



2018 Workforce & CTE Summer Conference



Trades/Construction (NCCER)

Kimberly Jones

Assistant Director of Assessment

Mississippi Community College Board

Office of Curriculum & Instruction

Required Assessments Per Program of Study



Program Name	CIP	Certification Needed	Instructor Training Needed
Carpentry	46.0201	NCCER Core Carpentry Level 1	NCCER Instructor Cert. Training
Construction	15.1001	NCCER Core NCCER Site Layout NCCER Project Management NCCER Project Supervision	NCCER Instructor Cert. Training
Electrical	46.0302	NCCER Core Electrician Level 1 Electrician Level 2	NCCER Instructor Cert. Training
Construction Equipment Operations	49.0202	NCCER Core Heavy Equipment Operations Level 1	NCCER Instructor Cert. Training
Electro-Mechanical Technology	15.0499	NCCER Core Industrial Maint. E & I Level 1	
HVAC	47.0201	NCCER Core HVAC Level 1 HVAC Level 2	NCCER Instructor Cert. Training
Industrial Maintenance	47.0303	NCCER Core Industrial Maint. E & I Level 1	NCCER Instructor Cert. Training
Masonry	46.0101	NCCER Core Masonry Level 1 Masonry Level 2 Masonry Level 3	NCCER Instructor Cert. Training
Pipefitting	46.0502	NCCER Core Pipefitting Level 1 Pipefitting Level 2	NCCER Instructor Cert. Training
Welding	48.0508	NCCER Core NCCER Level 1 NCCER Level 2 Or NCCT Welding Level 1 OR AWS Sense Level 1	NCCER Instructor Cert. Training 2



National Credentialing Initiative

Background



- In February 2016, national certifications were adopted as the measure of technical skill attainment for CTE programs where such certifications exist.
- Following the approval of the *National Certifications Standards and Procedure Manual* and the *Qualifications Manual*, MCCB started the implementation of national certifications as a measure of technical skill attainment as a system-wide initiative of Mississippi's community and junior colleges.
- The MCCB Office of Curriculum and Instruction (OCI) procured contracts and membership (when appropriate) with vendors certifying the identified credentials for each program.
- Efforts by OCI were to ensure testing vouchers and/or software licenses are made available to the colleges at the lowest rates available and to ensure as seamless transition to the national credentialing process as possible.

Requirements

- During the curriculum revision process, national certifications are now aligned to student learning outcomes for particular programs of study.
- This alignment of national certifications prompted the requirement of credentialing for all students enrolled in a program that is mapped to a national certification in order for the student to be considered as achieving technical skill attainment.
- Furthermore, instructors teaching the courses leading to national credentials must attain the level of certification held by the students or a certification level higher than the one attainable by students.
- In programs that have a national credential identified, instructors must possess the required training to be qualified to teach curriculum for the credential and/or administer student skills tests **as required by the credentialing agent** (such as NCCER).





1. **National Industry Certifications**
2. End-of-Course Assessment
3. Collaborative Relationships
4. **Instructor Training and Certification**
5. Comprehensive Assessment System
6. Low-cost Certifications
7. Technical Skills Attainment
8. Curriculum, Instruction, and Assessment Alignment
9. Valid and Reliable Data Analysis

Purpose of Credentials

What, in your opinion, is the purpose of national credentials?

A professional credential is a credible way of demonstrating proficiency in a field or area of study.

Credentials identify individuals who are committed to their profession and provides a tangible recognition of their knowledge and/or experience (Silvis, 2011).



Benefits of CTE Credentials

So what does this do for our students?

- Attaining CTE credentials denotes certification, which is a distinction that sets those with credentials apart from others in the field-of-work.
- Having credentials provide individuals with documented skills that are necessary for competing in today's global economy (PCS, 2015).
- Providing industry-recognized credentials is a strategic way for improving instruction which denotes students' acquired skillset and comprehension.

Which student would you want to hire?

Student A has nothing to document or show the skillset, knowledge, or strengths gained and will require training from the ground up.

Student B has documented successful completion of a program, have the basic knowledge and skillset, and verifiable certification in that area of study.



How to determine which certifications are most valued and which ones are not?

The MCCB approach is to use national certifications as a tool to promote academic achievement.

Curriculum Mapping Process

Phase 1- The national certification assessment.

Phase 2- The credentialing body offering the national certification assessment.

Phase 3- The assessment vendor or administrator of the assessment.

Phase 4- The cost of each assessment.



References: National Certifications Standards and Procedures Manual for Career Technical Education and Workforce Training.

