

**DIRECTORATE FOR EDUCATION  
INSTITUTIONAL MANAGEMENT IN HIGHER EDUCATION GOVERNING BOARD**

**Group of National Experts on the AHELO Feasibility Study**

**PROGRESS REPORT ON THE CONTEXTUAL DIMENSION**

**6th meeting of the AHELO GNE**

**Paris, 28-29 March 2011**

*This document was prepared by the ACER Consortium.*

*The AHELO GNE is invited to:*

- *TAKE NOTE of the progress report.*
- *COMMENT on progress as necessary.*

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## OVERVIEW

1. The AHELO Feasibility Study involves carefully integrated work that is designed to maximise efficiency and ensure successful project outcomes. AHELO's context instruments provide essential foundations for the political, practical and technical direction of the study, and integration across all testing strands.

2. Design of the contextual frameworks and instruments commenced in January 2011, building on 2008/2009 foundation work by OECD, the AHELO GNE and commissioned experts. This Module D Progress Report provides an update of early work undertaken between February and March 2011. This document provides background information that will be elaborated with a verbal report at the sixth AHELO GNE meeting being held in Paris on March 28 and 29, 2011.

3. Figure 1 provides an overview of Module C schedule and progress. As this shows, good early progress has been made. In this diagram 'C' stands for 'Completed'.

**Figure 1: Module D schedule and progress**

Phase	Activity	2011											
		1	2	3	4	5	6	7	8	9	10	11	12
Framework	Finalise methodology	C											
	Review of research		C	C									
	Audit existing resources		C	C									
	Framework development		C	C									
	Consultation and validation			C									
	Develop instrument specification												
	Evaluation and review of framework												
	Deliver final framework and specifications												
Instrument	Submissions from networks	C	C	C									
	Search for existing materials	C	C	C									
	Item development	C	C	C									
	Qualitative testing and revision												
	Small-scale quantitative test												
	Revise, validate and map items												
	Deliver instrument source versions												
	Develop coding guides	C	C	C									
	Review coding guides												
	Develop coder training materials												
Deliver coding guides and coder training materials													

## **MODULE MANAGEMENT**

4. The Module D team comprises the Centre for Higher Education Policy Studies (CHEPS) in the Netherlands, the Australian Council for Educational Research (ACER), and the Center for Post-Secondary Research (CPR) at Indiana University in the USA.
5. Discussions in 2010 with participating countries and experts affirmed the core nature of contextual assessment to all strands of AHELO. As detailed in the AHELO Assessment Design, as the only source of common data across the three testing strands the assessment of context provides a necessary foundation for most quality assurance, scaling and statistical analyses and fieldwork coordination.
6. Plans for the development of context instruments were drafted and presented at the AHELO GNE fifth meeting in October 2010. ACER also provided the OECD with work plans and costings for student, faculty and institution context instruments.
7. ACER negotiated a contract for Module D with the OECD, and subcontracts with CHEPS and CPR. ACER worked with OECD, Module D partners and the Module A team to prepare operational plans for development of the Contextual Dimension Framework and institution, faculty and student instruments. The Module D work plans are included as Appendix 1 in this document.

## **FRAMEWORK DEVELOPMENT**

8. *The Module D team will involve a wide array of stakeholders in developing a survey framework for the contextual dimension of the AHELO Feasibility Study. (Contract M09/57/4)*
9. The Module D team has begun drafting the Contextual Dimension Framework. As at early March 2011, producing this work has involved:
  - initial discussions during several Module D team meetings (via teleconference) in February 2011, yielding a structure for the framework and instruments;
  - review of relevant literature, including applied and policy research, GNE and other documents including the results of an earlier prioritisation of the contextual variables by the AHELO GNE prior to the launch of the AHELO Call for Tenders; and
  - an invitation to AHELO National Project Managers (NPMs) in late February 2011 to provide initial materials relevant to institutions and national systems.
10. The Module D team is working to produce a first draft of the Contextual Dimension Framework in mid March. The following consultations are scheduled for March and April 2011:
  - discussion at the AHELO NPM meeting scheduled for 29-30 March 2011 in Paris;
  - discussion at the AHELO Stakeholders' Consultative Group (SCG) meeting scheduled for 31 March 2011 in Paris;
  - a face-to-face meeting of the Module D team in Tokyo scheduled for early April 2011; and

- discussion at the AHELO Technical Advisory Group (TAG) meeting scheduled for 5-7 April 2011 in Tokyo.

11. Feedback from these consultations will be used to finalise the framework, and provide a basis for item and instrument development, validation, small-scale testing and delivery.

