Mississippi National Certifications Initiative (MNCI)
Period 1 Evaluation Report

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INTRODUCTION

As industry certification gains significance in the labor market, the Mississippi Community College Board (MCCB) recognizes the importance for educational institutions to align programs of study with certifications. In 2013, MCCB adopted a Policy and Procedure Manual for the Office of Curriculum and Instruction requiring all curricula developed or revised for Career Technical Education (CTE) programs at Mississippi's community colleges to adopt national standards for industry and identify appropriate industry credential and certifications.

In February 2016, the Mississippi Association of Community and Junior College Presidents (MACJC) voted to adopt national certifications as the measure of technical skill attainment for Career Technical Education (CTE) programs where such a certification existed. Ultimately the collaborative partnership between the MCCB, MACJC, employers, credentialing agencies, and students will improve the state's image, differentiate a student's education, and reduce the skills gap.

The adoption of national certifications resulted in the Mississippi National Certification Initiative (MNCI) Project, which is funded in part by the W. K. Kellogg Foundation. This report is being provided as an overview of the activities that have occurred under the MNCI since its inception. An external evaluator is being hired to conduct a program evaluation for subsequent reporting periods.

GOALS

The goal of the MNCI is to identify accredited organizations offering national certifications that are industry-recognized for our postsecondary students and to increase student attainment of those credentials. The MNCI can position our students for job attainment by equipping them with the training and credentials to be an added value to their program completion.

1. To increase employment and earning opportunities among Mississippians seeking middle-skills jobs.

2. To improve the Mississippi Community College System's infrastructure for validating, collecting, and reporting career and technical education (CTE) national certification data and information.

OBJECTIVES

1. To increase by at least 50% the number of national certifications earned by MS community college career and technical education (CTE) program graduates by June 30, 2020.

2. To conduct a phased implementation that aligns the curricula, where available, of at least 75% of 82 MS community college career and technical education (CTE) programs of study to pertinent national certification standards by June 30, 2020.

3. To train 100% of MCCB's Office of Assessment staff in the National Center for Construction Education and Research's (NCCER) certification process by June 30, 2020.

4. To establish MCCB as a NCCER Accredited Training Sponsor (ATS) by June 30, 2020.

5. To train a minimum of 2 community college CTE personnel at all 15 MS community colleges to administer at least 1 national certification assessment process by June 30, 2020.

6. To reduce the cost of national certification exams by a minimum of 50% for MS community college career and technical education students by June 30, 2020.

7. To create and maintain a statewide database to collect and report national certification information for MS community college CTE programs by December 31, 2018.

STAGES OF DEVELOPMENT

The project is relatively new and has just ended the first year of operation, which included mostly planning and implementation with some training and certification occurring. Colleges are still utilizing the MS-CPAS assessments as the measure for technical skill attainment for most of their Career Technical Education (CTE) programs of study. As the MNCI moves into its second year of operation, we anticipate an increase in the number of colleges requesting to use national certifications aligned to the programs of study as the alternate assessment for the programs. All colleges have until June 30, 2020, to transition from the MS-CPAS to a national certification for programs that are aligned to a national certification. The Project will reach fruition as colleges transition to administering national certification.

RESOURCES/INPUTS

The MCCB staff, Department of Information Systems Technology, community college CTE deans and directors, business and industry partners, certifying vendors, and instructors are key inputs and resources of the MNCI.

ACTIVITIES

Researching and identifying national certifications, curriculum mapping to national certifications, alternate assessment requests, contract negotiation and procurement, instructor training and certification, student certification, and collaborative efforts with college personnel and business and industry partners make up the major activities occurring as part of the Project.

During Period 1, many of the activities conducted allowed the MCCB to meet or move toward attaining the objectives of the project.
- The external evaluator will work with the MCCB to determine a baseline to identify the number of certifications earned by CTE graduates.
- National certifications are being mapped to programs of study as curricula are being written or rewritten.
- 100% of the Assessment staff has received training and are certified Master Trainers through NCCER
- The MCCB was granted Candidate Status through NCCER on February 7, 2018.