Determining the Most Valued Credentials

Phase 1

Criteria	1 Unacceptable	2 Satisfactory
Assessment Outcomes	Does not map to Required Courses/Student Learning Outcomes in Program of Study	Map to 50% or more of Required Courses/Student Learning Outcomes in Program of Study
Industry Recognition and Value	Local or State Industry Advisory Committee for the Program of Study does not value the certification.	2 or more Companies represented on Local Industry Advisory Committee prefer and/or to hire with the certification.

Certifying Body Review Criteria

Phase 2

Criteria	1 Unacceptable	2 Satisfactory
Legal Entity	Unable to demonstrate legal status; does not retain authority for certification decisions or delegates certification decision.	Can demonstrate the organization is a legal entity and maintains sole authority over certification decisions. Can demonstrate separation from activities such as training, selling of products, and certification is not automatic with paid membership
Financial Stability	Unable to provide certified financial statements that demonstrate resources are adequate to maintain stability of operations as related to certification activities. Certification body has pending legal action with regard to certification activities in the state of Mississippi or the state granting legal status to conduct business.	Certification body is able to demonstrate that it has financial resources to maintain the stability of operations of the certification activities. Certification body must not have pending actions with Attorney General in the state of Mississippi or state granting legal status to conduct business.
Organizational Structure	Certification body is the sole provider of training for the certification or certification body is unable to demonstrate it is a neutral third-party validator of knowledge and skills.	Certification body is not the sole provider of training for the certification and certification body is able to demonstrate it is a neutral third-party validator of knowledge and skills.

Certifying Body Review Criteria cont'd

Phase 2

Criteria	1 Unacceptable	2 Satisfactory
Record Keeping	Unable to demonstrate ability to maintain record keeping to allow for verification of applicant, candidate, or certificant.	Can demonstrate ability to maintain record keeping in sufficient detail to allow for verification of applicant, candidate, or certificant.
Security	Unable to identify a procedure for identification of the applicant or candidate through the assessment process.	Documented procedure in place to allow for proper identification of the applicant or candidate through the assessment process.
Industry Review of Body of Knowledge	Unable to demonstrate job analysis, knowledge base and/or skill base required to be successful on the job. No demonstration of review by an independent panel of experts in the field. No demonstration of a regular review process for body of knowledge.	Certifying body demonstrates a thorough job analysis to include skills and knowledge base. Review of body of knowledge by an independent panel of experts in the field is evident. Certifying body demonstrates a regular review process for body of knowledge.
Examination	Unable to demonstrate that the examination of the candidate is fair, valid, and reliable according to acceptable educational assessment standards . Unable to demonstrate criteria for conditions to administer the examination to ensure consistency and fairness for candidates, including the proctoring of the examination and calibration of any technical equipment used. Unable to demonstrate procedure for evaluating any request for reasonable accommodation of the examination process.	Certifying body demonstrates the examination of the candidate is fair, valid, and reliable according to acceptable educational assessment standards. Certifying body demonstrates criteria for conditions to administer the examination to ensure consistency and fairness for candidates are evident, to include proctoring of the examination and calibration of any technical equipment used. Certifying body is able to demonstrate a procedure for evaluating any request for reasonable accommodation of the examination process.

Analysis of Assessment Vendor

Phase 3

Criteria	1 Unacceptable	2 Satisfactory
Training of Assessment Personnel	No evidence of a training procedure in place for training of assessment administrators.	Training procedure in place for assessment administrators.
Security	No evidence of a procedure for verifying the identity of assessment candidates. No evidence of an integrity statement or test security procedure on behalf of the assessment administrator.	Procedure in place for verifying the identity of assessment candidates. Procedure in place to ensure test security and/or integrity statement of the assessment administrator.
Communication of Results	No evidence of a procedure to communicate assessment results to assessment candidate and/or college/institution.	Procedure in place to allow communication of assessment results to assessment candidate and college/institution.
Compliance with State of MS Purchasing Guidelines	Vendor purchasing requirements are inconsistent with state purchasing laws and/or vendor will not adjust requirements to comply with state law.	Vendor demonstrates the ability to allow purchases within the guidelines established by state purchasing laws.

