



CTE ADVISORY COUNCIL

JULY 24, 2017

Missouri Department
of Elementary and Secondary Education

WHY ARE WE HERE?



Abraham Lincoln

**“Education is the most important subject
which we as a people may be engaged in.”**



The Power of Education

“The work we have chosen to do as educators has the power – a power far beyond any other - to transform the lives and possibilities of children.”

Katie Haycock
Education Trust



Missouri DESE

Goal #1

All Missouri students will graduate college and career ready.

Purpose of Schooling

“The primary aim of education is not to enable students to do well in school, but to help them do well in the lives they lead outside of school.”

Ray McNulty





Changing Economic Landscape



CHANGE

“The jobs that were available, and the retirement programs that were available to the previous generation are not available anymore.”

Jobs for the Future



Changing Economy

- Trade, transportation and technology have created a global market for goods, services and jobs.
- Results -
 - Global economy
 - Global workforce
 - Global competition



Gallup World Poll

In surveying millions of people around the world, Gallup has determined that the #1 desire of people, consistent across all cultures and continents, is what Gallup calls “a **good job**”.

The Gallup Organization (2016)



Good Job

- A “**Good Job**” is defined as a job that offers 30 or more hours per week, consistent employment, and getting paid enough to cover expenses.
- Only about 43% of the jobs in the U.S. qualify as “Good Jobs” using this definition.



Competition for Good Jobs

- Total population worldwide = apx. 7 billion
- 3 billion people want and need a “Good Job”
- Only 1.2 billion “Good Jobs” exist worldwide
- Global shortfall of “Good Jobs” = 1.8 billion

The Gallup Organization (2016)



Webster's Dictionary Definition:

Ready

- Prepared mentally or physically for some experience or action
- Prepared for immediate use
- Notably dexterous, adroit, or skilled



“St Louis Area Employers Moan About Job Applicants”

St. Louis Post Dispatch Headline - August 12, 2015

- “57% of employers cited a shortage of skilled and knowledgeable workers...”
- “...harder to find workers with the right skills.”
- “70% of employers complained that workers lacked communications and interpersonal skills and the ability to solve problems.”