- Two personnel at 12 of the colleges were trained as Master Trainers, and one personnel at 3 of the colleges were trained.
- Cost-savings were realized on the purchase of some national certification exams through contract negotiation.
- An online testing management system is currently being developed in phases to allow the MCCB to collect and report national certification information to colleges.

Ongoing activities will be conducted and implemented to assist with meeting the goals and objectives of the project.

OUTPUTS

As a result of the efforts thus far with the Project, an Assessment team was hired and attained credentials for a major part of the initiative, instructor training and certification was conducted, advisory committee luncheons were held, information sessions were provided, a webpage was developed, an online portal was setup to streamline ordering processes, a training resource manual was developed, instructor needs analyses were conducted, MCCB attained Candidate Status through NCCER, NCCER site visits were conducted, development started on an online testing management system, programs of study were mapped to national certifications, contracts were procured with certifying vendors, and student certifications were attained.

OUTCOMES

The following six metrics will be used to highlight the short-term outcomes during Period 1.

1. **The total number of community college CTE faculty trained**
   The following events have been held during the first year to provide training for approximately 335 CTE faculty:

   A. NCCER Master Trainer Trainings and Certification
      Two NCCER Master Trainer trainings were held November 14-17, 2017, and November 27-30, 2017. During the trainings, a total of 27 instructors and/or college administrators representing the 15 community and junior colleges attended the trainings and became certified as Master Trainers.

   B. PrePAC Training and Certification
      On February 21, 2018, 31 instructors representing the Early Childhood Programs from 12 of the 15 community and junior colleges participated in a training conducted by the American Association of Family & Consumer Sciences (AAFCS). Immediately following the training, AAFCS administered the PrePAC exam, and 30 of the instructors attained the PrePAC certification. AAFCS administered the exam as a retake at a later date and the last instructor was successful in attaining the certification.

   C. MCCB Institute for Teaching and Learning
      During the Institute for Teaching and Learning, the Assessment staff conducted a training session for first-year teachers to apprise them of faculty qualification requirements as part of the credentialing initiative. There were 70 faculty in attendance who were able to learn about developing assessments, how assessments would be aligned to their programs of study, which certifications were already aligned to programs, and what lies ahead with the credentialing initiative.

D. NCCER Craft Instructor Training

On May 11, 2018, the Mississippi Gulf Coast Community College Master Trainers and MCCB Assessment staff conducted a training for 22 craft instructors. The MCCB Assessment staff talked with the Master Trainers and craft instructors about test security protocol, NCCER testing requirements, teacher qualification requirements under the MNCI, and other testing logistics. A NCCER representative participated in the training via conference call and shared NCCER updates and answered questions.

E. Summer Conference Training and Certification

The MCCB hosted a Summer Conference for college staff and other stakeholders. During, a pre-conference on August 1, 2018, the Assessment staff provided training and certification sessions for instructors of varying programs of study. Training sessions were conducted for the instructors as agreed upon and provided by the certifying vendors. There were 30: 17 Business Office Technology; 2 Early Childhood; 1 Paralegal; 5 Design, Drafting Technology; and 5 Information Systems Technology instructors who were provided training and assistance from the certifying vendors prior to the test administrations.

F. In addition, during the Summer Conference held August 2-3, 2018, the Assessment staff conducted 5 professional development informative sessions geared specifically for CTE instructors of programs of study mapped to national certifications. The instructors were afforded the opportunity to learn specifics about the national certifications for the program which they teach. There were approximately 155 instructors who attended the five sessions.

2. **Total number of certification training hours provided to college personnel**

Throughout the year, college personnel has been involved in various training, which also include Polycom/webinars and face-to-face sessions.

