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Energy Workforce Development Investment



2009 Center for Energy Workforce Development SUMMIT

October 7-9, 2009

Marriott Downtown • Indianapolis, IN

Using Credentials in the Hiring Process

- Moderator: Valerie Taylor, Educational Consultant, CEWD
- Panelists:
 - Roy Swift, Senior Director, American National Standards Institute (ANSI)
 - Dorothy Wax, TITLE, Council on Adult & Experiential Learning (CAEL)
 - Kathy Mannes, TITLE, American Association of Community Colleges (AACCC)
 - Wanda Campbell, Senior Director - Employment Testing, Edison Electric Institute (EEI)

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ANSI: General Overview

ANSI's mission is to enhance the global competitiveness of U.S. business and the American quality of life by promoting and facilitating voluntary consensus standards and conformity assessment systems and ensuring their integrity.

A private and public sector partnership since 1918

ANSI is NOT a Governmental Agency or a Standards Developer

The ANSI Federation represents more than **125,000 companies and organizations** and **3.5 million professionals** worldwide

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ANSI Accreditation Portfolio

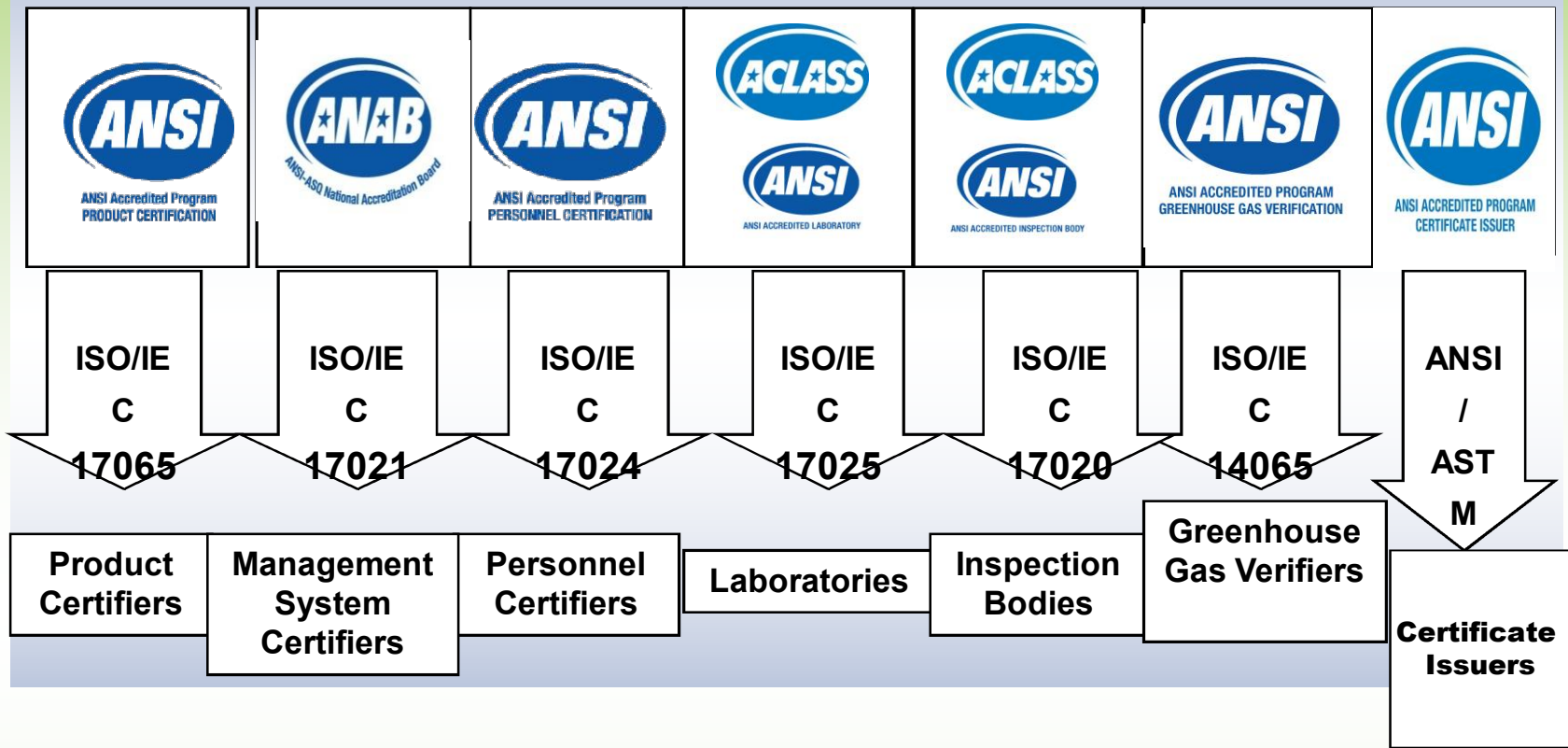
Standards



ANSI
Procedures
"Essential
Requirements
"

