

## Informal Meeting of OECD Education Ministers on Evaluating the Outcomes of Higher Education Tokyo, Japan

January 11-12, 2008

## **Report of the Canadian Delegation**

## **Head of Delegation**

The Honourable Diane McGifford Minister of Advanced Education and Literacy, Manitoba

## **Members of Delegation**

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- The Informal Meeting of OECD Education Ministers on Evaluating the Outcomes of Higher Education took place on January 11-12, 2008, in Tokyo, Japan. The Canadian delegation was headed by the Honourable Diane McGifford, Minister of Advanced Education and Literacy for Manitoba.
- The main objective of the meeting was to facilitate an exchange of ideas around a multitude of issues surrounding the question of evaluating higher education systems and arrive at a mutually agreeable set of conclusions regarding the feasibility of creating instruments suitable for evaluating higher education across OECD member countries.
- In his opening remarks, Aart de Geus, OECD Deputy Secretary General, noted that higher education has grown from the reserve of a privileged few to a significant driver of economic growth. Despite its importance, however, the different outcomes of education are not always well understood. Mr. de Geus pointed out that various countries already supported initiatives to evaluate the outcomes of higher education, some of which are not generally accepted, while others are characterized by technical complexity. He concluded that without evaluation there can be no learning or improvement and that the meeting was meant to give participants an opportunity to learn from each other first before proceeding further.
- Mr. Morio Ikedo, Senior Advisor of the Shiseido Corporation, started his presentation by speaking about the explosion of knowledge in the 21<sup>st</sup> century and the accompanying dramatic changes in academic systems. He particularly referred to such catalytic developments as globalization, advancement of IT, climate change, resource depletion, and demographic problems, all of which resulted in the need to integrate knowledge and wisdom globally to find solutions for sustaining humanity.
- Speaking about the paramount role of education in resolving an array of issues that societies face, Mr. Ikedo stressed the necessity to strike a balance between universality on one hand and individualism on the other. As an example, he spoke of the Education Rebuilding Council launched in Japan in 2006. This initiative, aimed at the radical reformation of colleges and graduate schools, stresses the importance of autonomy and symbiosis in education while ensuring a solid link between education and a changing economic environment through direct business involvement.
- Following the opening presentations, the discussion sessions explored several main issues: societal expectations of higher education; national experiences with evaluating the quality of higher education; existing national and international comparisons (merits and disadvantages of university ranking); and possibilities for assessing higher education learning outcomes. Below is a summary of the main discussion points.

## Societal expectations

• This discussion focused on societal expectations of higher education and whether those expectations are being met.

- Several other countries immediately expressed strong support for OECD's proposal to introduce an international evaluation of the outcomes of postsecondary education. These countries noted that the unprecedented expansion in the number of students and institutions is leading to increased pressure for countries to demonstrate the results of their investments. Mr. Lars Leijonborg, the Swedish Minister of Education, emphasized that increased autonomy must be accompanied by strong evaluation.
- The head of the Canadian delegation, Diane McGifford, spoke about the importance of striking a balance between institutional and societal expectations. More specifically, in the Canadian context, Aboriginal populations put a particular emphasis on the spiritual outcomes of learning. Therefore, before evaluating outcomes of education, Minister McGifford urged that the expectations of various stakeholders be clearly articulated.
- Dr. Peter Frankenberg, the German representative, stressed the diverse expectations and outcomes of higher education knowledge, intellect, creativity that make it difficult to evaluate.
- Malcolm Brown of HRSDC noted the knowledge economy's emphasis on continuous learning. Within that context, Mr. Brown pointed out that expectations are different for different types of learners (e.g., adult learners have different expectations from young people).
- Ms. Marie E. Orlowska, the Polish representative, spoke of the growth of higher education in Poland and the appearance of various private institutions. In light of the growing diversity, expectations are likewise diverse, and evaluation of these institutions should be different from the evaluation of older, better-established institutions.
- Other participants made references to the variety of educational institutions in their countries and noted that different aspects of educational management, such as curriculum design and student selection, must be taken into account when designing evaluation.
- Marshall Smith, Education Program Director at The William and Flora Hewlett Foundation, spoke of the need to consider the multiple aspects of higher education, such as increased knowledge base, occupational training, personal development, and ability to think critically.
- Finally, the importance of considering international values in the overall context of evaluation was discussed in light of the current trends of internationalization of education and the increasing number of foreign students at universities.