State of St. Louis Workforce 2015





CNBC

★★ *America's* **TOP STATES** FOR **BUSINESS** ★★

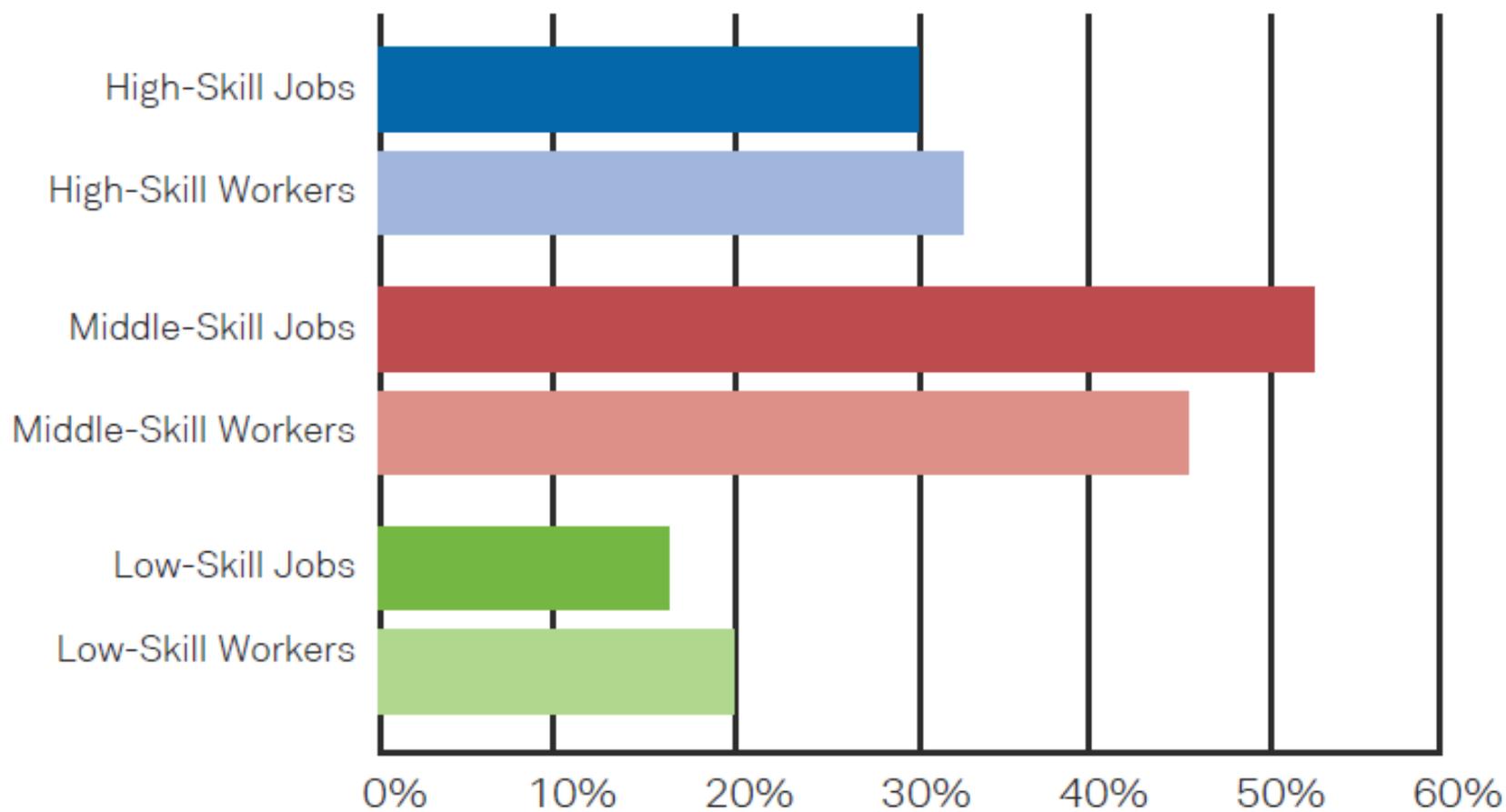
CNBC Ranks Missouri 49th in workforce preparedness.



Missouri's Labor Supply and Demand Gaps

| | Number of Job Advertisements | % of All Job Advertisements | % of All Job Seekers | Gap |
|-------------------------|------------------------------|-----------------------------|----------------------|-------|
| Health Care and Related | 78,436 | 20.3% | 9.8% | 10.5% |
| Business and Sales | 75,591 | 19.6% | 9.9% | 9.6% |
| Science and Technology | 47,837 | 12.4% | 3.3% | 9.0% |

Jobs and Workers by Skill Level, Missouri, 2015



Source: National Skills Coalition analysis of Bureau of Labor Statistics Occupational Employment Statistics by State, May 2015

HIGHER EDUCATION EXPERTS TELL
US MANY GRADUATES ARE NOT
PREPARED TO ENTER COLLEGE.



Missouri Public High School Graduate Enrollment in Remedial Classes in Public Post-Secondary Institutions

| | Fall 2012 | Fall 2013 | Fall 2014 | Fall 2015 | Fall 2016 |
|--------------|--------------|--------------|--------------|--------------|--------------|
| TOTAL | 35.6% | 35.6% | 30.8% | 28.2% | 26.8% |
| MATH | 30.8% | 30.1% | 26.2% | 23.8% | 21.5% |
| ENGLISH | 14.3% | 15.5% | 12.3% | 10.0% | 11.4% |
| READING | 9.1% | 9.7% | 7.6% | 6.1% | 6.6% |



