OFFICE OF CHIEF ACADEMIC OFFICER Summary of State Board of Education Agenda Items Consent Agenda September 19, 2019

OFFICE OF CAREER AND TECHNICAL EDUCATION

B. <u>Approval to begin the Administrative Procedures Act process: To revise selected</u> <u>Mississippi Secondary Curriculum Frameworks in Career and Technical</u> <u>Education</u>

Executive Summary

The Mississippi Secondary Curriculum Frameworks in Career and Technical Education have a four-year curricula revision cycle. The revision cycle includes input from local district personnel and business/industry partners.

The following secondary curriculum frameworks are recommended for approval:

- 1. Architecture & Construction Construction Core
- 2. Architecture & Construction Electrical
- 3. Architecture & Construction Carpentry
- 4. Manufacturing Welding
- 5. Science, Technology, Engineering, & Mathematics STEM Applications

All curricula frameworks are designed to provide local programs with an instructional foundation that can be used to develop localized instructional management plans and course syllabi. Additionally, the frameworks include the following elements for each revised secondary curriculum:

- Program
- Description
- Classification of Instructional Program (CIP) Code and CIP Name
- Course Outline and Codes
 - o Curriculum
 - Student Competencies
 - Suggested Student Objectives

NOTE: The Office of Career and Technical Education has provided executive summaries of the curriculum framework revisions.

Recommendation: Approval

Back-up material attached

The back-up for Tab B is five documents so it is on the Career and Technical Education (CTE) web page for your review. Below is the link to the CTE back-up materials.

http://www.mdek12.org/CTE#

A copy of each CTE framework is on the side table for your review. The strikethrough copy is first followed by the revised framework.

Summary of Secondary Curricula Changes for Career & Technical Education

2019 Construction Core

- Placed document in new curriculum format
- Adjusted competencies and objectives to reflect current standards and industry recommendations
- Created new Units 2, 3, and 4
- Moved Units within document to create better skill progression alignment
- Changed Student Competency Profile to reflect unit moves/updates
- Moved resources and scenarios to Teacher Resource Document
- Edited appendices to reflect new standards and industry alignment

2019 Electrical

- Placed document in new curriculum format
- Moved scenarios, suggested teaching strategies, and suggested assessment strategies to Teacher Resource Document
- Added "commercial" to anywhere that "residential" occurred
- Changed titles of Units 1, 2, 3, 4, and 7
- Changed format and wording of Course Outlines page
- Aligned curriculum to most recent version of International Society for Technology in Education (ISTE) standards and the MCCR standards
- Changed competency 1 in Unit 6 and added detailed list to Unit 6.1.a.

2019 Carpentry

- Placed document in new curriculum format
- Adjusted competencies and objectives to reflect current standards and industry recommendations
- Created new Unit 9
- Changed Student Competency Profile to reflect unit moves/updates
- Moved resources and scenarios to Teacher Resource Document
- Edited appendices to reflect new standards and industry alignment

2019 Welding

- Placed document in new curriculum format
- Adjusted competencies and objectives to reflect current standards and industry recommendations
- Created new Units 2, 3, 4, 12, 13, and 21
- Moved Units within document to create better skill progression alignment
- Changed name of Units to reflect moves and/or changes (Units 10, 11)

- Rearranged some competencies to better reflect material and correct Unit
- Changed Student Competency Profile to reflect unit moves/updates
- Moved resources and scenarios to Teacher Resource Document
- Edited appendices to reflect new standards and industry alignment

2019 STEM Applications

- Placed document in new curriculum format
- Aligned with Mississippi College- and Career-Readiness Standards for Science and Math
- Aligned with 21st Century Learning Framework, ISTE National Educational Technology Standards for Students, National Assessment of Educational Progress (NAEP) Technology and Engineering Literacy Framework
- Overhauled the curriculum, which was last published in 2011 to include four major, hands-on projects that integrate many units from the previous version
- Provided greater specificity and rigor at objective level to include integrated math, physical science, technology, engineering, safety, and 21st Century Skills
- Removed financial and economic literacy