Awarding College Credit for the WorkKeys NCRC Promotes Persistence and Increases Revenue

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Agenda

• What is Prior Learning Assessment
• How does PLA Boost Student Outcomes
• What is the American Council on Education (ACE) Credit Recommendation
• PLA in Action
• Questions
Prior Learning Assessment is the process for evaluating knowledge and skills to award college credit for learning from:

- On-the-job training
- Independent Study
- Military and Volunteer Service
- Training Courses and/or Certifications
- Work Experience
Variety of PLA Methods

1. Evaluated Non-College Training
2. Industry Recognized Certificates
3. Standardized Tests
4. Student Portfolios
5. College Credit, College Completion
THE PLA BOOST

Results from a 72-Institution Study of Prior Learning Assessment and Adult Student Outcomes

• Increased degree completion
• Reduced time to degree
• Reduced cost
• Increased credit earning

PLA Boosted Adult Student Credential Completion Rates

Using propensity score matching to control for other factors, PLA boosted adult student completion rates by:

- 49% for all PLA Methods
- 27% excluding military PLA Methods
- 30% for PLA Methods
- 17% for all PLA Methods
PLA Boosted Completion Rates for Key Adult Student Groups

- **Hispanic Adults**: 24%
- **Grant Recipients**: 19%
- **Black Adults**: 14%
- **Adults at Community Colleges**: 25%

Boost to completion was even higher for these groups for certain PLA methods.
Time and Money Savings for Adult Students

- PLA Students Earned Credits for Nearly a Semester of Full-time Study: 9 to 14 Months
- Time Saved by Adult Degree Earners with 12 or more PLA Credits: 9 to 14 Months
- 12 to 15 Credits

WORK SMARter
Student Persistence = Institutional Revenue

- Adult Students Take an Average of 17.6 More Credits
- Institution Revenue Increase
Report Includes Recommendations To:

<table>
<thead>
<tr>
<th>Promote</th>
<th>Promote equity in educational attainment especially for black adult and low-income students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scale</td>
<td>Scale PLA Usage through Institutional Policies, Practices, and Partnerships</td>
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<tr>
<td>Build</td>
<td>Build Support for PLA at the Institutional Level</td>
</tr>
<tr>
<td>Improve</td>
<td>Improve System, State, and Federal Policies</td>
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</table>
American Council on Education Credit Recommendation for the ACT WorkKeys NCRC
## New ACE Credit Recommendation

<table>
<thead>
<tr>
<th>WorkKeys NCRC Earning</th>
<th>Institution Level</th>
<th>Subjects Credits Apply to</th>
<th>Recommended Credits</th>
</tr>
</thead>
</table>
| Platinum              | Lower-Division Baccalaureate | • Technical Mathematics  
                          • Introduction to Information Literacy | Up to 6 Credits/semester hours  
(3 credits/semester hours for each subject) |
| Gold                  | Lower-Division Baccalaureate | • Technical Mathematics  
                          • Introduction to Information Literacy | Up to 4 Credits/semester hours  
(2 Credits/semester hours for each subject) |
| Silver                | Lower-Division Baccalaureate | • Technical Mathematics  
                          • Introduction to Information Literacy | Up to 2 Credits/semester hours  
(1 Credits/semester hours for each subject) |
American Council on Education (ACE)

• Membership organization that mobilizes the higher education community to shape effective public policy and foster innovative, high-quality practice.

• As the major coordinating body for the nation’s colleges and universities, their strength lies in their diverse membership of more than 1,700 colleges and universities, related associations, and other organizations in America and abroad.

• ACE is the only major higher education association to represent all types of U.S. accredited, degree-granting institutions: two-year and four-year, public and private.

• Their members educate two out of every three students in all accredited, degree-granting U.S. institutions.
Alignment of credit recommendation to ACT’s mission

• Helping students achieve educational and workplace success

ACE CREDIT Renewal

• Provides institutions with a skills-based approach for awarding college credit
• Provides institutions with an innovative approach for recruiting and rewarding highly qualified students
• Facilitates students’ success as they strive to earn a degree or credential
• Provides one way to address the crisis of high student loan debt and low student graduation rates.
Percentage of ACT WorkKeys Examinees Earning NCRC Levels

848,778 examinees who took all three WorkKeys NCRC assessments between June 2017 and July 2019
Positive Relationship between NCRC Level and First-Year College GPA in Arkansas

All correlations in the chart are statistically significant ($p < .01$) and indicate a moderate to strong positive relationship between the WorkKeys assessments and first-year college GPA.
ACE Review Exam Process

The *content review* determines whether an exam covers its subject in sufficient depth and evaluates the content for currency and validity.

The *technical review* evaluates the psychometric properties of an exam to determine whether the exam is constructed using appropriate measurement and statistical practices.
Exam Content Materials

- Examination – *We provided four forms of each assessment.*
- Test information brochure
- Practice tests
- The examination and any appropriate supplemental materials or testing tools
- Scoring keys
- Exam participant’s manuals, workbooks, and handouts
- Rubrics used for assessment
- A description of the required qualifications of exam instructors, developers, or Angoff judges; the procedures used for their selection; and sample biographies of current members
### Exam Content Materials Cont.

