

# **The Assessment of Higher Education Learning Outcomes (AHELO)**

**OECD's Study of the Scientific and Practical Feasibility of Assessing Baccalaureate-Level Student Learning Outcomes Across Nations**

**CHEA 2013 Annual Conference**

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# *AHELO: 4 strands of work*

## Discipline strand in Economics

- Subject competence
- Application to Real World problems
- Effective use of relevant data and quantitative methods
- Communication

## Generic skills strand

## Discipline strand in Engineering

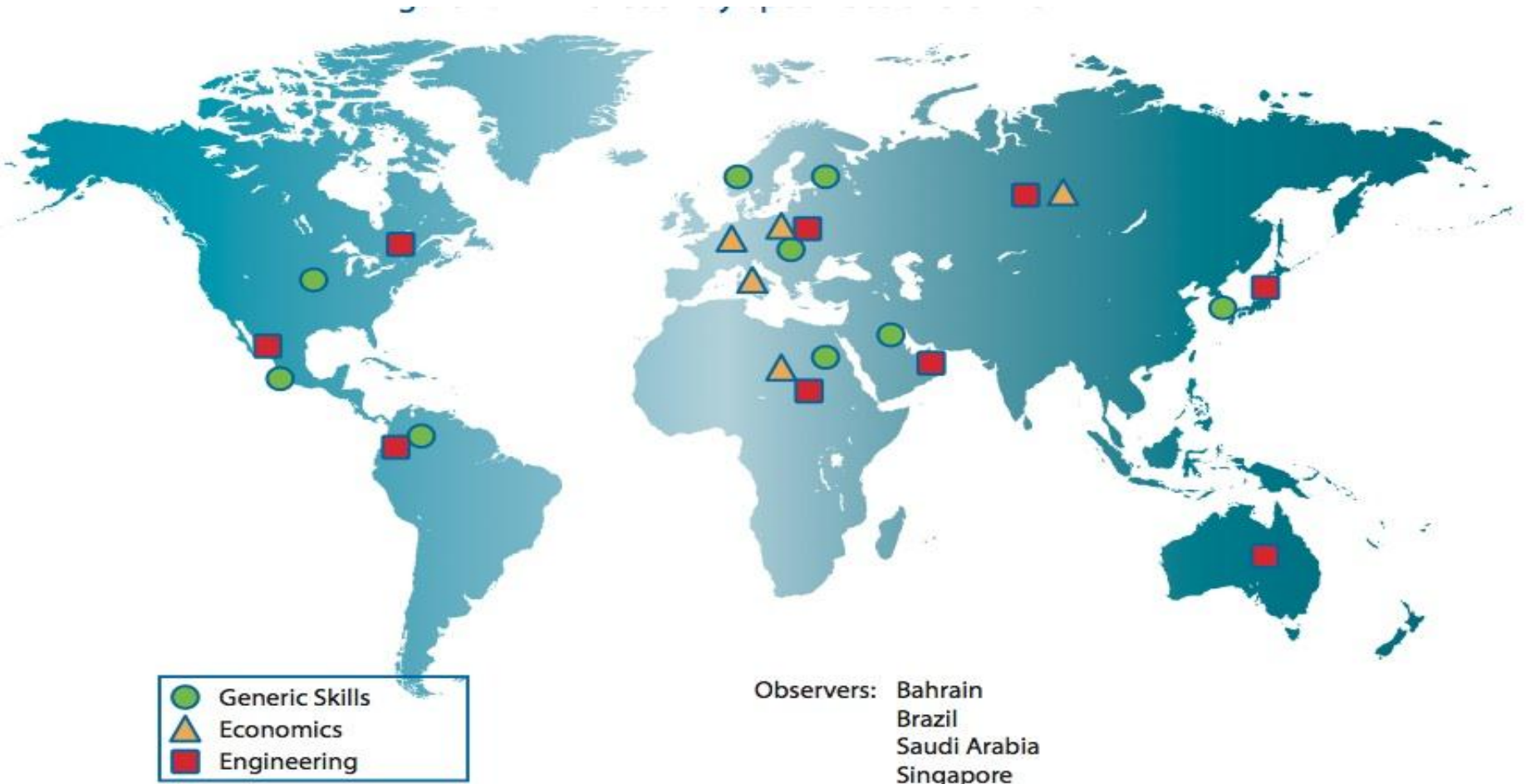
- Engineering Generic Skills
- Basic & Engineering sciences
- Engineering Analysis
- Engineering Design
- Engineering Practice