SDO's and
ISO TAGs

Conformity Assessment (ISO/IEC 17011)



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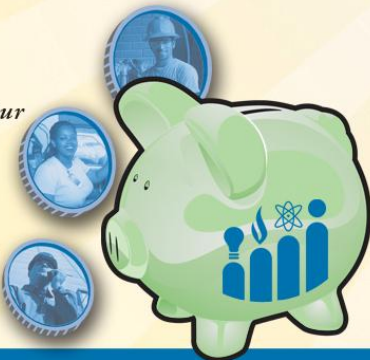
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Credentialing: The Competency Connection

- Qualifications
 - Degrees
 - Work Experience
- Privileging
- Education/Training Certificates
- Certifications
- Licensure

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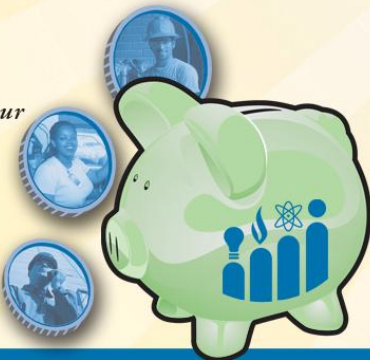
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Certificates

- Generally associated with education and training – educational process
- Indicates that the content has been learned in an educational event
- May or may not have an assessment
 - If there is an assessment, considered to be low stakes
- Course/training is generally designed by an instructor or group of experts
- Generally good for life – no renewal period
- Owned by the individual – “cannot be taken away” by the educational institution

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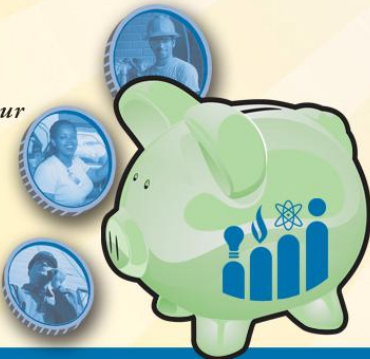
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Certification

- Focus is on the “job”, “occupation” or “practice”
- Determining the competencies to successfully practice – Job/Practice Analysis
 - Often has a code of ethics/practice
- Results is from an assessment process (examination)
 - Must be fair, valid and reliable
 - Written
 - Oral
 - Performance
 - Generally a high stakes examination – Health, Safety, National Security
- Is a third party independent judgment regarding whether competencies have been achieved
- Time limited – Must re-certify with a designated time frame
- Certificate does not belong to the individual – can be taken away
 - Unethical
 - Incompetent

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Licensure

- Generally associated with “State” Licensure but there are federal licenses e.g. FAA, EPA (although they call their examinations “certification”)
- State Licensure
 - Legal right to practice in a job/occupation/profession
 - Scope of practice is determine by the state legislature
 - Sometimes based on a national “Certification”
 - Time limited – Have to re-license within a designated period of time
 - Professions are licensed to “protect the public”
 - Examinations are often created by “Federations”
 - Accounting
 - Nursing
 - Engineering

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CAEL: General Overview

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Career Readiness Certificate

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How is the CRC aligned to the DOL competencies?

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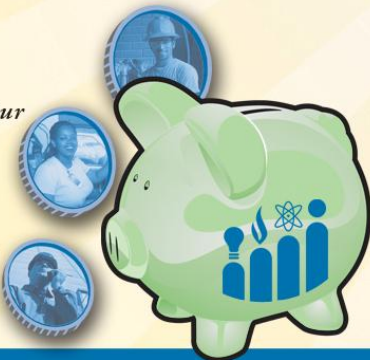


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How is the CRC being used in the hiring process?

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AACC: General Overview

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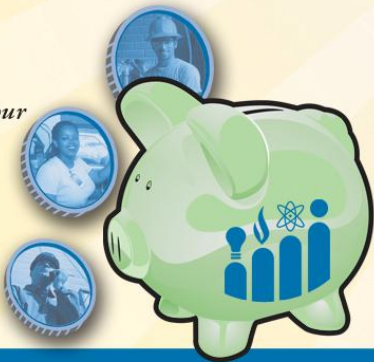
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How do the certificate programs connect to employment?

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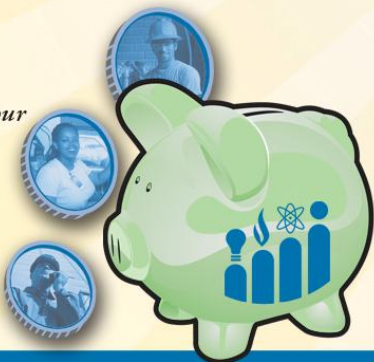
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How are other industries using certificates for employment?