Missouri Public High School Graduate 6-Year Completion Rate (Fall 2010 – Spring 2016)

| | # Students | Completed Associates Degree | Completed Bachelor's Degree | Completed Graduate Degree | Total Completions |
|--------------------------|---------------|-----------------------------|-----------------------------|---------------------------|-------------------|
| TOTAL | 23,861 | 15.8% | 35.9% | 2.1% | 48.2% |
| AFRICAN AMERICAN | 2,389 | 6.3% | 21.3% | 0.6% | 26.5% |
| CAUCASIAN | 18,031 | 16.5% | 39.8% | 2.4% | 52.6% |
| HISPANIC | 614 | 11.9% | 32.2% | 2.6% | 42.8% |
| ASIAN / PACIFIC ISLANDER | 716 | 20.3% | 33.5% | 2.8% | 47.6% |



Disconnected Youth

- Defined as individuals between the ages of 16 and 24 who are not in school and are not working anywhere
- In 2015, approximately 5.5 million youths (14.3%) in the U.S. were “disconnected”
- Disconnection rates for blacks (21.6%), Native Americans (27.8%), Hispanics (16.3%), Whites (11.3%) and Asian Americans (7.9%)
- Estimated one-year-cost to taxpayers to take care of “disconnected” youths = **\$26.8 billion**

Lewis, K., and Burd-Sharps, S. (2015)



Delayed Adulthood

- Ages 18 -24 living at home with their parents
 - Men – 59%
 - Women – 50%
- Ages 25 -34 living at home with their parents
 - Men – 19%
 - Women – 10%

U.S Census Bureau 2011



21st Century Work Skills

- The human labor market will center on three kinds of work:
 - Solving unstructured problems
 - Working with new information
 - Carrying out non-routine manual tasks



The Skills Colleges and Employers Are Looking For

- Communication for internal and external clients
- Empathy
- Collaboration
- Problem solving
- Initiative
- Strong work ethic

Edutopia, March 10, 2017



21st Century Workplace Skills

- **Digital-age literacy** - includes the various competencies expected in a 21st century workplace.
- **Inventive thinking** - includes the ability to think outside the box.
- **Effective communication** – includes the ability to clearly communicate with a wide range of audiences.
- **High productivity** - which will be a requirement of success in the 21st Century workplace.



Attributes Employers Seek on a Candidate's Resume

| Attribute | % of respondents |
|--------------------------------|--|
| Leadership | 80.1% |
| Ability to work on a team | 78.9% |
| Communication skills (written) | 70.2% |
| Problem-solving skills | 70.2% |
| Communication skills (verbal) | 68.9% |
| Strong work ethic | 68.9% |
| Initiative | 65.8% |
| Analytical/quantitative skills | 62.7% |
| Flexibility / adaptability | 60.9% |
| Technical skills | 59.6% |
| Interpersonal skills | 58.4% |
| Computer skills | 55.3% |
| | Job Outlook 2016, National Association of Colleges and Employers |
| | |

Another Way To Look At It

| Basic Knowledge/Skills | Applied Skills |
|--|------------------------------------|
| English Language (Spoken) | Critical Thinking/Problem Solving |
| Reading Comprehension (In English) | Oral Communication |
| Writing in English (grammar, spelling, etc.) | Written Communication |
| Mathematics | Teamwork/Collaboration |
| Science | Diversity |
| Government/Economics | Information Technology Application |
| Humanities/Arts | Leadership |
| Foreign Language(s) | Creativity/Innovation |
| History/Geography | Lifelong Learning/Self Direction |
| | Professionalism/Work Ethic |
| | Ethics/Social Responsibility |

Success Skills

- Master core academic content
- Think critically and solve complex problems
- Work collaboratively
- Communicate Effectively
- Learn how to learn
- Develop academic mindsets



Michael Fullan

“There are no shortcuts or panaceas – no silver bullets.”

“The challenge is to improve education in the only way it can be – through the day-to-day actions of empowered individuals.”