Research-based “Value-added”  
or “Learning gain”  
measurement strand





# *Participants*

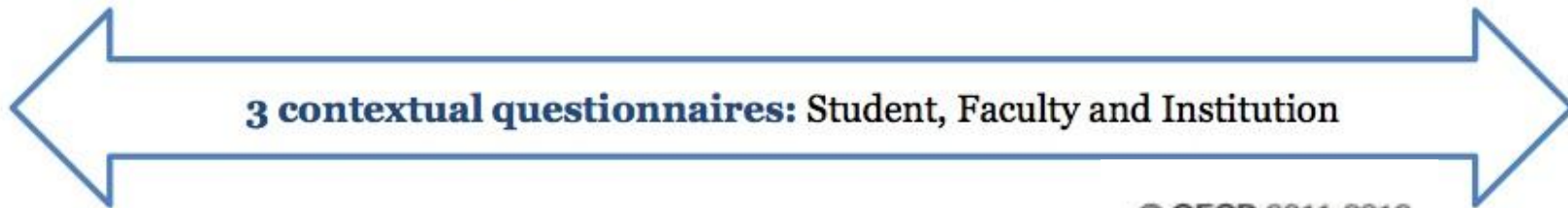




# *AHELO Test Implementation*

| <b>Generic skills</b>                           | <b>Economics</b>  | <b>Engineering</b>             |
|---|---|--------------------------------|
| International adaptation                        | Frameworks and instruments developed with                 |                                |
| Validation:<br>one cognitive lab<br>per country | Validation:<br>focus groups in participating institutions |                                |
| 120 minutes<br>1 CRT<br>25 MCQs                 | 90 minutes<br>1 CRT<br>45 MCQs                            | 90 minutes<br>1 CRT<br>30 MCQs |
| Online delivery                                 |   |                                |

CRT: Constructed Response Task  
MCQ: Multiple Choice Question





## *The Technical Advisory Group (TAG)*

- Charged with Reviewing the Technical Adequacy of All Aspects of the AHELO Feasibility Study:
  - Assessment Frameworks and Instruments
  - Sampling and Test Administration Procedures
  - Analysis and Reporting
- Charged with Making Recommendations on Feasibility and the Future Conduct of an AHELO Main Study





## *Challenges Faced by the Feasibility Study*

- Too Little Money and Too Little Time
- Translation and Contextual Variation
- Student Motivation for Tests that Do Not Count
- Debates About the Role of “Generic Skills” and How Best to Assess Them
- Perceptions [in the US] that Results Will Eventually be Used for Ranking



# U.S. Involvement in AHELO

- U.S. researchers/assessment developers
- Substantial financial support from several American education foundations
- Not a “participating nation” until 2010
- CT, MO and PA and 11 universities participate in 2012 data collection
- Financial support and OECD voting representation by U.S. Dept. of Education