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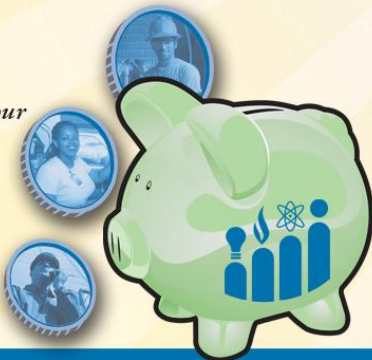
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EEI Employment Testing: Overview

- Aptitude Testing
- Premises underlying Aptitude Testing
- Types of Abilities Required for Jobs
- Level of Abilities Required for Jobs
- Distinctions between Aptitude and Certification Tests
- EEI Employment Testing
- Career Assessment and Diagnostic Instrument (CADI)

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Aptitude Tests

- EEI employment tests are predominantly aptitude tests.
- Examples of abilities referred to as “aptitudes” include:
 - Mathematical
 - Reading
 - Spatial
 - Mechanical
 - Reasoning

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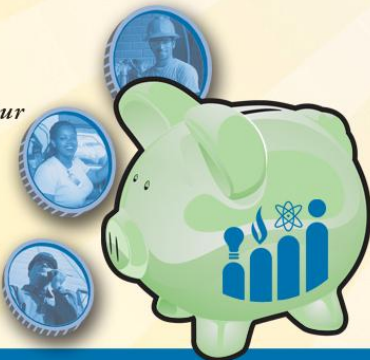
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Premises Underlying EEI Employment Tests

- People premises:
 - People differ in innate abilities.
 - People with greater ability levels can further develop their ability more quickly than people with lower levels of ability.
- Job premises:
 - Jobs differ in the types of abilities required to be successful.
 - Jobs differ in the level of abilities required to be successful.

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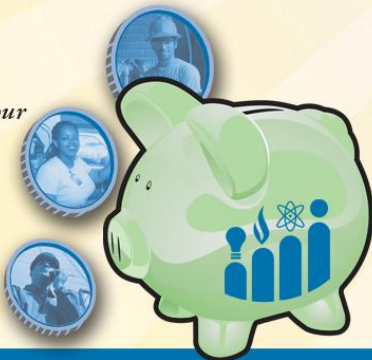
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The Level of the Ability Required Depends on Job Complexity

- Nuclear Plant Operator jobs require higher levels of abilities than is required for fossil or hydro jobs.
- System Operator jobs require higher levels of abilities than maintenance jobs.
- The higher the complexity of the job, the more valuable employment testing becomes.

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Innate and Developed Abilities

Cutoff Score

A [XXXX...]



Not a great deal of ability,
some development

B [XXXXXXXXXXXXXXXXX...]

More ability and development

C [XXX.....]

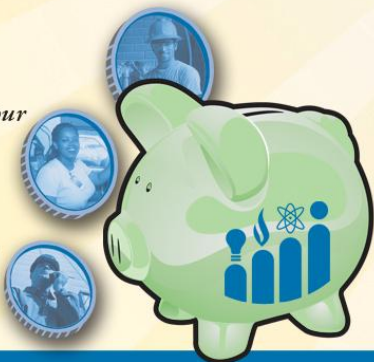
More innate ability,
but little development

D [XXXXXXXXXXXXXXXXXXXXX.....]

More innate ability and
substantial development

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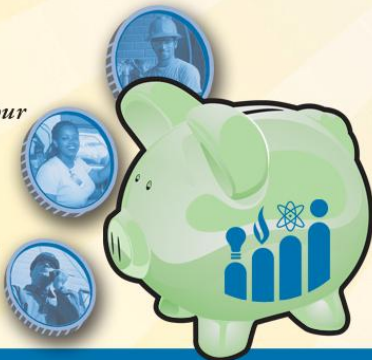


Distinctions between Aptitude Tests and Certification Tests

- What the tests measure:
 - Certification tests measure knowledge of particular subjects.
 - Aptitude tests measure the innate abilities that are developed over time.
- Ability to prepare for the tests
 - Compared to aptitude tests, preparation for certification tests can be done over a shorter period of time.

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Distinctions between Aptitude Tests and Certification Tests

- Range of predictions of job performance:
 - Certification tests measure the ability to perform a narrow range of jobs.
 - Aptitude tests measure the ability to perform a wide range of jobs.
 - The range of jobs includes job progressions as well as groups of job progressions with similar job requirements.