Training Sessions	Date(s)	# of personnel	Training Hours per personnel	Total # of contact hours
Master Trainer	11/14-14/2018	15	32	480
Master Trainer	11/27-30/2018	12	32	384
PrePAC	02/21/2018	31	5	155
MCCB Institute for Teaching and Learning	05/05/2018	70	5	350
MSGCCC Craft Instructors	05/11/2018	22	4	88
Summer Conference Training/Certification	08/01/2018	30	5	150
Summer Conference Sessions	08/02-03/2018	155	5	775
Totals		335		2,382

3. Total number of CTE programs of study aligned to national certifications per year

A pivotal part of the national credentialing initiative is to align CTE programs of study to national certifications, if a certification exists for the program of study. To date, there have been 32 programs of study mapped to approximately 70 national certifications. The following table depicts the programs and certifications aligned to each program.

Program Category	Program Name	CIP	Certification(s)
Automotive Service Excellence (ASE) **Entry-Level Certifications formerly ASE Student Certifications** 4 ASE Programs 25 Certifications	Automotive Technology	47.0604	Automobile Test Auto Maintenance & Light Repair Automatic Transmission/Transaxle Brakes Electrical/Electronic Systems Engine Performance Engine Repair Heating and Air Conditioning Manual Drive Train and Axles Suspension and Steering Automobile Service & Technology
	Diesel Equipment - Transportation Option	47.0605	Medium/Heavy Truck Tests Electrical/Electronics Systems Diesel Engines Brakes Suspension & Steering Gasoline Engines Drive Train Heating, Ventilation, & Air Conditioning (HVAC) Preventive Maintenance Inspection
	Collision Repair Technology	47.0603	Collision Repair & Refinish Tests Painting and Refinishing Non-structural Analysis and Damage Repair Structural Analysis and Damage Repair Mechanical and Electrical
	Parts & Marketing Management	52.1907	Parts Specialists Tests Medium-Heavy Truck Parts Specialist Automobile Parts Specialist General Motors Parts Consultant
Individual Certification Group (ICG)	Early Childhood	19.0709	Pre-PAC
	Paralegal Technology	22.0302	NALS-ALP

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Information Systems Technology (IST) 6 IST Programs 7 Certifications	Computer Networking	11.0901	2 Certifications: CompTIA A+ OR MTA Security Fundamentals AND CompTIA Network+ OR MTA Networking
	Computer Programming	11.0201	2 Certifications: CompTIA A+ OR MTA Security Fundamentals AND MTA Software Development OR ~~ILE RPG Certified Associate~~
	Computer Servicing	47.0104	CompTIA A+
	Database Administration Technology	11.0802	2 Certifications: CompTIA A+ AND CIW Database Design Specialist
	Data Analytics Technology	52.1302	2 Certifications: CompTIA A+ AND ~~SAS Base Programmer Certification~~
	Network Security Technology	11.1003	2 Certifications: CompTIA A+ AND CompTIA Security+
Business Office Technology (BOT) 5 BOT Programs 12 Certifications	Accounting Technology	52.0302	OPAC Word© BasicOPAC ProofreadingOPAC Excel©OPAC QuickBooks© OPAC Excel© Intermediate OR MOS MS Word© OPAC Proofreading MOS MS Excel© Intuit QuickBooks©