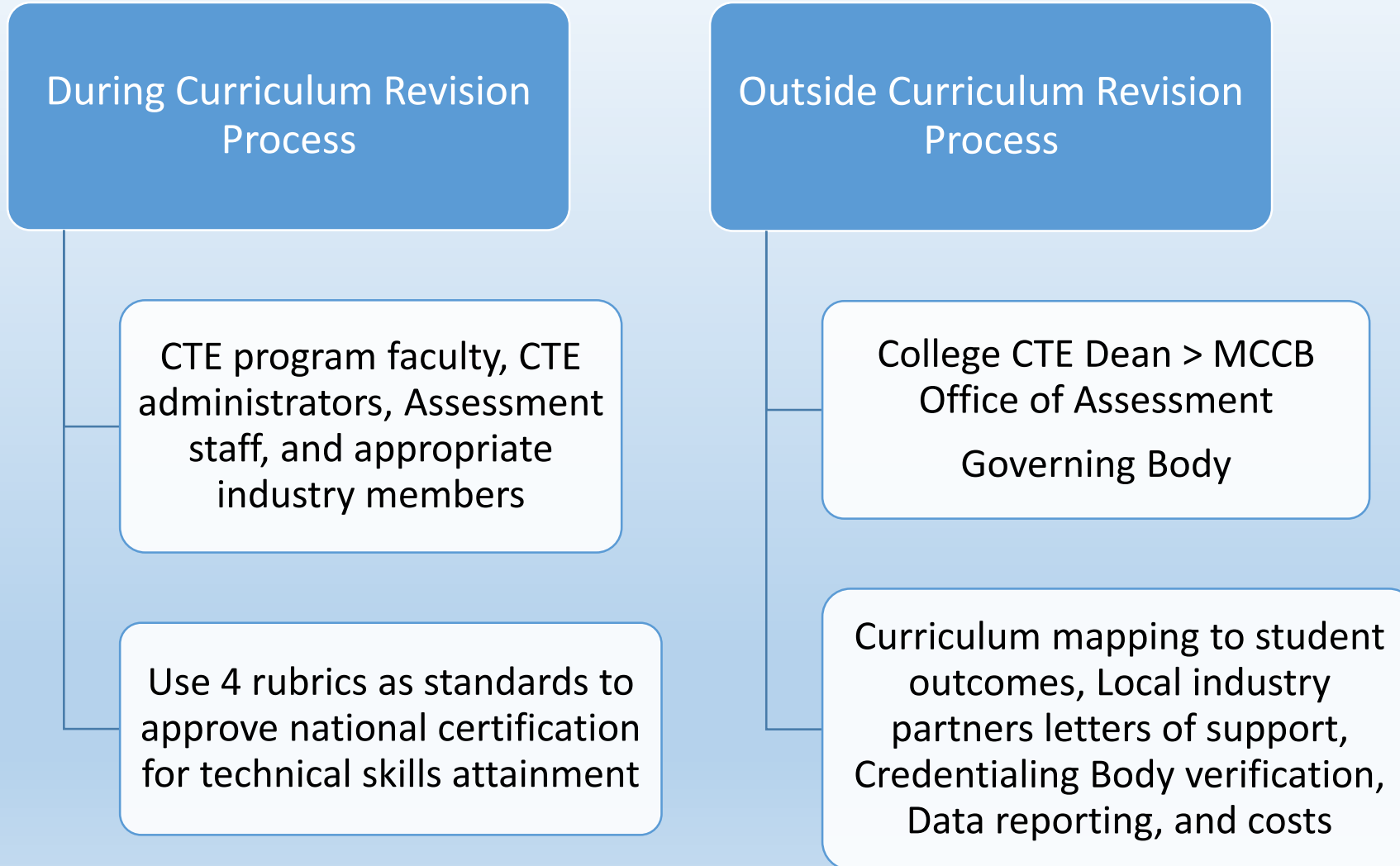
Determining the Most Valued Credentials

Phase 4: Is it Worth it?

Criteria
The maximum allowable cost of the national certification or combination of certifications cannot exceed the average tuition for a 4-semester credit hour course.
The per hour tuition rates at the colleges offering the program of study will be used to calculate the average tuition for the 4-semester credit hour course.
State licensure fees for programs with state licensure requirements in Mississippi are exempt from the cost analysis.

References: National Certifications Standards and Procedures Manual for Career Technical Education and Workforce Training.