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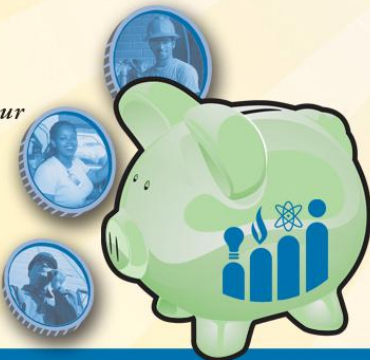
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Distinctions between Aptitude Tests and Certification Tests

- Type of validity evidence provided:
 - Certification tests are validated based on the content of the jobs.
 - Aptitude tests are validated based on the relationship between performance on the test and performance on the job.
 - Validation of aptitude tests requires that test data and job performance data be available for a large number of individuals (incumbents or applicants).

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Distinctions between Aptitude Tests and Certification Tests

- Test Stability across Changes in Job Tasks:
 - Certification tests require renewal to ensure that knowledge remains current.
 - EEI employment tests do not need to be renewed, because they are tied to the ability or job requirements rather than the tasks.
 - Technical developments usually increase the need for higher levels of aptitudes because of the increased complexity.

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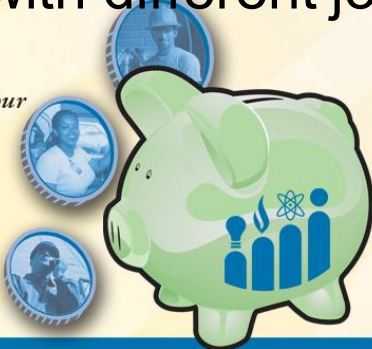
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How Can Employment Testing be Used in the Hiring Process?

- Whenever possible, EEI employment tests are used for entry-level jobs to eliminate the need for testing current employees on aptitudes required throughout the job progression.
- Employment tests are also used when current employees apply for transfer (maintenance to operations) or promotion to jobs that involve different job requirements (meter readers applying for lineworker apprentice jobs).
- During a reduction in force, employment tests may be required to enable a more senior employee to bump into a lower-level job with different job requirements.

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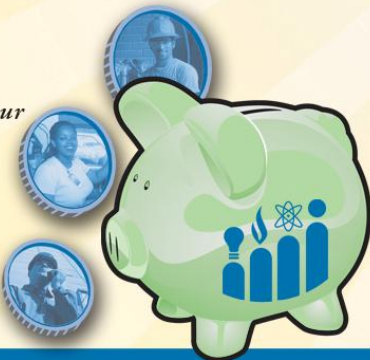
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How Can Employment Testing be Used in the Hiring Process?

- Candidates who have been screened on basic qualifications are administered the EEI employment test prior to interviews.
 - Employment tests are less labor intensive and expensive than interviews or drug screens.
 - Employment tests are often more legally defensible than interviews.
- **Over the last three decades, EEI has prevailed on the validity of its employment tests in ALL legal challenges.**

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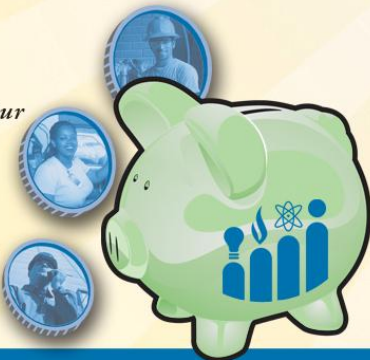
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Examples of EEI Employment Tests

- Plant Operator Selection System (POSS)
- Power Plant Maintenance Selection System (MASS)
- Construction and Skilled Trades Selection System (CAST)
- Technician Occupations Selection System (Tech)
- Support and Administrative Selection System (SASS)
- Customer Service Representative Project (CSR)
- Meter Reader Aptitude Battery (MRAB)

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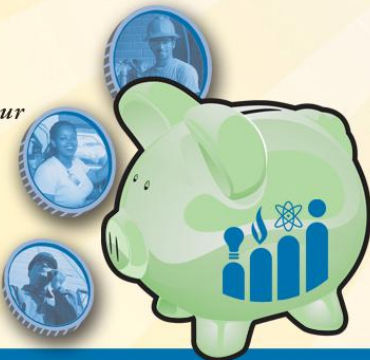
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Upcoming EEI Employment Test Projects

- System Operator/Power Dispatcher and Natural Gas Controller Project
- Natural Gas Project
 - Distribution Employees
 - Service Technicians
 - Natural Gas Transportation and Storage Employees

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Career Assessment and Diagnostic Instrument (CADI)

- CADI provides comprehensive career guidance to students, entry-level employees, and employees whose jobs are being eliminated (meter readers).
- CADI also provides diagnostic feedback on developmental needs.
 - Frequently used for employees who were unsuccessful when tested for jobs with different job requirements.

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