create incentives and standards for seamless student transitions between educational institutions.

NOTE: This section requires further discussion.

Objective 1B: ~~Net cost of postsecondary education as a percent of average family income will not increase.~~ **Missouri's system of higher education will become more affordable to more Missourians.**

Indicators

- ~~1) Percentage of state average family income required to pay for college after grant and scholarship aid, for the "average student" and disaggregated by demographic groups, educational sector, and income levels (for public institutions, this indicator will also include changes in state operating appropriations)~~ **Percentage of family income required to pay for college after grant and scholarship aid by income quintiles**
- ~~2) Total financial aid dollars awarded to Missouri students for need-based financial aid and for other forms of financial assistance, disaggregated by educational sector~~ **Total student financial aid from all institutional sources including both restricted and unrestricted funds awarded to Missouri students**

Contributing Factors

- a) On-time FAFSAs files by income and EFC level
- b) Percent change in state appropriations for higher education**

These action steps may be taken as appropriate:

- ✓ Implement the Higher Education Student Funding Act;
- ✓ Support the growth of the Access Missouri Student Financial Assistance Program;
- ✓ Carry out a sustained statewide public information campaign on the value of higher education and the steps prospective students must take to prepare academically and financially; and
- ✓ Increase state funding and external funding sufficient to enable institutions to minimize tuition increases and maintain quality undergraduate and graduate programs and services.

NOTE: Prior to **formal** adoption **and implementation** of this section, there should be exploration with DESE, the State Board of Education, P-12 organizations to obtain joint agreement.

Objective 1C(a): *Increase college attendance rate of high school students ~~and non-traditional students.~~*

Indicators

- ~~1) College attendance rates of the 9th grade cohort of Missouri students, disaggregated by demographic group~~
- ~~2) College attendance rates of spring Missouri high school graduates~~
- ~~3) Percentage of the population and number of students aged 18 to 24 enrolled in postsecondary education, disaggregated by demographic group~~
- ~~4) Percentage of the population, and number of students over the age of 25 enrolled in postsecondary education, disaggregated by demographic group~~
- ~~5) Total enrollment in credit bearing outreach courses and programs~~

Contributing Factors

- ~~a) Percent of Missouri 9th graders cohort who take the ACT within four years~~
- ~~b) College attendance rates of the 9th grade cohort of Missouri students, disaggregated by demographic group~~
- ~~c) Percent of Missouri high school graduates enrolling in postsecondary education that require remedial coursework~~
- ~~d) Cohort analysis of persistence from fall semester to fall semester~~

Objective 1C(b): *Increase postsecondary attendance rate of non-traditional students.*

Indicators

- 1) Percentage of the population and number of students age 25 and older enrolled in postsecondary education

Contributing Factors

~~a) Number of degree programs newly offered in underserved locations~~

b) Enrollment in New Jobs Training, Customized Training, and related training programs

These action steps may be taken as appropriate:

- ✓ Implement appropriate early intervention strategies at the school district level;
- ✓ Implement the Curriculum Alignment Project;
- ✓ Support the activities of the P-20 Coalition;
- ✓ Provide incentives for attracting adult students, particularly in underserved regions;
- ✓ Provide incentives for the delivery of degrees (especially graduate degrees) in underserved geographic areas
- ✓ Provide institutional support for the additional costs associated with non-traditional course delivery methods;
- ✓ Review and, if necessary, strengthen CBHE oversight to assure the effectiveness of non-traditional programming and;
- ✓ Work with DESE to explore requiring collegiate level placement testing such as the ACT, Work Keys, Accuplacer, Compass etc in 11th grade.

Moved From Objective 3A

Objective 1D: *Missouri's higher education system institutions will demonstrate continual improvement or sustained excellence in student learning outcomes.*

Indicators

- 1) Results of ~~annual~~ assessments of student learning in general education using sampling techniques
- 2) Results of ~~annual~~ major field assessments
- 3) Pass rates on licensure and certification examinations
- 4) Developmental student success rate in collegiate-level courses

Contributing Factors

- a) Results of student engagement and/or satisfaction surveys

These action steps may be taken as appropriate:

- ✓ Continue to experiment with VSA and/or similar template for reporting of assessment of student learning gains;
- ✓ Evaluate need for and potential structure of policy in student assessment and placement, especially as a natural outgrowth of Curriculum Alignment Initiative
- ✓ Evaluate potential revisions to statewide data collection to better illustrate the scope and magnitude of postsecondary assessment
- ✓ Inventory instruments currently used to assess general education, major field, and professional certification / licensure

Strategic Issues, Goals, and Action Steps

Strategic Issue: *Develop a 21st Century Society and Global Economy*

GOAL 2: Missouri's higher education system will contribute to a dynamic, information-based, globally competitive society and economy by collaborating with government and business.