### National experiences with evaluating the quality of higher education

- Two sessions of the meeting touched on a variety of national experiences with evaluating the quality of higher education institutions. Within the general context of the discussion, other relevant issues, such as international rankings, were also debated.
- In her capacity as the chair of Session 2 on the topic "National experiences with evaluating the quality of higher education," Minister McGifford spoke of the importance and challenges of evaluating the quality of higher education outcomes.
- Participants presented examples of their national evaluation mechanisms, explaining challenges and successes they have faced. Evaluation systems including self-examination, self-evaluation by universities, evaluation by certified organizations, as well as evaluation by national corporations, were among some of the mechanisms participants discussed.
- Germany's Peter Frankenberg spoke of Germany's Excellence initiative, a joint program of German federal and state governments to support excellent research and training at German universities (see Appendix I).
- Another example of a national initiative was Australia's Learning and Teaching Performance Fund. This program measures outcomes of graduate student success in employment. It has the advantage of promoting better teaching and learning practices at universities; however, making the system transparent and comprehensive continues to be a major challenge.
- A major evaluation program currently in place is the Tuning Project (http://www.tuning.unideusto.org/tuningeu/), run by the European Commission. It compares education structures by outlining reference points for curricula in 30 subject areas. Several participants stressed the usefulness of Tuning as a potential model for an OECD-wide assessment tool.
- The discussion also touched on the issue of existing international rankings. Among the concerns expressed were the indicators used for these rankings, including the emphasis placed on research indicators, and the negative effect of rankings on institutional behaviour.
- Uniformity caused by evaluation was also a point of concern, as rankings tend to measure the same variables, thus impeding diversity. The European Commission is currently testing an alternative ranking system with more focus on diversity, including more variables. In addition, a concept of "my ranking" is being considered for individuals to compile their own ranking based on the attributes they consider important. A pilot project is being conducted with a university in Germany.

## Feasibility study

- The concluding session of the meeting focused on the possibility of measuring learning outcomes of higher education.
- To begin this session, Marshal Smith presented the main findings of the OECD Expert Group meeting in Seoul, Korea, in October 2007 on the design and implementation of a feasibility study on evaluating higher education outcomes. The issues for the meeting were drawn from two earlier expert meetings.
- The experts concluded that the feasibility study should assess whether reliable crossnational comparisons of higher education learning outcomes are scientifically possible and whether their implementation is feasible.
- Further elaborating on the content of such a feasibility study, Mr. Smith explained that three countries would be the minimum number required to achieve a valid assessment. Up to six countries could be covered in order to provide additional information. It was also suggested that three to five institutions per country would be sufficient. In addition, the experts agreed that (electronic) engineering, economics, and biotechnology were the most interesting subjects for a feasibility study.<sup>1</sup>
- Countries sought more information on the methodology of the study and urged the consideration of the full range of existing approaches to evaluation and assessment for the establishment of the instruments of the feasibility study.
- Several countries expressed concern regarding the need to account for differences in language and culture, as well as the need to initially select comparable institutions and fields. Selecting social disciplines as part of the study was also recommended.
- While some countries, including Austria, strongly opposed the study, others such as Spain, Sweden, and Korea were supportive and expressed interest in including their institutions in the feasibility study.
- In conclusion, countries urged OECD to produce a description of what the initiative would imply for higher education institutions and policy makers. Further steps will be decided based on the outcomes of the feasibility study.

## **Canadian contribution**

• Members of the Canadian delegation held a delegation meeting prior to the start of the formal meeting session in order to discuss Canada's key messages and position on the issue at hand.

<sup>&</sup>lt;sup>1</sup> For detailed description of the Expert Group findings, see Appendix II.