<table>
<thead>
<tr>
<th>Topic Area</th>
<th>Examination Information Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Test Information</td>
<td>Rationale and purpose of the test</td>
</tr>
<tr>
<td></td>
<td>Name(s) and institutional affiliations of the principal author(s) or consultant(s)</td>
</tr>
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<td></td>
<td>Types of scores reported for examinees</td>
</tr>
<tr>
<td></td>
<td>Directions for scoring procedures and keys</td>
</tr>
<tr>
<td>Item/Test Content Development</td>
<td>Specifications that define the domain(s) of content, skills, and abilities that the test samples</td>
</tr>
<tr>
<td></td>
<td>Summary of the job analysis research (if a non-academic test)</td>
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<tr>
<td></td>
<td>Statement of test’s emphasis on each of the content, skills, and ability areas</td>
</tr>
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<td></td>
<td>Rationale for the kinds of tasks (items) that make up the test</td>
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<td></td>
<td>Information about the adequacy of the items on the test as a sample from the domain(s)</td>
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<tr>
<td></td>
<td>Information on the currency and representativeness of the test’s items</td>
</tr>
<tr>
<td></td>
<td>Description of the item sensitivity panel review</td>
</tr>
<tr>
<td></td>
<td>Whether and/or how the items pre-tested (field tested) before inclusion in the final form</td>
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<tr>
<td></td>
<td>Item analysis results (e.g., item difficulty, discrimination, item fit statistics, correlation with external criteria)</td>
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<tr>
<td>Reliability Information</td>
<td>Internal consistency reliability</td>
</tr>
<tr>
<td></td>
<td>Evidence for equivalence of forms of the test</td>
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<td>Scorer reliability for essay items</td>
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<td>Errors of classification percentage for the minimum score for granting college credit (cut score)</td>
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</tbody>
</table>

| Validity Information | Content-related validity |
| | Criterion-related validity |
| | Construct validity (if appropriate) |
| | Possible test bias of the total test score |
| | Evidence that time limits are appropriate and that the exam is not unduly speeded |
| | Provisions for standardizing administration of the examination |
| | Provisions for exam security |

| Scaling and Item Response Theory Procedures | Types of IRT scaling model(s) used |
| | Evidence of the fit of the model(s) used |
| | Evidence that new items/tests fit the current scale used |

| Validity of Computer Administration | Size of operational test item pool for test |
| | Exposure rate of items when examinees can retake the test |

| Cut-Score Information | Rationale for the particular cut-score recommended |
| | Evidence for the reasonableness and appropriateness of the cut-score recommended |
| | Procedures recommended to users for establishing their own cut scores (e.g., granting college credit) |
| | Information on norms and normative groups (if applicable) |

| Recommended Items | Effects of different content samples |
| | Effects of testing on different occasions |
| | Equivalence of forms |
| | Score stability over time |
| | Irrelevant sources of difficulty affecting test scores |
ACE Reviewer Panel’s Overall Summary

The NCRC’s three exam results are excellent for measuring students’ readiness for the workforce as well as their ability to succeed in post-secondary learning institutions.

Moreover, the exams gauge the skill gaps between students’ ability and workforce expectations.

The results can be used to improve educational curricula, giving institutions a “blueprint” to map what students are learning to workforce demands.

The credentialing levels are quite rigorous, compared to national norms.
Validity evidence is outstanding. Most compelling are the number of studies comparing WorkKeys scores to such factors as job performance ratings, grade point average, grades in vocational programs, and other measures of productivity and career preparedness (e.g., absenteeism, customer complaints, and turnover).

Outstanding evidence of exam fairness including detailed analysis of both level scores and college and career performance across factors including education, gender, racial/ethnic background, and other factors of interest to fairness.

Evidence from a review of required job skills (O*NET) demonstrated that increases in NCRC certification level were associated with increases in the skills needed to be considered qualified for more jobs, with Platinum level certification demonstrating proficiency in the skills needed for 99% of listed jobs.
A manager tracks the total value of warehouse inventory and the average number of days an item spends in inventory before being sold each month.

**Level 7 Graphic Literacy**

5. Which month reflects an increase in total value of inventory from the prior month with the largest drop in average days in inventory?

**CORRECT RESPONSE**

Note that the total value of inventory increases from September to October, while at the same time the average days in inventory decreases from approximately 24.0 to 21.0, a difference of 3 days. While February also shows an increase in total value from the prior month, the average days in inventory decreases from approximately 15.0 to 13.0, a difference of only 2 days.
Using WorkKeys as a Credit for Prior Learning (CPL) Tool

Lynette Livingston, Ed.D. – Provost and Vice President for Academic Affairs, CVTC
Questions