Career Readiness Stressed By Shields



St. Joseph Partnership Supports Education and Workforce Goals

- Business and civic leaders promoting creation of a 2-year community college.
- Recommending Missouri Western State University, Metropolitan Community College, St. Joseph School District and Hillyard Technical Center collaborate in this effort
- Goal is to serve those not planning to attend a 4-year college or university



St. Joseph Partnership Supports Education and Workforce Goals

- Local statistics show 250 graduates each year from local high schools with no plan to further their education
- The proposed program will offer:
 - Access to general education courses
 - Career-track technical training, including potential to earn certification in high-demand fields
 - Economical access to programming
- Goal is to help meet local workforce needs and contribute to lifting household incomes





INFORMATIONAL UPDATES

CTE ADVISORY COUNCIL
July 24, 2017

Missouri Department
of Elementary and Secondary Education



Legislative Update

Perkins Reauthorization

H.R. 2353 – Strengthening Career and Technical Education for the 21st Century Act

- Passed by voice vote on June 22, 2017 by House of Representatives
- Does not fundamentally change the existing Perkins law.
- Strengthens alignment among the Every Student Succeeds Act (ESSA), WIOA, and Perkins.
- Key theme is strengthening CTE program alignment to the needs of the labor market.



H.R. 2353 – Strengthening Career and Technical Education for the 21st Century Act

- Definitions – CTE Concentrator
 - Secondary- a student who completes three or more CTE courses **or** at least two courses in a single program area.
 - Postsecondary – a student who earns 12 cumulative credits in a single program area or completes a program that encompasses fewer than 12 credits.



H.R. 2353 – Strengthening Career and Technical Education for the 21st Century Act

- Definition – Participant
 - An individual who completes at least one CTE course or earns at least one credit in a CTE program or program of study.



H.R. 2353 – Strengthening Career and Technical Education for the 21st Century Act

- Secondary Core Indicators of Performance:
 - Graduation rates;
 - Academic attainment rates;
 - Student placement two quarters after exiting secondary education;
 - Percentage of CTE concentrators in non-traditional CTE program fields; and
 - A measure of “CTE Program Quality” that must include one of the following:
 - Student attainment of recognized postsecondary credentials;
 - Student attainment of postsecondary credits in their CTE program/program or study; or
 - Percentage of students participating in work-based learning



H.R. 2353 – Strengthening Career and Technical Education for the 21st Century Act

- Postsecondary Core Indicators of Performance
 - Student placement two quarters after program completion;
 - Median earnings two quarters after program completion;
 - Attainment of recognized postsecondary credentials during a program or within one year of program completion;
 - Percentage of CTE concentrators in non-traditional CTE program fields



H.R. 2353 – Strengthening Career and Technical Education for the 21st Century Act

- Comprehensive Needs Assessment
 - New process that must be completed by the local eligible grant recipient at the beginning of the grant period and updated at least once every two years and must include reviews of six elements





Recap of State Board Presentation

Recap of State Board Presentation

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- CTE Advisory Council update will be done with the State Board of Education in June.
- Expected 5-10 minute presentation was a 65 minute dialogue between Brian Noller, Dr. Henningsen, Dr. Harden and the State Board of Education
- Lots of positive dialogue regarding Career and Technical Education





CTE Certificate

CTE Certificate

- Presented to the State Board of Education on June 13, 2017.
- Passed with full support of the Board
- One concern – 50 hours of work-based learning was not enough.
- Biggest concern mentioned by KC Area CTE Directors as a potential hurdle.



CTE Certificate

- Legislation was passed in 2016 by the 98th Missouri General Assembly (SBs. 620 & 582)
- State Board of Education, in consultation with the CTE Advisory Council, established minimum requirements for a career and technical education (CTE) certificate.
Approved by State Board of Education in June 2017
- CTE certificate will be earned by students in addition to his or her high school graduation diploma.



CTE Certificate

- Students must meet all requirements in order to receive the CTE certificate.
- Schools support student efforts to accomplish these requirements through the development and monitoring of the individual personal plan of study.