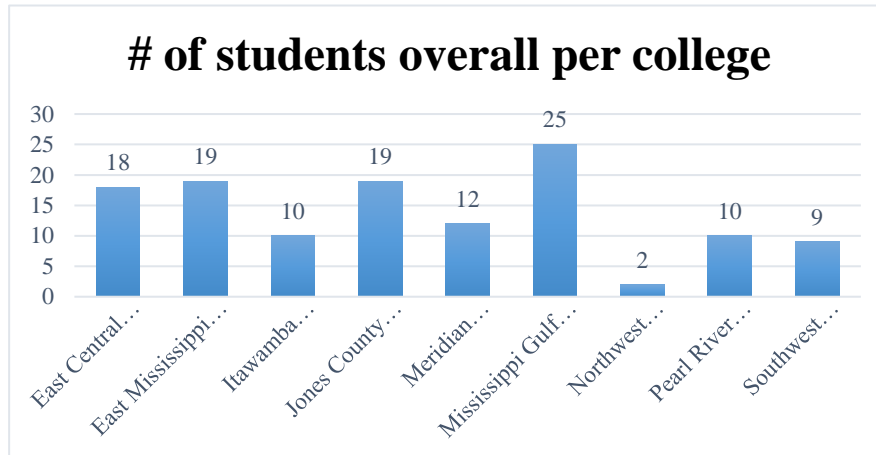|	Program	CIP Code	Certifications
	Administrative Office Technology	52.0401	OPAC Word© Basic OPAC Proofreading OPAC Excel© OPAC QuickBooks© OPAC Excel© Intermediate OPAC Database OR MOS MS Word© OPAC Proofreading MOS MS Excel© Intuit QuickBooks© MOS MS Access©
	Business Management	52.0201	OPAC Word© Basic OPAC Proofreading OPAC Excel© OPAC QuickBooks© OR MOS MS Word© OPAC Proofreading MOS MS Excel© Intuit QuickBooks©
	Computer Technology	52.0407	OPAC Word© Basic OPAC Proofreading OPAC Excel© OPAC QuickBooks© OPAC Excel© Intermediate OR MOS MS Word© OPAC Proofreading MOS MS Excel© Intuit QuickBooks©
	Healthcare Data	51.0799	OPAC Medical Terminology OPAC Proofreading OPAC Medical Proofreading
Design, Drafting Technology (DDT) 4 DDT Programs 4 Certifications	Architectural Engineering	15.0101	Autodesk AutoCAD Certified User Autodesk Revit Architecture Certified User
	General Drafting	15.1301	Autodesk AutoCAD Certified User Autodesk Inventor Certified User OR Autodesk AutoCAD Certified User Certified SolidWorks Associate
	Industrial Engineering	15.1501	Autodesk AutoCAD Certified User
	Industrial Technology	15.0612	Autodesk AutoCAD Certified User

Trades/Construction (NCCER) 11 NCCER Programs 20 Certifications	Carpentry	46.0201	*ICTP Kit for Instructor Training* NCCER Core Carpentry Level 1
	Construction	15.1001	*ICTP Kit for Instructor Training* NCCER Core NCCER Site Layout NCCER Project Management NCCER Project Supervision
	Electrical	46.0302	*ICTP Kit for Instructor Training* NCCER Core Electrician Level 1 Electrician Level 2
	Commercial/Residential Maintenance	46.0401	*ICTP Kit for Instructor Training* NCCER Core NCCER Carpentry Level 1
	Construction Equipment Operations	49.0202	*ICTP Kit for Instructor Training* NCCER Core Heavy Equipment Operations Level 1
	HVAC	47.0201	*ICTP Kit for Instructor Training* NCCER Core HVAC Level 1 HVAC Level 2
	Industrial Maintenance	47.0303	*ICTP Kit for Instructor Training* NCCER Core Industrial Maint E & I Level 1
	Electro-Mechanical Technology	15.0499	*ICTP Kit for Instructor Training* NCCER Core Industrial Maint E & I Level 1
	Masonry	46.0101	*ICTP Kit for Instructor Training* NCCER Core Masonry Level I Masonry Level 2 Masonry Level 3
	Pipefitting	46.0502	*ICTP Kit for Instructor Training* NCCER Core Pipefitting Level 1 Pipefitting Level 2
	Welding	48.0508	*ICTP Kit for Instructor Training* NCCER Core Welding Level 1 Welding Level 2 OR ~~AWS SENSE Level 1~~

4. Total number of CTE students sitting for national certification exams

During the fall 2017 semester, no certification exams were administered under the MNCI due to contractual procurement. During the spring 2018 semester, a total of 124 students were administered national certification exams.

