Introduction

1. The OECD is working on the development of an assessment of higher education learning outcomes that would allow comparison between higher education institutions across countries. Three meetings of invited experts have been held and we are now in the process of planning a feasibility study to determine whether such a comparison is scientifically and practically possible.

Aim

2. The aim is to assess what undergraduate degree students know and can do in order to provide better information to higher education institutions, governments, and other stakeholders including students and employers. The motivation is that this information could contribute to higher education institutions’ knowledge of their own teaching performance, and thereby provide a tool for development and improvement.

Background and rationale

3. The rapid growth in higher education - number of students and institutions - and its increasing internationalisation, has led to attention to its quality and relevance. OECD Ministers of Education meeting in Athens in June 2006 asked OECD for advice on how better to understand and evaluate the various dimensions of quality in higher education.

4. Existing international comparisons of higher education institutions focus on research, measured by proxies such as the number of published articles, citations, and Nobel Prize winners, or on resource inputs. There is no reliable comparative information on what students have learned or can do as a result of their time at university. At the same time, rankings - whether national or international - are clearly having an impact on public opinion, institutional decision-making and individual choices.
5. Given the importance of higher education for human capital development, its cost to public finances and to individuals and their families, and the needs of business and industry, the proposal is to explore the scope for developing a measure that gives due weight to teaching and learning.

6. Examples of national and regional drivers for new and complementary information on higher education outcomes include:

- In Europe: the Bologna Process; the development of learning outcomes; the ‘Tuning’ project;
- In the USA: the Spellings Commission and the ensuing focus on issues of accountability and accreditation; and the development of new assessment initiatives including the Collegiate Learning Assessment; the National Survey of Student Engagement; and the Postsecondary Achievement and Institutional Performance Pilot Program funded by the Department of Education to aid in the development of methods and the implementation of mechanisms to measure, assess, and report on postsecondary student achievement and institutional performance outcomes.
- In Japan and Korea: concern about the quality and relevance of higher education in a difficult demographic situation;
- In China: demand from consumers and those advising them for reliable information about the quality of programmes offered globally;
- In Australia especially: the development of an education export industry;
- In the United Kingdom especially: the growth of league tables and rankings published by media groups based on publicly available data which consumers find difficult to interpret.

Challenges to address

7. Measurement of educational outcomes is complicated and controversial. It is of crucial importance that an assessment has both reliability and validity. Constructing an assessment that is valid across institutions, cultures and disciplines presents numerous scientific and practical challenges. Amongst these are how to take account of:

- the diversity of institutions: from specialised to comprehensive in discipline coverage; international in reach or more locally oriented;
- differences between national systems of higher education: relations between government and institutions; the proportion of students entering higher education;
- the absence or presence of selection in the system or certain institutions, in order to assess not only the performance of students but also the value added by institutions;
- variations in the duration and content of programmes;
- cultural and linguistic diversity
- the learning outcomes in terms of skills and knowledge that institutions and programmes are intended to deliver.
8. Practical and operational challenges that also have to be addressed are how to motivate students and institutions to participate and ensuring fair assessment of the results.

**Progress to date**

9. The first stage has therefore been to consult a number of international experts in seeking to define the scope of the task. Three meetings have been held in Washington (April), Paris (July) and Seoul (October). The Washington meeting was primarily about the usefulness and desirability of an OECD international assessment of higher education learning outcomes (EDU(2007)8), the Paris meeting focused on the conceptual possibility (EDU(2007)9), and the Seoul meeting concerned how to move from possibility to feasibility (EDU(2007)14). Summary records of these meetings have been prepared and made public.

10. The work of the experts was presented to an informal meeting of OECD Education Ministers in Tokyo in January 2008. The initiative attracted considerable attention and the Chair’s Summary of the meeting is attached at Annex 1.

**A feasibility study**

11. The main conclusion of the experts meetings is that while it might be both desirable in terms of public policy and theoretically possible to assess and compare central components of education outcomes it would be necessary to conduct a feasibility study to test this proposition before undertaking any more systematic assessment.