## INSTRUMENT DEVELOPMENT

12. *The Module D team will develop context survey instruments to identify factors that may help to explain observed learning outcomes of the target population. Three conceptually and psychometrically linked instruments will be developed: (1) the Student Context Instrument (SCI), to be administered alongside the Generic Skills, Economics or Engineering assessments; (2) the Faculty Context Instrument (FCI), to be administered to relevant teaching staff; and (3) the Institution Context Instrument (ICI), to be administered to institutional leaders in each participating institution. (Contract M09/57/4)*

13. The Module D team prepared specifications for the context items and instruments. This involved designing item specifications, developing protocols for operationalising the Contextual Dimension Framework, reviewing translation and adaptation contexts and requirements, and liaison with CAE to interface the online contextual instruments with the CLA testing platform.

## CONTRIBUTE TO PROJECT MANAGEMENT

14. *The Module D team will assist with broader aspects of the study's planning, implementation, analysis and reporting. Specifically, the Module D team will work closely with the teams leading other AHELO modules to maximise synergies across the different strands of work and ensure that the overall project is carried out on time and within budget. (Contract M09/57/4)*

15. As necessary and possible given the early stage of the work, the Module D team has been involved in overall management of the AHELO Feasibility Study, working closely with colleagues in other consortium partners. They are scheduled to be involved in two key meetings:

- Participating in the March 2011 meeting of the AHELO GNE; and
- Participating in the April 2011 meeting of the AHELO TAG.

16. The Module D team has also contributed to the revision of the AHELO Assessment Design and the drafting and revision of the AHELO Analysis Plan, as well as reviewing AHELO Reporting Guidelines. Contribution has been multifaceted and provided on an ongoing basis during the development and finalisation of these materials.

## **PROGRESS TOWARDS DELIVERABLES**

17. The Module D team is making good early progress on:
- The revised organising framework for the three context instruments;
  - The student survey, faculty survey and institution context instruments;
  - The report mapping the contextual survey items to the organising framework; and
  - Coding guides for the surveys instruments.

## APPENDIX 1: MODULE D WORK PLANS

### Statement of work

This Appendix describes work to develop three instruments for Module D, the Contextual Dimension of the Assessment of Higher Education Learning Outcomes (AHELO) Feasibility Study, and to undertake their small-scale validation.

The 'Module D team' consists of the Australian Council for Educational Research (ACER), the Centre for Higher Education Policy Studies (CHEPS) at the University of Twente in the Netherlands, and the Center for Postsecondary Research (CPR) at Indiana University in the United States.

The contextual information that will be collected from participating countries in the AHELO Feasibility Study includes information on student characteristics, institutional settings, teaching practices, and other characteristics of learning environments. Such insights will play a vital role in enhancing the capacity of the AHELO Feasibility Study to better understand how students and faculty engage and productively interact in increasingly diverse and internationalised higher education environments.

### Description of tasks

1. **Framework development:** The Module D team will involve a wide array of stakeholders (as detailed below) in developing a survey framework for the Contextual Dimension of the AHELO Feasibility Study by:
  - a. Building on development work already completed by the contracted contextual dimension experts and the prioritisation process carried out by the AHELO Group of National Experts (GNE).
  - b. Reviewing existing relevant research to further establish the relevance of the concepts to be addressed, to chart the technical characteristics of instruments in use, and to clarify and position the development approach.
  - c. Auditing existing context survey resources and practices, and compiling a database of relevant and available questionnaire items. This will focus on initiatives which are international, national and institutional in nature.
  - d. Through the audit, identify particularly innovative approaches to using survey and related assessment data for continuous quality improvement.
  - e. The Module D team will create a framework which:
    - i. Reflects the views of the participating countries as expressed in the prioritisation process as well as the thinking of leading experts in the field (including from the AHELO Stakeholders Consultative Group (SCG));
    - ii. Takes into account the characteristics of the target population;

- iii. Provides an overall definition of the key constructs included in the framework;
  - iv. Operationalises the constructs by defining the kinds of questions or other information sources that can be used to measure the selected constructs;
  - v. Reflects the relative importance of constructs and scales so that question inclusion can be decided and communicated to the various stakeholders;
  - vi. Identifies appropriate item characteristics; and
  - vii. Provides a template for mapping items to constructs.
2. **Instrument development:** The Module D team will develop context survey instruments to identify factors that may help to explain observed learning outcomes of the target population. Three conceptually and psychometrically linked instruments will be developed: (1) the Student Context Instrument (SCI), to be administered alongside the Generic Skills, Economics or Engineering assessments; (2) the Faculty Context Instrument (FCI), to be administered to relevant teaching staff; and (3) the Institution Context Instrument (ICI), to be administered to institutional leaders in each participating institution. The questionnaires will be designed for completion within 10 minutes, either on paper or electronically. The instrument development will involve:
- a. Following a number of general design considerations to enhance the power of measurement and ease of administration. These will align with the standards set for international data collections, characteristics of large-scale existing context assessments and link with other survey design specifications recorded during the background audit.
  - b. Drawing on the item inventory compiled in the framework development which will contain the most advanced items in use in relevant existing instruments.
  - c. Creating new material that will be workshopped within the team, with the AHELO Technical Advisory Group (TAG), and with National Project Managers (NPMs) from all participating countries in the AHELO Feasibility Study.
  - d. Developing composite scales and scoring rubrics, where possible and desirable.
  - e. Mapping all potential items against the established framework.
  - f. The completed instruments will be designed to:
    - i. Measure the target constructs;
    - ii. Have high levels of face, content and construct validity;
    - iii. Provide reliable and precise measurement of target constructs;
    - iv. Be efficient to administer, analyse and report on;
    - v. Align with and enhance existing instruments and practices; and
    - vi. Provide a basis for ongoing research and development.