CTE Certificate

- Students entering high school in school year 2017-2018 and thereafter shall be eligible to earn a CTE certificate.





Office of College and Career Readiness

CERTIFICATE OF ACHIEVEMENT

Is presented to

FIRST NAME LAST NAME

For meeting the requirements for a
Career and Technical Education (CTE) certificate in the area of

CTE AREA OF CONCENTRATION

Superintendent

Building Administrator/Principal/Director



Commissioner

Assistant Commissioner

CTE Certificate Criteria

- Meet all graduation requirements.
- Qualify as a Career and Technical Education (CTE) concentrator.
- Maintain a minimum Grade Point Average (GPA) of 3.0 on a 4.0 point scale.



CTE Certificate Criteria

- ❑ Pass an approved Technical Skill Assessment (TSA) and/or earn an approved Industry Recognized Credential (IRC).
- ❑ Complete a minimum of 50 hours of appropriate work-based learning experiences aligned with the CTE area of concentration.
- ❑ Maintain at least a 95% attendance record overall for grades 9-12.



CTE Certificate Criteria

- Demonstrate attainment of soft-skills/business skills.
- Achieve a score at or above the state standard on any department-approved measure(s) of college and career readiness.*

* Schools are to use the .75 student weighted measures, described in the Assessment Scores Matrix, as the state standard. This matrix is found in Appendix C of the MSIP 5 Comprehensive Guide to the Missouri School Improvement Program, 2016.





Common Criteria and Quality Indicators

Common Criteria and Quality Indicators

- Input received from CTE Advisory Council
- A few modifications were made to the Common Criteria and Quality Indicators and the Evaluation/Program Improvement Tool
- Assessment tool through Tiered Monitoring is still under construction
- Districts will be notified once it is available





CTE Funding

CTE Funding Update

- Ad Hoc CTE Funding Committee completed their work in September 2016
- Funding plan was presented to the CTE Advisory Council on January 23, 2017
- Rollout of funding plan will begin with the 2018-19 school year
- Funding plan will be phased in over three years
- Planning regional meetings in the fall of 2017





OCCR Mission/Vision & MSIP6 Success Ready Graduates

OCCR Vision and Mission

Vision – Successful Students, Better World

Mission – To guide and support Missouri schools in preparing success ready students.

A ***success ready student*** has the knowledge, skills, behaviors, and experiences to achieve personal goals and contribute in all facets of life.



MSIP6 – Success Ready Graduates

- Workgroup made up of volunteers from all regions of the state representing :
 - pre-K
 - K-12
 - Higher Education
 - Department of Economic Development
 - Missouri State Chamber of Commerce
 - Cerner
 - Siemens
 - Toyota
 - Laborer's Union of Eastern Missouri
 - plus others



MSIP6 – Success Ready Graduates

- Workgroup recommended “On-Track” indicators for students entering:
 - Kindergarten
 - Middle School
 - High School
 - Life Beyond High School (within 12 months)



MSIP6 – Success Ready Graduates

- Indicators for each level included:
 - On-Track indicators of success
 - Academic proficiency
 - Co-Curricular learning and leadership activities
 - Career and citizenship awareness, exploration and preparation





Missouri Career Pathways

The Pathways Vision

All Missouri citizens will:

- 1. Graduate from high school success ready** *with a personal plan of study* and work-based learning experience,
- 2. Attain a credential** of certification with value in the regional and global labor market(s), and
- 3. Launch a career** in an occupation earning a family living wage with opportunity to advance to higher levels of education and employment.



Meeting the Challenge...