12. The feasibility study would have to do two things:

- test the science of the assessment - whether it is possible to devise an assessment of the outcomes of higher education which enables us to make reliable statements about the performance/effectiveness of learning in institutions of very different types, and in countries with different cultures and languages;

- and test the practicality of implementation and of motivating institutions and students to take part in such a test.

13. It is anticipated that the assessment will be based on a written test of the competences of students who are almost at the end of a Bachelor programme. Because of the national differences in academic year, a window of testing time would need to be allowed, giving flexibility to the institutions. It will also need to be ensured that the timing does not coincide with major exams. Further, the assessment should be computer delivered and the comparison should be on institutional level rather than system level.

14. Expert advice is that the feasibility study should look both at transverse critical thinking and at the problem solving skills that are necessary for success in both academic and business contexts, combined with a subject specific test relating to one or at most two disciplines. To test the latter the OECD should seek advice on one or two areas – likely candidates are engineering and economics, although bio-technology is also a possibility.

15. To provide a reliable test of the theory and the practicality of the concept, the OECD should involve a relatively small number of voluntary institutions in each of a small number of countries - maybe four to six. Participating institutions would need to be sufficiently different to provide a cross-section of the sector, even though they will not be fully representative of the diversity of the sector. The sample is
likely to include some prominent institutions and some which are less known, and where appropriate a mix of private and public institutions.

16. The experts underlined that getting the “science for the assessment” right would critically determine the credibility of the exercise. An paper describing some current initiatives, which was prepared for the experts’ group, has recently been published as OECD Education Working Paper no.15 Assessment of learning outcomes in higher education; a comparative review of selected practices.

Developing the assessment instrument

17. During the next few months the OECD will be taking forward the development of the assessment instrument. This is a crucial step in the process and will involve further discussions with testing experts world-wide. It will be necessary to establish new experts’ working groups or Committees for this. Experts have reviewed the various initiatives taken in countries and were impressed with the approach taken by the Collegiate Learning Assessment (CLA) developed in the United States. As with PISA the direct assessment of student knowledge and ability will be complemented by contextual information which will then enable policy- and practice-related conclusions to be drawn.

18. Some of the central issues this new group of experts would be dealing with are how to meet the different interests of the stakeholders; whether to build the assessment from an existing instrument or construct a new one; how to define and operationalise the desirable outcomes of higher education (skills and knowledge); how to sample students and how to present the results.

Timing and next steps

19. Following the Tokyo meeting the OECD is now ready to start detailed work on the feasibility study. We would expect to have the results from this in time to inform decisions next steps by the end of the 2009-10 biennium.

20. A Senior Survey Manager post has been advertised; the successful candidate’s first tasks will be to secure funding for and institutional commitment to the feasibility study, and to take forward the development of the assessment instruments.

Funding and staffing

21. The cost of the feasibility study will be substantial. The Senior Survey Manager post is funded from available resources but the bulk of the money remains to be raised. We will be seeking voluntary contributions from the countries involved in the feasibility study and will also seek support from Foundations for some of the development work.

Communication

22. OECD is engaging with a wide range of stakeholders (officials, institutions, media, students) in communicating the purpose and practicalities of the initiative. Interest is high and although the issues are complex the response from the sector is generally supportive. There have been a number of enquiries from countries and institutions that would like to participate in the feasibility study.

Governance and management

23. The support of both governments and institutions is necessary for the success of this initiative. Both the unit surveyed and the unit of analysis will be institutions, and no system-level analytical work is
foreseen. Some associations of universities have made clear their concern that an assessment would be used as an accountability or ranking tool rather than as a spur to institutional improvement. For these reasons it is proposed that the management of the feasibility study be placed under the immediate supervision of the Governing Board of the OECD Institutional Management in Higher Education (IMHE) Programme which brings together both Governments and institutions. This mechanism allows countries which are not directly involved in the feasibility study to influence decision-making and to monitor progress.