# **U.S. Higher Education Institutions Participating in AHELO Feasibility Study**

- **Connecticut Board of Regents for Higher Education**
  - Southern Connecticut State University (public regional university; 9,000 undergraduates)
- **Missouri Department of Higher Education**
  - Central Methodist University (independent; 3,500 students)
  - Missouri State University (public institution; 16,000 undergraduates)
  - Truman State University (public institution; 6,000 undergraduates)
  - University of Central Missouri (public regional; 12,000 students)
  - Webster University (independent; 4,000 undergraduates)
- **Pennsylvania State System of Higher Education (PASSHE)**
  - Cheyney University of Pennsylvania (public historically black university; 1,300 undergraduates)
  - Clarion University (public institution; 5,100 undergraduates)
  - Edinboro University (public institution; 6,600 undergraduates)
  - Lock Haven University (public institution; 5,000 undergraduates)
  - Millersville University (public institution; 7,200 undergraduates)



# U.S. Participants' Roles

- National level

- U.S. Dept of Education is member of OECD Education Governing Board
- SHEEO—National Project Manager (NPM) and representative on project advisory board--Group of National Experts (GNE)
- NCHEMS prepared sample files and will analyze national data
- Foundations remain interested and involved

- State level

- SHEEO agency provided project leadership, coordination, and oversight in Connecticut, Missouri and Pennsylvania

- Institutional level

- AHELO Institutional Coordinator and “team”
- IR office prepared student/faculty population files
- Test Administration—recruitment, scheduling, monitoring
- President, provost, faculty, media relations, graduate students

# **Generic Skills Assessment Framework/Design**

- Two rotating performance tasks adapted from Collegiate Learning Assessment (CLA) – 90 minutes
- Selected response items from well-tested Australian item bank – 30 minutes
- Brief student experience survey
- Faculty/institutional web-based questionnaires
- All assessments, surveys and data entry done on secure international web sites

# Steps and Timelines for Fieldwork, Analysis and Reporting

- Test administration by U.S. institutions using secure international testing websites (Feb-May)
- Assessments scored by lead scorer and five additional U.S. scorers trained using international scoring rubrics (May-June)
- Data files analyzed by ACER, reported to OECD and released to participating nations in Dec 2012
- Preparation, review and release of Feasibility Study findings and recommendations
- Final project conference March 2013

# Participation/Completion Results

| <b><u>U.S. Institutions</u></b> | <b><u>Student completions /sample population</u></b> | <b><u>Faculty completions/ sample population</u></b> |
|---------------------------------|--|--|
| Institution A                   | 59/200=30%   | 24/40=60%  |
| Institution B                   | 54/273=20%   | 49/102=48%   |
| Institution C                   | 75/200=38%   | 28/40=70%  |
| Institution D                   | 131/196=69%  | 24/40=60%  |
| Institution E                   | 119/197=60%  | 45/61=74%  |
| Institution F                   | 66/200=33%   | 33/40=83%  |
| Institution G                   | 86/230=37%   | 28/40=70%  |
| Institution H                   | 33/200=17%   | 28/40=70%  |
| Institution I                   | 54/200=27%   | 31/40=78%  |
| Institution J                   | 34/200=17%   | 18/40=45%  |
| Institution K                   | 8/200=4%   | 18/40=45%  |
| <b>Total</b>                    | <b>719/2296=31%</b>                                  | <b>326/523=62%</b>                                   |

# Questions from U.S. Participation

- What was the institutional experience from voluntary participation?
- What factors contributed to differences in student participation and performance?
- What student and institutional characteristics affect test results?
- How do U.S. students/institutions compare with other nations' students/institutions?
- Are potential benefits worth the costs? At which levels?

# Opportunities and Potential Ahead for Focusing AHELO

- Growing international interest in developing international assessment instruments
- Potential benefits particularly for emerging higher education systems and institutions
- Useful to students and receiving institutions operating in global environment
- Can provide stimulus and leveraging to achieve more transparent learning outcomes and transferable skills

# Challenges and Limitations in Moving Ahead

- Need for clarity of focus and purpose
- Genuinely international instruments need to be developed
- Faculty and institutional ownership difficult but not impossible to achieve
- Distance/difficulty linking to improvements in teaching and learning—other supports needed
- Highly variable student motivation and institutional/cultural contexts
- National comparisons and international benchmarks may be prohibitively complex/costly