Selecting National Certifications



The Why of Having National Credentials

- Levels the playing field and promotes success and employability of our students
- Prepares all students for high-skill, high-wage, high-demand occupations in the 21st century global economy
- Strengthens the role of the community college in advancing workforce development
- Obtains support in improving program quality, implementation and accountability
- Places graduates of CTE programs in the realm with other professionals
- Closes the gap between academic attainment and workforce



The How of Having National Credentials

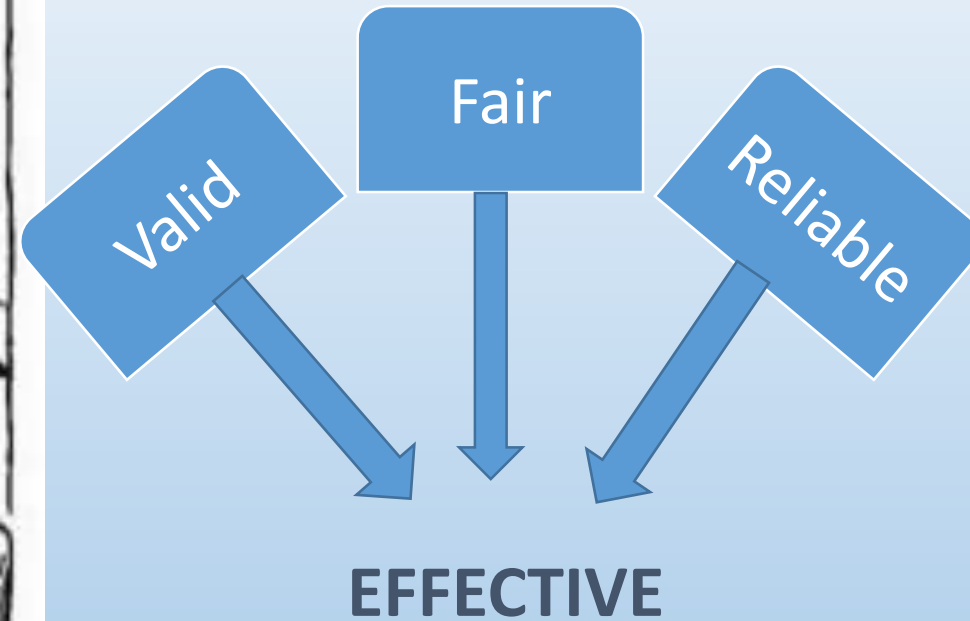
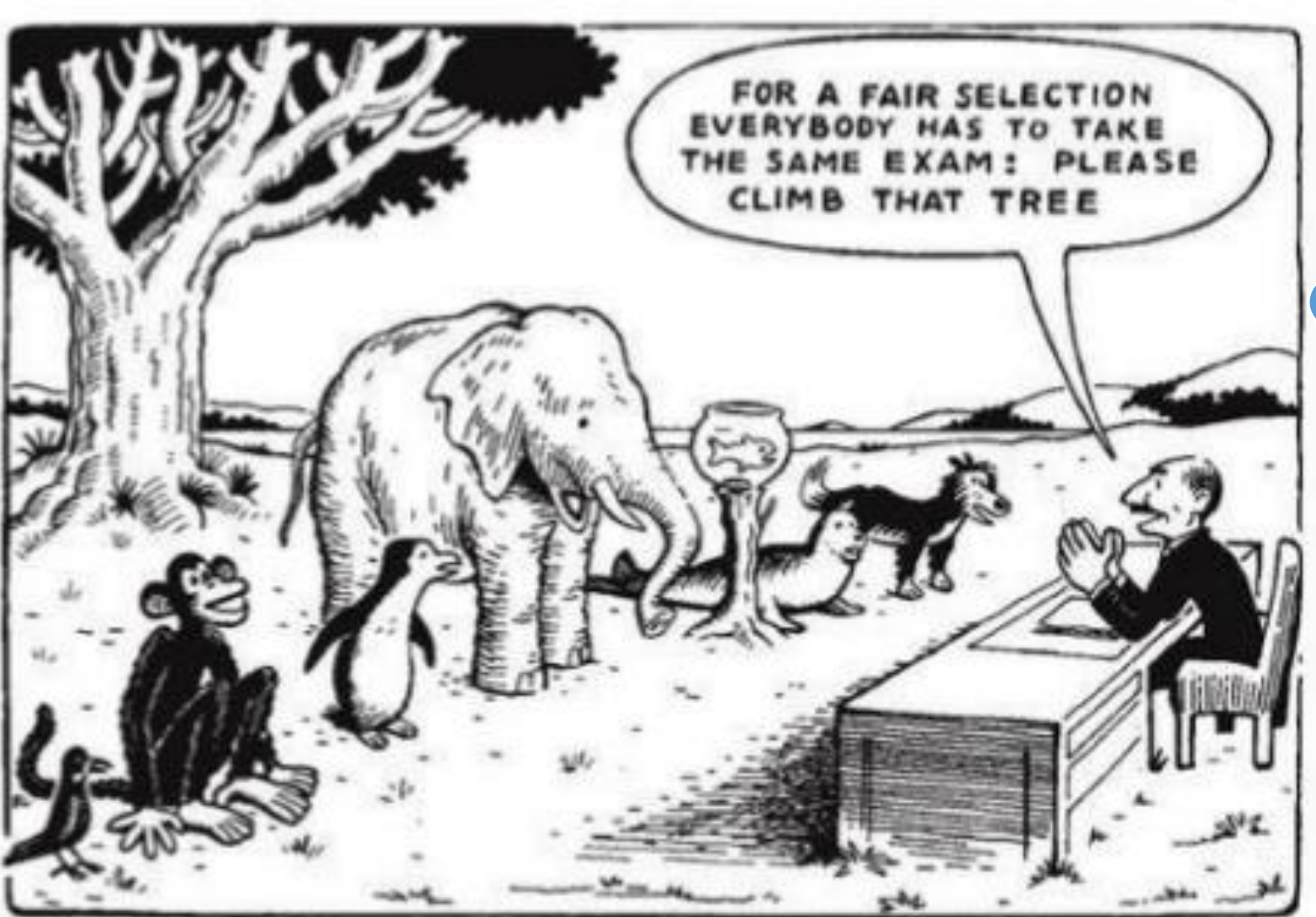
- **Comprehensive State-wide Assessment System**
- **Collaboration with Stakeholders**
 - Community and Junior colleges
 - Business/industry partners
 - Community
- **Contract Procurement**
 - Nationally recognized
 - Low costs
 - First-hand access to data
- **Students**
 - Readiness
 - Affordability
- **Instructors**
 - Training
 - Certification