of students overall per college
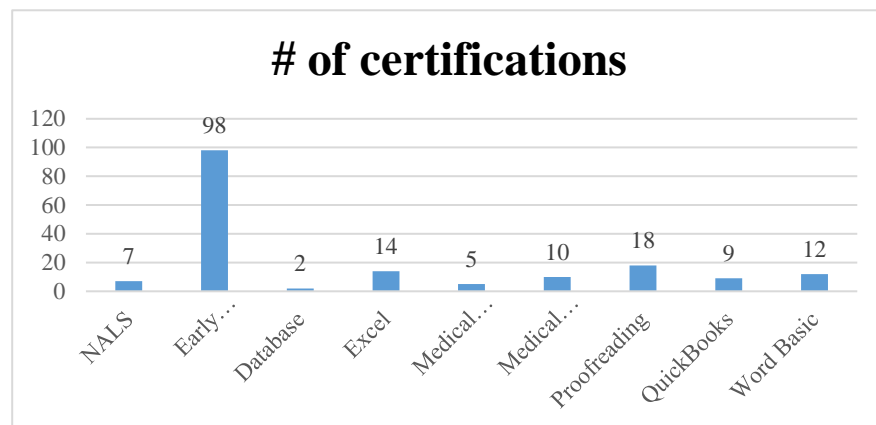
of certifications

5. Total number of CTE students achieving national certification status

Of the 124 CTE students who tested during the spring 2018 semester, 92 achieved 142 national certifications. Students enrolled in Business Office Technology programs were able to attain three to six different OPAC certifications each.

Certification	Pass	Fail
NALS	6	1
Early Childhood Education	67	31
Database	2	0
Excel	14	0
Medical Proofreading	5	0
Medical Terminology	10	0
Proofreading	17	1
QuickBooks	9	0
Word Basic	12	0
Total	142	33

6. **Average savings in national certification examination costs**

A goal is to purchase certification exams at the lowest possible cost. The Assessment team works with certifying vendors to procure quotes for bulk purchases of exam vouchers or site licenses. While some vouchers are provided at cost without price reduction, some were able to be purchased at a lower rate than if purchased individually per college or student.

Students enrolled in the Business Office Technology (BOT) programs take the Office Proficiency Assessment & Certification (OPAC) national exams or the Microsoft Office Specialist exams. The OPAC site license purchased rendered a cost savings for colleges. Prior to the MNCI, each college had to pay a $2,100 site license to administer the OPAC exams and pay for each test/retest individually. Under the MNCI contractual agreement, all 15 colleges have access to the OPAC site license with unlimited tests/retests for $35,000. Outside of the MNCI the cost for the 15 site licenses alone would be $31,500 with additional costs per student taking the exams.

Purchasing certification exams for CTE students enrolled in automotive programs were beneficial and also rendered cost-savings. Entry-level student certifications through the Automotive Service Excellence (ASE) certifying vendor is $41 per exam; however, the contractual rate with MCCB under the MNCI is $35 per exam. Fall 2018 will be the first administration of ASE exams and the total population of testers will be identified after orders are submitted for vouchers. To date, there are students enrolled in four programs of study that have been mapped and are offering ASE certifications.

The four-phase rubric used to vet national certifications was instrumental in determining the certification for the Early Childhood Program. Two national certifications were identified for the program; however, using the rubric and programmatic guidelines, one certification was deemed unsatisfactory due to the cost of the certification exceeding the requirements set forth in the rubric. The vetting process resulted in students' opportunity to attain a national certification for that program at a cost of $30 with a free retest versus a $300 exam with no retest opportunity.

7. **Average earnings of participants with national certifications**

Statistical data regarding the average earnings of participants with national certifications will be provided during Period 2. This information will be obtained from an external entity.

CONCLUSION AND USE

The MNCI Program Evaluation Report is a culmination of activities occurring during the first year of implementation or during Period 1. An external evaluator is being hired through a Request for Application (RFA) process and will conduct a more formal program evaluation. The external evaluator will develop a logic model to further guide the project and will assist in refining research questions that will be addressed at the culmination of the project.

The Evaluation Report contains both quantitative and qualitative methods to present the activities during Period 1. Simple counts of frequency or descriptive statistics were used to highlight activities. Information in the report will be used to further guide the direction of the project and to determine areas that require more attention in meeting the goals and objectives of the project.