Strong career pathways incorporate:

- Challenging Academics
- Demanding Technical Core
- Early College/Dual Credit
- Work-Based Learning
- Career Counseling



Business/Industry Partners

- **Connect the world of work with education**
 - Mentoring
 - Classroom Speakers
 - Student Internships
 - **Teacher Externships**
 - Job Shadowing
 - Project Facilitation
 - Business Tours
 - Registered Apprenticeships



Pathways for Teacher Goals

- Connect educators to business & industry workplace skills
 - Math Skills
 - Communication Skills
 - Technology Skills
 - Science Skills
 - Soft Skills
- Broaden awareness of career opportunities for students
- Integrate work place skills into instruction



How we assist districts:

- Identify high demand occupations
- Connect employers with educators
- Connect educators with post-secondary programs
- Support districts in providing career awareness, exploration, and preparation for “all” students
- Promote work based learning experiences
- Coordinating and facilitating teacher externships to enhance relevancy in the classroom
- Facilitating workshops, training, and STEAM activities
- Promote and support Breaking Traditions & Displaced Homemaker



Career Pathways

- Continue with Pathways for Teachers
 - Since 2013-14, over 900 teachers, counselors and administrators have participated
- DESE Grant Opportunity – 2017-18 school year
- Missouri Post-Secondary Success – project jointly sponsored by DESE and University of Kansas Center for Research on Learning
- Breaking Traditions and Displaced Homemaker



DESE Staffing

- Steve Bryant– State Program Manager and SC Region
- Vacant- St. Louis Regional Director
- Roberta Carson - Mid-Missouri Regional Director
- Ann Starlin-Horner - Kansas City Regional Director



RPDC Staffing (new for 2017-18)

- Four Pathways Consultants located in the NW, NE, SW, and SE RPDC's assisting with connecting business and industry with education and externships
- Nine Career Advisors at each of the nine RPDC's to assist MS and HS Counselor's implementing students personal plans of study (PPOS), Programs of Study (POS), and Missouri Connections.





Vocational-Technical Enhancement Grants

Vocational-Technical Education Enhancement Grants

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- The original administrative rule became effective in 1994
- Public high schools, area career-technical schools and community colleges that operate department-approved occupational preparatory (long-term) career education programs are eligible to apply
- The commissioner of education shall annually request from the director of the Division of Workforce Development, Department of Economic Development, an annual listing of demand occupations in the state



Vocational-Technical Education Enhancement Grants

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- 75% of grant funds shall be expended for new programs, curriculum enhancement or instructional equipment that address demand occupations that have been determined to be in critical shortage
- Up to 25% of funds may be used for these purposes as well as facility improvement



Vocational-Technical Education Enhancement Grants

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- Grant recipients must expend at least 25% matching funds from local sources for all instructional equipment
- Grant recipients shall expend at least 50% matching funds from local sources for all other grant fund expenditures



Vocational-Technical Education Enhancement Grants

- The Department approved 146 Enhancement Grant funding requests for FY18
- All approved grant recipients were notified in June so they could obligate funds beginning July 1, 2017



Vocational-Technical Education Enhancement Grants

- \$19,146,196.10 in reimbursement requests were received
- \$16,200,000.00 in budget
- Six percent reduction was applied to all grants
- All grantees must enter their grant into the ePeGS payment system by September 30



Vocational-Technical Education Enhancement Grants

Reduction of funds:

- ❑ DESE provides a spreadsheet to LEAs showing the six percent reduction for each item requested in the grant
- ❑ Schools are to review their grants and determine locally how they wish to handle the reduction
- ❑ EG funds may **ONLY** be used in those program areas that had been previously approved



Vocational-Technical Education Enhancement Grants

Reduction of funds:

- ❑ The grant guidelines for allowable expenditures are to be followed
- ❑ Schools are to explain their grant adjustments in the text box found on ePeGS



Vocational-Technical Education Enhancement Grants

FY18 key dates:

- August, 2017--Meet with Workforce Development to determine high demand occupations for FY19
- Mid-October, 2017--Probable date for release of FY19 planning guide and administrative manual;
- February, 2018--Probable deadline for FY19 EG applications (both narrative and budget).
- No significant changes are anticipated in the application structure.





Questions

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