Test Security



Required Characteristics





Test Validity

- A Test Security Incident threatens the integrity of the assessment and could undermine or damage the **validity** of the assessment results and all decisions based upon those results.
- Validity is the extent to which a test measures what it claims to measure.
- It is vital for a test to be valid in order for the results to be accurately applied and interpreted.

Test Reliability



- **Reliability** is the degree to which an assessment tool produces stable and consistent results.
- For example, if you were to administer a test with high reliability to an examinee on two occasions, you would be very likely to reach the same conclusions about the examinee's performance both times.
- A test with poor reliability, on the other hand, might result in very different scores for the examinee across the two test administrations.

Test



- The **fairness** of an exam refers to its freedom from any kind of bias.
- The exam should be appropriate for all qualified examinees irrespective of race, religion, gender, or age.
- The test should not disadvantage any examinee, or group of examinees, on any basis other than the examinee's lack of the knowledge and skills the test is intended to measure.

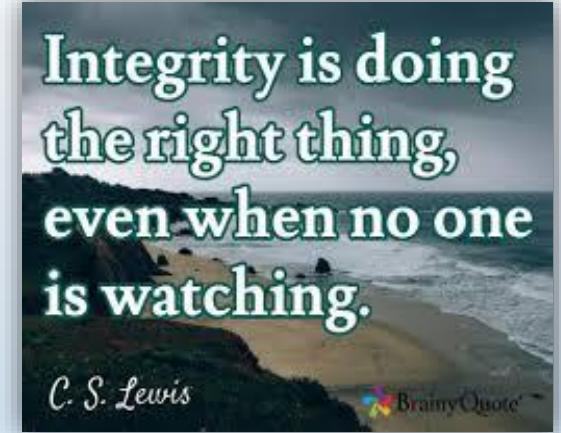
Test Security Incidents



- **Failure to Administer Test:** Make sure tests are administered to the correct students according to the published testing schedule. Districts need to maintain careful records of re-testers in order to ensure that re-testers are participating in any scheduled retest administrations.
- **Failure to Provide Appropriate Accommodations:** Provide allowable accommodations during testing; do not provide non-allowable accommodations during testing.
- **Providing accommodations to students that should not receive them.**
- **Providing Coaching:** Test administrators/proctors cannot provide unallowable assistance during a test. *Interfering in any student test response constitutes coaching.
- **Coaching includes (but is not limited to):** tapping on student desk, pointing at any portion of testing materials, tapping on or touching students, hand signals, facial expressions, and even lingering behind or next to a student while viewing the student's work on a test question.
- Verbal communications to an individual student or students, such as, "great work," "good job," "keep trying," "check your work," or "you still have time," all constitute coaching.