3. **Item validation:** The Module D team will liaise with the TAG to establish the validity of items and decide on a suitable configuration of items that best meets the over-arching goals of AHELO. Item validity will be assessed:
- a. Qualitatively, through:
    - i. Focus groups; and
    - ii. Cognitive interviews.
  - b. Quantitatively via a small-scale trial (involving a small number of institutions and respondents in countries willing to participate in this facet of the validation) and subsequent psychometric analyses to review, as possible given sample size, matters such as:
    - i. Links with population marker variables;
    - ii. Item descriptive statistics;
    - iii. Links between items;
    - iv. Coding (and scaling for any composite variables);
    - v. Construct (internal, convergent and divergent) validity and concurrent validity (where possible);
    - vi. Reliability (for any composite variables)
    - vii. Response category performance;
    - viii. Reliability generalisability;
    - ix. Test processes for standard error calculation;
    - x. Planned and unplanned item non-response; and
    - xi. Response interference effects.
  - c. In addition, the NPMs will play an important role in developing and validating the context instruments. Key facets of this include:
    - xii. Supplying background materials to inform conceptual and practical designs for the instruments;
    - xiii. Consulting with institutions to contextualise and validate proposed indicators;
    - xiv. Supplying and reviewing items and instruments;
    - xv. Assisting with qualitative and quantitative validation activities;
    - xvi. Reviewing final instrumentation prior to deployment;
    - xvii. Assisting with the collection and verification of existing country-specific data;

- xviii. Contributing to data entry, verification and coding; and
  - xix. Reviewing results and reports.
4. **Contribute to project management:** The Module D team will assist with broader aspects of the study's planning, implementation, analysis and reporting. Specifically, the Module D team will work closely with the teams leading other AHELO modules to maximise synergies across the different strands of work and ensure that the overall project is carried out on time and within budget.

### **Role and responsibilities**

The core staff members (and organisational affiliations) involved in Module D include:

- Australian Council for Educational Research (ACER), Australia:
  - Sarah Richardson – policy analysis, research advice and support;
  - Hamish Coates – research advice and support; and
  - Tim Friedman – technical support.
- Centre for Higher Education Policy Studies (CHEPS), The Netherlands:
  - Jon File – Director, Module D team;
  - Frans Kaiser – framework and instrument design;
  - Liudvika Leisyte – framework and instrument design; and
  - Don Westerheijden – framework and instrument design.
- Center for Postsecondary Research (CPR), USA:
  - Alexander McCormick – policy analysis, instrument design;
  - Bob Gonyea – design of student and faculty instruments; and
  - Tom Nelson Laird – design of faculty instruments.

Staff in the Module D team will attend meetings of the AHELO GNE, and TAG, when requested by the OECD Secretariat, and when required of NPMs from Participating Countries.

### **Deliverables and schedule**

The Module D team will deliver:

- The revised organising framework for the three context instruments;
- The student survey, faculty survey and institution context instruments;

- The report mapping the contextual survey items to the organising framework; and
- Coding guides for the surveys instruments.

The table below outlines the schedule of work. In the tables below, black boxes indicate deliverables.

Phase	Activity	2011											
		1	2	3	4	5	6	7	8	9	10	11	12
Framework	Finalise methodology	■											
	Review of research		■	■									
	Audit existing resources		■	■									
	Framework development		■	■	■								
	Consultation and validation			■	■	■	■						
	Develop instrument specification						■						
	Evaluation and review of framework						■	■					
	Deliver final framework and specifications							■					
Instrument	Submissions from networks	■	■	■	■								
	Search for existing materials	■	■	■	■								
	Item development	■	■	■	■								
	Qualitative testing and revision				■	■							
	Small-scale quantitative test				■	■							
	Revise, validate and map items					■	■	■					
	Deliver instrument source versions							■	■				
	Develop coding guides	■	■	■	■	■	■	■	■				
	Review coding guides							■	■	■			
	Develop coder training materials							■	■	■			
	Deliver coding guides and coder training materials							■	■	■			