- The head of the delegation shared with ministers and other delegates the complexity of higher education in Canada due to the great diversity of higher education institutions and numerous expectations from stakeholders.
- A particularly invaluable platform for discussion occurred between Canada and Germany, which have similar decentralized education systems, and share similar concerns with regard to the potential implications of the OECD initiative.
- Canada's main position on the OECD initiative was that the development of an assessment tool for higher education across OECD countries was fraught with technical difficulties. Furthermore, any tool intended to rank Canadian institutions would be unacceptable to Canadian education authorities. Canada could accept the development of an assessment tool that could be used as a guide by interested countries and institutions. Canada had no objections to OECD undertaking a feasibility study but cautioned against reviewing only one approach to the evaluation of outcomes rather than looking at a broader range of existing approaches.
- Given Canada's reservations, more discussion will be necessary among Canadian education authorities once more information becomes available from OECD.

## Challenges

• Participation of the Canadian delegation in the meeting, despite the overall success, was complicated by some protocol issues with federal delegates that were not resolved beforehand.

## **Further steps**

- The CMEC Secretariat will inform ministers of education of the feasibility study.
- At the upcoming meeting of ministers of education in February 2008, the Honourable Diane McGifford will make an oral report outlining the main issues and seeking ministers' feedback on the initiative.
- A more substantial discussion around the feasibility study will occur during the next EPC/CERI meetings in April 2008, at which time a more concrete Canadian position will have to be articulated based on the input received from ministers.

On behalf of the Canadian delegation, CMEC would like to thank Ambassador Joseph Caron and the embassy staff for their assistance in preparation for the meeting and their warm hospitality.

## Appendix I: The Excellence Initiative in Germany

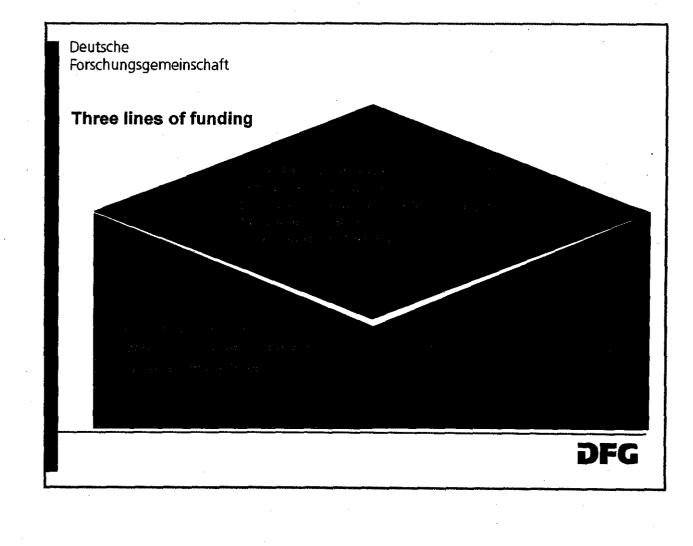
Appendix II: Assessing Higher Education Learning Outcomes: Summary of the Third Meeting of Experts

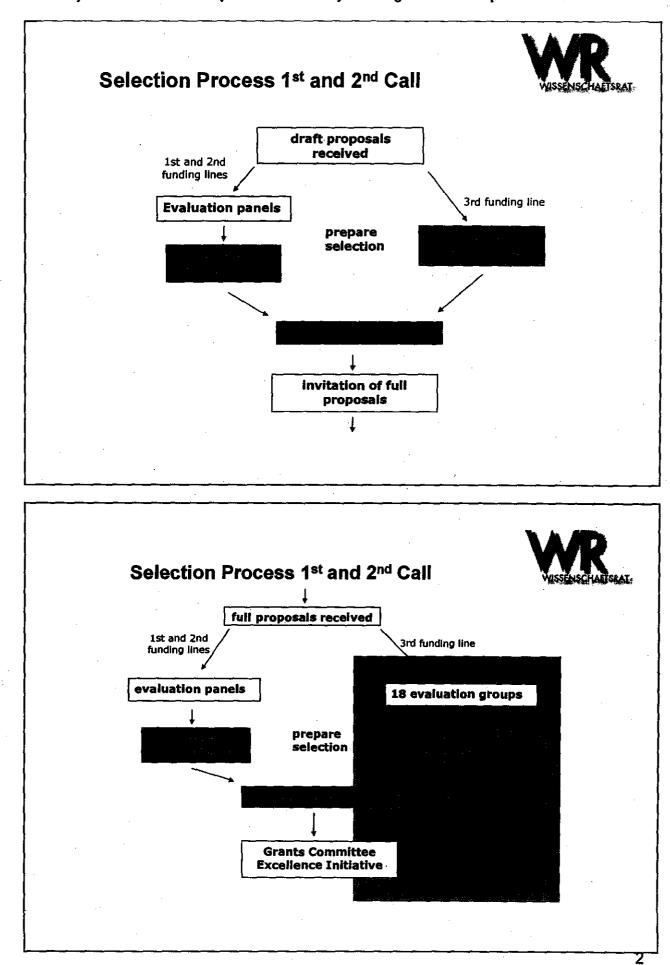
Professor Dr. Peter Frankenberg Minister of Science, Research and the Arts Baden-Württemberg