Testing Integrity

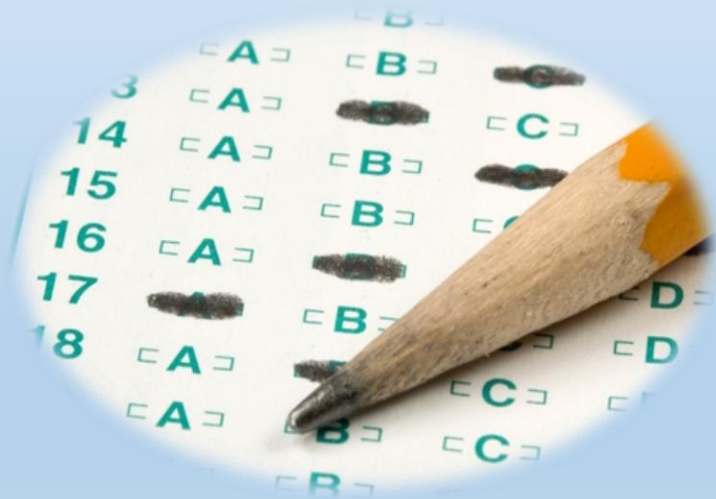
- Policy on test security
- Opportunities for training
- Security plans (College and Site)
- Standards for detecting irregularities
- Investigation of suspected irregularities
- Being prompt in reporting irregularities
- Accountability
- Examining areas from improvement



Paper Testing

- **Pros:**

- Instructors/proctors are not required to learn and manage an unfamiliar assessment system
- Students are not required to learn and navigate a new system



- **Cons:**

- Instructors are required to physically store completed module exams and performance profiles
- Instructors can manually scan and upload exams and profiles into the registry, but that adds additional time and management
- Instructors have to manually grade module exams
- It takes longer for students to receive feedback from instructors regarding module and profile grades
- Multiple test versions are unavailable
- Students can attempt testing multiple times without a monetary penalty

Online Testing

- **Pros:**

- Instructors are not required to physically store completed module exams and performance profiles
- Instructors do not have to manually scan and upload exams and profiles into the registry
- Instructors do not have to manually grade module exams
- Students receive immediate assessment feedback
- Multiple test versions are available
- Students can easily access grades, resources, and other information
- Instructors have access to assessment data and information that can be used for remediation
- Prospective employers have instant online access to students' assessment and credential information

- **Cons:**

- Instructors/proctors are required to learn and manage an unfamiliar assessment system
- Students are required to learn and navigate a new system
- Students cannot attempt testing more than two times without a monetary penalty





Info**about NCCER**

- NCCER develops standardized construction and maintenance curriculum, and assessments with portable credentials.
- These credentials are tracked through NCCER's Registry System that allows organizations and companies to track the qualifications of their craft professionals and/or check the qualifications of possible new hires.
- NCCER's Registry System also assists craft professionals by maintaining their records in a secure database.
- NCCER's workforce development process of accreditation, instructor certification, standardized curriculum, registry, assessment and certification is a key component in the industry's workforce development efforts.
- NCCER also drives multiple initiatives to enhance career development and recruitment efforts for the industry, primarily through its Build Your Future initiative.
- NCCER's new branding and international initiatives have led to the use of NCCER.

NCCER Testing Requirements



- **MCCB Requirements-** The [2018-2019 Assessment Order Form](#) & [Student Registration Template](#) should be submitted to MCCB.
- **Site Requirements-** See [ATS Guidelines Manual](#)
- **Instructor Certification-** Instructors must obtain the ICTP (Craft) designation. New instructors will be trained by a Master Trainer. **Before a Craft Instructor can be added to the NCCER Registry System, the instructor must select the Release statement in the registry when activating their profile in the system.** All of the required documentation must be submitted to Canvas and approved in the Registry system.
- **Instructor Recertification-** [Master Trainers](#) must teach one module in a three year period and have a successful submission of Form 200 for renewal.
- **Instructor Training-** There should be two Master Trainers at each college site.
- **Student Certification-** Students must complete and pass all module exams and performance evaluations in order to receive NCCER certification.

NCCER Testing Requirements Cont'd

- **Testing Window-** Tests may be completed after each module (unit) or at the end of the semester.
- **Mode of Testing -** The assessment is administered via paper-pencil format. All three parts of the examination must be taken on the first attempt. If the entire examination is not passed on the first attempt, students may retake the examination parts they did not pass. All failed parts must be retaken at the same time. There is a two year limit in which to retest.
- **Testing Requirements-** For security and liability purposes, it is recommended that the teacher/instructor on record (who is actively teaching the content to test candidates) should not be the sole proctor for test administration of their students. However, the teacher/instructor on record can serve as a proctor-observer for the test administration.