Objective 2A: *Missouri's higher education system will demonstrate improvement in meeting the workforce needs of Missouri.*

Indicators

- 1) Number of direct educational partnerships with Missouri businesses, including MBEs
- 2) Number of credentials awarded in key non-METS fields (fields to be determined)
- 3) Number of students passing certification and licensure examinations in high demand fields (fields to be determined)
- 4) ~~Increases in personal income from degree attainment~~

Contributing Factors

- a) ~~Employer surveys regarding new teachers~~
- b) Employer follow-up surveys of appropriate categories of degree and/or certificate completers

These action steps may be taken as appropriate:

- ✓ Develop corporate links to access training and learning opportunities;
- ✓ Expand customized education and training opportunities where the business community and higher education institutions work together;
- ✓ Offer more access for place-bound or time-bound learners;
- ✓ Establish employer-based feedback mechanisms to evaluate the quality and preparedness of the graduates of postsecondary programs; and

- ✓ Support programs to recruit well-prepared, new and experienced teachers in high need areas.

Objective 2B: *Missouri's higher education system will increase the number of degrees and certificates awarded in METS-related and health practitioner fields. (Specific fields to be determined)*

Indicators

- 1) a. Number of degrees and certificates awarded in METS-related fields, including METS-related teacher education
b. Number of METS-related degree and certificate recipients who transferred from a two-year college
- 2) a. Number of degrees and certificates awarded in health practitioner fields
b. Number of health practitioner degree and certificate recipients who transferred from a two-year college

Contributing Factors

- ~~a) Number of declared majors in METS-related fields, including METS-related teacher education~~
- ~~b) Number of credit hours delivered in METS-related fields~~
- ~~c) Number of METS-related graduates who transferred from a community college~~
- ~~d) Number of graduate students enrolled in master's level and above programs in METS-related fields~~
- ~~e) Number of declared majors in health practitioner fields~~
- ~~f) Number of health practitioner graduates who transferred from a community college~~
- ~~g) Number of graduate students enrolled in master's level and above programs in health practitioner fields~~

These action steps may be taken as appropriate:

- ✓ Work with elementary and secondary schools to increase student interest in mathematics and science while improving overall educational preparation in mathematics and science;
- ✓ Invest in increased institutional capacity in health practitioner programs;
- ✓ Increase the number of postsecondary students completing courses in METS-related fields; and
- ✓ Offer funding incentives to institutions for increasing graduates in METS and health practitioner fields while demonstrating sustained quality programs.

Objective 2C: *Missouri's higher education system will increase the number of graduate degrees awarded in critical fields ~~and the number of graduate degrees newly offered in underserved areas.~~ (Specific fields to be determined.)*

Indicators

- 1) Number of graduate and professional degrees awarded in critical fields, disaggregated by demographic group **and geographic location**
- 2) ~~Number of graduate and professional programs newly offered in underserved locations~~

Contributing Factors

These action steps may be taken as appropriate:

- ✓ Foster increased access to graduate and professional programs for historically underserved populations;
- ✓ **Increase the number of graduate and professional programs newly offered in underserved locations**
- ✓ Provide incentives to expand access to graduate and professional programs in underserved areas using cooperative arrangements, resource sharing, and technology whenever possible; and
- ✓ Expand access to high-quality continuing professional development opportunities in underserved areas using cooperative arrangements, resource sharing, and technology whenever possible.

Objective 2D:

Missouri's higher education system will increase the amount and scope of basic and applied campus research and development activity to the extent consistent with institutional missions.

Indicators

- 1) Total expenditures on research and development at Missouri higher education institutions as a percentage of gross state product
- 2) Total number and value of external grants awarded to researchers connected to Missouri higher education
- 3) Number of invention disclosures and patents awarded in connection with a Missouri higher education institution
- ~~4) Total number of students, graduate and undergraduate, engaged in research activities beyond regular classroom requirements~~
- 5) Number of new business start-ups linked to research or development incubators associated with Missouri higher education institutions

Contributing Factors

- ~~a) Number of invention disclosures and patents awarded in connection with a Missouri higher education institution~~
- b) Missouri's New Economy Index

These action steps may be taken as appropriate:

- ✓ Develop public relations efforts to inform the public about the benefits of research activities;
- ✓ Establish competitive grant programs to expand research capacity in higher education institutions;
- ✓ Establish competitive grant programs for collaborative research projects;
- ✓ Improve cooperation between the Department of Economic Development and higher education institutions;
- ✓ Establish and utilize a state-supported data inventory for identifying expertise and opportunities that result from research and development activities on campuses;

- ✓ Provide extension programs and innovation centers with technical guidance to encourage the development of new companies, economy clusters, and partnerships;
- ✓ Provide incentives to institutions that transfer new technologies to the marketplace.