#### The Excellence Initiative in Germany

Informal Meeting of OECD Ministers of Education Tokyo, January 2008

- The Excellence Initiative is a program of German federal and state ("Länder") governments to boost excellent research and training of junior researchers in German universities
- > The program started in 2005
- The federal state (75 percent) and the states make 1.9 billion euros available in total
- Until now, there were two calls (continuation of the program is likely); funding decisions were made in October 2006 and October 2007
- > The program includes three lines of funding:

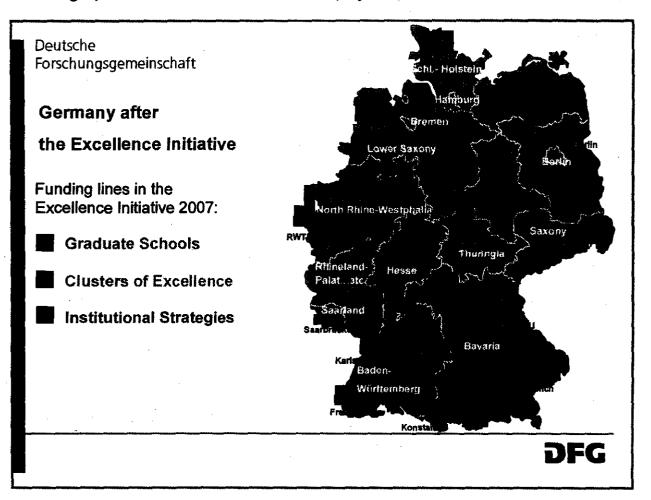




> Projects were chosen by means of a very thorough selection procedure:

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#### Geographical distribution of the funded projects:



- > Most important features and benefits of the Excellence Initiative:
  - Excellence is promoted on the level of sub-units of a university and on the level of whole universities
  - Stress on innovative, future-orientated concepts
  - Funding decisions are based on strict peer review (15% success rate); regional distribution of grants was no relevant criterion; professional selection procedures were organized by the Deutsche Forschungsgemeinschaft (German Research Foundation) and the Wissenschaftsrat (German Science Council)
  - High degree of consensus between specialists and policymakers on the funding decisions
  - The program has stimulated strategic thinking and interdisciplinary cooperation within the universities
  - The Excellence Initiative promotes co-operation between universities and nonuniversity research institutions (e.g., Karlsruhe Institute of Technology, KIT)
  - Competition among universities increases for the benefit of the whole system
  - Universities make stronger efforts to define their individual research profiles
  - Excellent research units in German universities have become more visible and receive additional funding
  - The program has provided new opportunities for the best German universities to co-operate with top universities outside of Germany

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# ASSESSING HIGHER EDUCATION LEARNING OUTCOMES SUMMARY OF THE THIRD MEETING OF EXPERTS

Seoul, Korea 26-27 October 2007

This summary of the third meeting of OECD experts is provided for information.

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#### ASSESSING HIGHER EDUCATION LEARNING OUTCOMES

#### SUMMARY OF THE THIRD MEETING OF EXPERTS

#### Introduction and summary

1. The main purpose of the meeting on the assessment of higher education outcomes in Seoul, Korea on 26-27 October, was to move forward work on this OECD initiative by discussing the design and implementation of a feasibility study. The issues for the meeting were drawn from the two earlier expert meetings.

2. The structure suggested for a feasibility study by the OECD and the Educational Testing Service (ETS), was broadly endorsed by the experts. On detailed matters of implementation the experts reached agreement on some points while others remain to be resolved and decided on by the OECD. The feasibility study should aim to provide both proof of concept (by testing the scientific approach to assessment) and an indication of practicality (by trying out the assessment in a sample of countries and institutions). For convenience this record recapitulates some information from the earlier meetings.