NCCER Vendor Contact Information



<u>Contact</u>	<u>Certifying Body</u>	<u>Certification Group</u>	<u>Certifications</u>
<p>Heather Hoffman Credentiaing & Compliance Services Coordinator hhoffmann@nncer.org</p> <p>Stephanie Camille Accreditation and Audit Programs Manager 1-888-622-3720, ext. 6911 scamille@nccer.org</p> <p>NCCER 13614 Progress Boulevard Alachua, FL 32615</p>	<p>National Center for Construction and Education Research</p>	<p>Trades/Construction (NCCER)</p>	<p>NCCER Core Carpentry Level 1 NCCER Site Layout NCCER Project Management NCCER Project Supervision Electrician Level 1 Electrician Level 2 Heavy Equipment Operations Level 1 HVAC Level 1 HVAC Level 2 Industrial Maint E & I Level 1 Masonry Level 1 Masonry Level 2 Masonry Level 3 Pipefitting Level 1 Pipefitting Level 2 NCCER Level 1 NCCER Level 2 Welding Level 1 Master Trainer ICTP Kit</p>

Submitting Instructor Required Documents

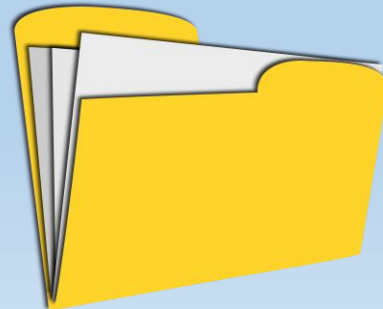
- Instructor Documentation:

Step 1: Each instructor must complete New User Registration in the Registry System at <https://registry.nccer.org/>.

a. The instructor must check off the Release statement to serve as signature of the Registration and Release Form

b. **NCCER Card Number known:** follow the steps to [Complete Registration](#).

c. **No NCCER card number assigned:** follow the steps to, Create an Account - to obtain a NCCER card [number](#).



- In addition, the following documents must be provided to MCCB and submitted via Canvas:

1. [Instructor Profile](#)
2. [Responsibilities & Liabilities Form \(702A/703A\)](#)
3. Dated and graded ICTP written and performance tests
4. Documentation of qualifications (resume, certificates, diploma, teaching license, etc.)
5. Written instruction evaluations by [students](#)
6. [Registration of Curriculum Certification \(Form 101\)](#)
 - This process is completed in the Registry System if the instructor's ICTP initial certification was delivered for the first time by a Master Trainer under MCCB.

Ordering ICTP Kits



- Order ICTP kits directly through NCCER.
- However, before orders are placed, your college must complete and submit the **2018 Assessment Ordering Form** and the **General Registration Form Template (Roster)** to MCCB via **Canvas** to notify MCCB of the program of study for which the kit is being ordered.
- ICTP kits may then be ordered from NCCER by accessing a NCCER order form at <https://nccer.app.box.com/s/6bkwih10s8izfewbbxzifankp5pzv2qw>
- Once the form is complete, you can email it to orders@nccer.org or fax it to **(386) 518-6961**. If you do fax your order form, please call **(386) 518-6954** to confirm receipt of your fax.

Evaluation Checklist

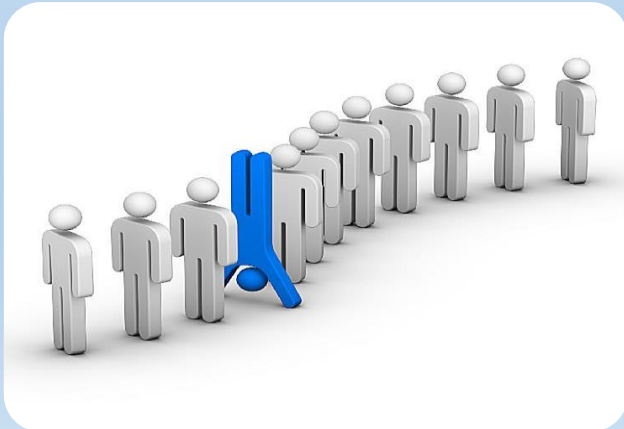
- ✓ Adequate amount of space to carry out instruction Adequate supply of materials, tools, equipment, etc.
- ✓ Meets all regulatory and ATS safety and health requirements
- ✓ Appropriate instructional resources
Ensure the security of testing mechanisms under lock & key with restricted access
- ✓ End of module exams and performance profiles are kept on file for 3 years (either via hard copy or electronically)
- ✓ Complies with all applicable occupational health, safety & environmental laws/regulations
- ✓ Trainee records (Form 200) are submitted timely & accurately
- ✓ NCCER Registration & Release Form on file for each trainee/student for a period of 3 years
- ✓ Ensure the security and confidentiality of training related records