Objective 2E: *Missouri institutions will increase learning experiences beyond the classroom and service activities beyond the campus in support of promoting civic engagement, understanding international and inter-cultural issues, and improving critical thinking.*

Indicators

- 1) ~~Number~~ Percentage of students participating in “high-impact” learning activities such as internships, study abroad, student-faculty research, and service learning institutionally sponsored education outreach programs (e.g. ESL, TRIO, ABE)
- 2) Number of education outreach programs and program participants (e.g. ESL, TRIO, ABE etc)
- 3) ~~Number of direct service relationships between higher education institutions and community/charitable organizations~~
- 4) ~~Number of community service hours contributed by postsecondary students, faculty, and staff in association with their institution~~

Contributing Factors

These action steps may be taken as appropriate:

- ✓ Encourage and reward institutions to emphasize and assess student gains in critical thinking, creative problem solving, and effective communication in all academic programs;
- ✓ Provide incentives to institutions to provide their students increased access to “high-impact” learning opportunities;
- ✓ Use technology and alternative delivery mechanisms to increase opportunities for lifelong learning by all Missouri citizens;
- ✓ Foster increased cultural literacy, international understanding, and appreciation for diversity in all students through appropriate learning opportunities; and
- ✓ Establish learning communities within institutions that encourage the development of engaged citizens among students, faculty, staff, and the surrounding community.

Strategic Issues, Goals, and Action Steps

Strategic Issue: *Enhance Resources through Increased Investment, Stewardship, and **Shared Responsibility***

GOAL 3: Missouri's higher education system will increase external financial support for higher education by demonstrating its value to key stakeholders and public policy-makers while **understanding that shared responsibility is necessary for providing a globally competitive workforce, creating valuable new knowledge and products, and enriching the quality of life of all Missourians.**

NOTE: This section requires further discussion.

Moved to Objective 1D

~~**Objective 3A:** *institutions will demonstrate continual improvement or sustained excellence in student learning outcomes.*~~

Indicators

- ~~1) Results of annual assessments of student learning in general education~~
- ~~2) Results of annual major field assessments~~
- ~~3) Pass rates on licensure and certification examinations~~
- ~~4) Developmental student success rate in collegiate level courses~~

Contributing Factors

- ~~b) Results of student engagement and satisfaction surveys~~

These action steps may be taken as appropriate:

- ~~✓ Continue to experiment with VSA and/or similar template for reporting of assessment of student learning gains;~~
- ~~✓ Evaluate need for and potential structure of policy in student assessment and placement, especially as a natural outgrowth of Curriculum Alignment Initiative~~
- ~~✓ Evaluate potential revisions to statewide data collection to better illustrate the scope and magnitude of postsecondary assessment~~
- ~~✓ Inventory instruments currently used to assess general education, major field, and professional certification / licensure~~

Objective 3B: *Missouri's higher education system will increase the efficiency with which students move to graduation.*

Indicators

- 1) Three-year and six-year graduation rates of college-ready students

Contributing Factors

- ~~a) Average time to completion by program level, including the 42-hour block, for college-ready students~~
- ~~b) Number of transfer students who graduate from any institution with a baccalaureate degree~~

These action steps may be taken as appropriate:

- ✓ Use appropriate technology to improve the delivery of instruction, the sharing of knowledge, and the accomplishment of managerial tasks;
- ✓ Incorporate considerations of institutional efficiency in the implementation of the Higher Education Student Funding Act;
- ✓ Establish current agreed-upon missions (between each institution and the CBHE) and reinstitute five-year mission reviews;
- ✓ Provide incentives to and recognize institutions for maintaining distinctive missions;
- ✓ Provide consistent, comparable, and transparent information on the student experience to key higher education stakeholders, including prospective students and their families, public policy makers, and campus faculty and staff;
- ✓ Provide consistent, illustrative, and transparent information on research activities and accomplishments to key higher education stakeholders, public policy makers, and the general public;

- ✓ Pursue continuous improvement and demonstrate accountability for student learning and development; and
- ✓ Facilitate inter-institutional partnerships that increase revenues and decrease expenses.

Objective 3C: *Missouri's public higher education system will attract additional state support for operations and capital*~~annually attract additional resources.~~

Indicators

- 1) ~~Total educational revenue per FTE student~~
- 2) Total state appropriations for public higher education operations
 - i. State appropriations for targeted strategic investments in higher education
 - ii. State appropriations for performance funding in higher education
 - iii. State higher education operating funding per student FTE compared to surrounding states and the national average
- 3) Total state appropriations for public higher education capital improvements
 - i. State higher education capital funding per student FTE compared to surrounding states and the national average
- 4) ~~Total federal non-student aid dollars received by Missouri higher education institutions~~
- 5) Percentage of total state revenue appropriated for higher education
- 6) State public higher education appropriations per \$1,000 of Missouri personal income and per capita state appropriations for public higher education compared to surrounding states and the national average

Contributing Factors

- a) ~~State higher education operating appropriations compared to surrounding states and the national average~~
- b) ~~State higher education appropriations for capital projects compared to surrounding states and national averages~~

These action steps may be taken as appropriate:

- ✓ Develop new coherent, complementary and coordinated policy-driven funding strategies for increased public support that will help ensure national competitiveness;
- ✓ Measure progress in achieving strategic initiatives;

- ✓ Maximize non-state resource development through increased external grants, additional contracts for services, expanded development activities, and additional entrepreneurial activities; and
- ✓ Reward institutions for innovations in efficiency and demonstrated improvement in delivering quality educational programs and services.