#### **Communication with stakeholders**

3. The experts agree that assessing higher education outcomes is of potential importance to many stakeholders and that the values of such an assessment should be communicated. An assessment would serve individuals to make better informed choices; assist employers seeking to assess the value of qualifications; help higher education institutions seeking to understand their comparative strengths and weaknesses; and inform policy makers seeking to quantify stocks and flows of high level skills and to assess the contribution of institutions.

4. The experts recommended that the work of assessing higher education outcomes should be viewed as a process. That process includes not only the design and implementation of the study, but also communication with stakeholders, to build up an acknowledgement of the assessment and an understanding of its value. The experts therefore advised that the OECD should inform policy makers, institutions and other stakeholders further on the study to provide a deeper knowledge of its purpose, the gains to be made and the practicalities of implementation.

## The feasibility study

5. The two purposes of the feasibility study should be:

- to test whether reliable cross-national comparison of higher education outcomes is scientifically possible
- to test whether a valid assessment can be practically implemented within institutions.

6. The experts advised that given the interest and momentum for an assessment of higher education the proposed time schedule for the feasibility study should be kept. The proposed feasibility study was not to be regarded as a pilot study. Fuller field trials would be required in a subsequent stage.

7. It was also agreed by the experts that for in order to test the assessment effectively, the selection of higher education institutions participating in the feasibility study should be diverse and not homogeneous.

8. The experts agreed to the proposal for forming expert committees for the further development of assessment instruments and the design and implementation of the feasibility study. They also suggested the OECD would define the tasks for the committees and set the framework within which they would conduct their work.

#### The assessment - Cultural and lingual challenges in measuring outcomes

9. The experts discussed at length the challenges of capturing higher education outcomes in a way which took account of cultural and linguistic differences. The experts agreed that the feasibility study should cover several quite different countries and include at least three languages.

10. To find the common elements of skill and knowledge in higher education will be one of the most important objectives of the feasibility study. It was suggested to define the desirable outcomes of higher education (skills and knowledge), in a group with representatives of different cultures, to find the common characteristics and a cross-national consensus. The importance attached to transversal skills such as critical thinking and problem solving might not be the same in all cultures.

#### Constructing the assessment instrument

11. The experts discussed options for construction of an assessment for a feasibility study: to construct an entirely new instrument for the assessment: to 'internationalise' one of the existing instruments (for example the Collegiate Learning Assessment); or to compose an instrument by selecting items/questions from a pool of existing instruments. None of these approaches had unanimous support: it was considered by the experts that constructing a new instrument would take a long time, that internationalising an existing instrument has its difficulties, and that by mixing existing instruments one might lose the core qualities of the separate instruments.

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12. The experts agreed however that it would be possible to have different approaches for the feasibility study and a subsequent main study. While the instrument for the feasibility study needs to answer whether it is possible to measure and compare cross-national outcomes of higher education, it could perhaps be constructed from existing instruments. For a future fully-fledged study there would be time available to construct a new, or partially new, instrument.

#### Number of countries/languages and institutions in feasibility study

13. The experts agreed that three countries would be the minimum number required for a valid feasibility study to evaluate the comparability of the assessment. Up to six countries could be covered in order to provide additional information. It was also suggested that three to five institutions per country would be enough to conduct the feasibility study. In considering whether to include more countries or institutions in the study, the information gain should be put in relation to the increasing complexity and cost. The criterion should be what was necessary for the successful testing of the concept.

#### Subjects in feasibility study

14. The experts agreed that (electronic-) engineering, economics and biotechnology were the most interesting subjects for a feasibility study. It was agreed that one subject could be enough for the purpose of a feasibility study and that two subjects could be included if costs and practical concerns would allow it. Three was not necessary. It would be important to choose a subject (or subjects) of interest to institutions, governments and organizations. Pros and cons of the different subjects were put forward but no subject was singled out as more relevant or suitable than the others.

#### Sampling of students

15. The experts pointed out the importance of a strict regulated sampling of students to achieve comparability. Planning and organizing this was left to the OECD and the committees.