Most Common and Severe Non-conformances

Common Non-conformances:

- Missing records (i.e. registration and release forms, written module exams, performance profile sheets, performance verification submission sheet, etc.)
- No evaluation of instructor by trainees
- No evaluation of instructor by Sponsor Representative
- No evaluation of proctor/coordinator by Primary Administrator



Severe Non-Conformances:

**Could result in suspension or revocation of accreditation.*

- Missing/Lost/Stolen written assessment
- Sponsor Representative/Primary Administrator absent or no longer employed
- Suspected compromise of assessments or cheating – of any kind by Instructor, Proctor, Trainee, etc.
- Suspected false information of performance verification or profile sheet
- Unauthorized sharing of proctor examiner ID or login.



Please submit any assessment-related questions, comments, and/or concerns to the MCCB Assessment Team using the question card provided. We look forward to hearing from you, and we will provide feedback as soon as possible.

Thank you in advance for your valued opinion and correspondence!

-MCCB Assessment Staff

MCCB Assessment Staff Contact Information

assessment@mccb.edu

Kimberly Jones

Assistant Director of Assessment

kjones@mccb.edu

(601) 432-6131

Krystal Adcock

Assessment Specialist

kadcock@mccb.edu

(601) 432-6121

Tony Chiang

Research Analyst

cchiang@mccb.edu

(601) 432-6222

Shamiko Allen

Assessment Specialist

sallen@mccb.edu

(601) 432-6277

<http://www.mccb.edu/WkfEdu/asDefault.aspx>

References

Abbott, S. E., et al, 2014, *Career and Technical Education*, Glossary of Education Reform, Retrieved from

<http://edglossary.org/career-and-technical-education/>

California Department of Education (CDE), 2013, *California Career Technical Education Model Curriculum Standards*, 1-28.

Retrieved from <http://www.cde.ca.gov/ci/ct/sf/documents/ctestdfontpages.pdf>

Mississippi Community College Board Division of Workforce and Economic Development. (2017). National certifications standards and procedures manual for career technical education and workforce training. 5-19. Retrieved from

<http://www.sbcjc.cc.ms.us/pdfs/as/standardsandproceduremanual.pdf>

Mississippi Community College Board Division of Workforce and Economic Development. (2017). Qualifications manual for postsecondary career and technical education instructors. 4-5. Retrieved from

<http://www.sbcjc.cc.ms.us/pdfs/as/qualificationsmanual.pdf>

References Cont'd

Mississippi Department of Education (MDE). (2012). Career and Technical Education. Schools. Retrieved from

<http://www.mde.k12.ms.us/OCTE/school>

National Association for Career Technical Education (NACTEI). (2017). Retrieved from <http://nactei.org/index.php>

National Center for Construction Education & Research (NCCER). (2018). About nccer. Retrieved from <https://www.nccer.org/about-us>

National Center for Construction Education & Research (NCCER). (2018). Most common and severe non-conformances. Retrieved from <https://support.nccer.org/support/solutions/articles/13000012496-most-common-and-severe-non-conformances>

National Center for Construction Education & Research (NCCER). (2018). TU-ATU-ATEF audit. Retrieved from <https://nccer.app.box.com/s/e9028ehd2vy9qmzivi6s1rtv05sr0irf>

References Cont'd

Pitt County Schools (PCS), 2015, Credentialing, Retrieved from <https://www.pitt.k12.nc.us/Page/1486>

Silvis, J. (2011). Accreditation, Certification, Licensure, Registration, Healthcare Design, Retrieved from <https://www2.ed.gov/about/offices/list/ovae/index.html>

U. S. Department of Education (USDE) (2016a), Office of Career, Technical, and Adult Education, Retrieved from <https://www2.ed.gov/about/offices/list/ovae/index.html>

Thank you for attending the Trades/Construction (NCCER) Session!



2018 Workforce & CTE Summer Conference



The mission of the Mississippi Community College Board is to advance the community college system through coordination, support, leadership, and advocacy.