## **Timing of testing**

16. The experts agreed that the best time for the assessment would be towards the end of the student's first (Bachelor) degree (but not during final exams) and at the end of the academic year. If conducted once the programme was concluded there would be difficulty in motivating students to participate. Because of the national differences in academic year, experts agreed that a window of two months of testing in would be precise enough, still giving flexibility to the institutions. Although the timing in the academic year is not the most important aspect of a feasibility study, it makes a fairer comparison if the timing is as equal as possible. Also, it is part of the feasibility study to test the implementation, which also includes the timing of the assessment.

#### **Duration of testing**

17. A reasonable time length for the assessment for a student was estimated by the experts to be 1.5 to 3 hours. Two hours was agreed to be the most reasonable duration for individual students.

18. Using a matrix sampling approach would permit total test items exceeding this duration to be administered. No student would take the full assessments. Different sections of the assessment would be given randomly to students. (For example, in a test which is divided into 13 half-hour sections, giving a total testing time of 6.5 hours, each student would take 4 half-hour tests, giving a total of 2 hours per student). In the end, the assessment would be summarized to give the complete results per institution. Further it was suggested that the assessment should be held before or after a class – to make participation as easy as possible for the students, especially those who work part time. Using matrix sampling has implications on how to give results back to the students. This is considered below.

#### **Computer delivered assessment**

19. The experts recommended that the assessment should be computer delivered. It was made clear that this would be an irrevocable decision - it would not be possible to change to paper delivered assessment once a computer delivered study commences.

20. For comparability reasons it is essential to be certain that it is the sampled student that takes the assessment, because the assessments results will be associated to background information on the students. To ensure that it is the sampled students who is making the assessment it would be an advantage if the assessment would take place at the institution, for instance in a computer lab.

#### Motivating institutions to participate

21. In the opinion of the experts the information that the feasibility study would give institutions on how to improve their own teaching and learning processes should be an appealing incentive for them to participate. While some institutions would like to participate to *show* how well they do, some would like to participate to *know* how well they do. For the purpose of the feasibility study it would not be necessary to reveal the results of the individual institutions unless they so agreed. However, for a future fully-fledged study anonymity would be inappropriate. Whichever the OECD decides on for the feasibility study, it would be important to make the conditions clear at the beginning and not have them changed along the way.

## Motivating students to participate

22. Motivating students to participate is a key to having a successful feasibility study. There are two aspects to this: first to have them participate in sufficient numbers, and second to insure they make the effort to perform their best in the assessment. The experts suggested that providing information on the study to the students would be essential to motivate them. Motivating the students was estimated by the experts to be harder in the starting up phase. Once the assessment is established, motivating students is likely to be easier. Experience from other assessment shows that it is more powerful and motivating if the institutions themselves contacts the students about the feasibility study by a letter or a phone call, than if for example the OECD were to contact the students.

23. The experts conceived it as important to give individual feedback to the students, to give back the results on their performance in the assessment. Because of the matrix sampling design of the assessment it would not be possible to give the entire assessment score as comparison (since each

student only does a selection of the entire assessment). The experts still deemed it important to give the corrected assessment results to the students. It was discussed whether some kind of scoring interval could be provided to the students to enable a kind of rough comparison to others how performed on the same sections of the assessment, perhaps on institutional or country level. It was suggested by the experts to be sensitive about comparisons in order not to discourage any students.

24. Other aspects of relevance to students' motivation are the length of the assessment and when it is scheduled.

## Next steps

25. The experts agreed that the institutions should be the main level for analysis. They discussed whether and how it would be possible to present results by faculty or department. The size of the study and its design will determine what is possible in this aspect.

26. The OECD will continue working to prepare for the feasibility study taking account of the advice given. The experts will be briefed on the progress of the work and might be contacted for future advice via e-mail but it was not expected that this group would meet again in this form. A summary report of the meeting will be prepared and made public.

27. Information material on the initiative would be prepared by the OECD and distributed to the experts for use in communications in their countries. This would probably be in the form of a PowerPoint presentation which should contain examples of assessment items.

28. The OECD is to produce a distinct description of what the feasibility study implicate to higher education institutions and policy makers. This will be distributed before contacting institutions asking their interest in participating in a feasibility study.

29. It was noted that the chair of the meeting, Marshall Smith, would report to the informal meeting of OECD Education ministers in Tokyo in January 2008 on progress.