24. The IMHE Governing Board would, in accordance with the principles governing OECD work on education, report on the conduct and outcomes of the feasibility study to the Education Policy Committee which would be the body responsible to the Council for taking decisions about whether and how to proceed with the work once the feasibility study was complete.
ANNEX

INFORMAL OECD MINISTERIAL MEETING ON EVALUATING THE OUTCOMES OF HIGHER EDUCATION, TOKYO, 11-12 JANUARY 2008, CHAIRRED BY KISABURO TOKAI, MINISTER FOR EDUCATION, CULTURE, SPORTS, SCIENCE AND TECHNOLOGY, JAPAN

CHAIR’S SUMMARY

Ministers from OECD countries met for an informal discussion on evaluating the outcomes of higher education. In an opening presentation, Morio Ikeda, of the Shiseido Corporation, emphasised the varied and demanding expectations that society has of higher education institutions and systems in the twenty-first century, and the need for OECD countries to respond. OECD Deputy Secretary-General Aart de Geus referred to the increasingly significant role of higher education as a driver of economic growth and the pressing need for better ways to value and develop higher education and to respond to the needs of the knowledge society. I emphasised the opportunity that lay before us to pursue reform so as to focus higher education policy more on quality and not just quantity.

In discussion we:

- Noted that higher education is expected to produce a range of outcomes - basic research, technology transfer, the conservation and communication of culture, education for young – and not so young - students, and engagement with wider society – efficiently, fairly and to a high standard; and that Governments and other stakeholders have therefore been turning increasingly to evaluation as a way to meet this challenge;
- Exchanged experiences on evaluating the quality of education and research through self-evaluation, peer review and third party evaluation, as well as ideas on how to maximise the benefit of evaluation while acknowledging the challenges of assessing concepts such as innovation and learning
- Agreed that associating the outcomes from evaluation with incentive structures for institutions, including the provision of additional funds, can be a powerful lever for quality assurance and quality improvement and foster competition among institutions, while noting that it may lead to increasing
disparity within countries and that there are significant challenges for policy to encourage improvement among institutions at the lower end of the performance spectrum.

- Underlined the importance of improving the information base for the evaluation of higher education outcomes and the need to take account of variations in student aspirations, local labour-market contexts, the mission of institutions and the composition of their student intake.

- Welcomed the Berlin Principles as a possible framework for the conduct and development of rankings of higher education institutions, and underlined that rankings and international ‘league tables’ are only as valid as the information on which they are based and can lead to distortions in institutional behaviour.

- Agreed that it was less problematic to evaluate research outputs, as the immediate outcomes of institutional performance, than educational outcomes that, ideally, would incorporate aspects of labour-market and social outcomes which become apparent only in the subsequent life of graduates, but considered that the bias in the information base of existing rankings towards research outcomes could detract from efforts to improve educational performance.

- Agreed that evaluation could only be effective if it was linked to consequences for institutions and individuals and that, because the stakes are high for potential students and their employers, governments and other stakeholders should pursue and promote their efforts to provide reliable timely information on outcomes and to make this public, noting that such efforts could improve the quality of the evaluation and ranking of higher education institutions by evaluation agencies and external observers in the media or elsewhere.

- Debated the extent to which an evaluation of educational outcomes might lead to uniformity in higher educational provision and run counter to diversity in objectives, missions, and institutional structures and agreed that any evaluation of higher education performance should provide for multiple dimensions of outcomes.

- Underlined the importance of establishing valid and reliable measures of learning outcomes and welcomed the initiative led by the OECD to assess the feasibility of an international study on assessment of learning outcomes, with the aim of contributing to increased accountability and improvement of assessment methods of learning outcomes by governments, institutions and quality assurance agencies; but noted the need for further debate on the potential benefits and risks, and recommended that, while the feasibility study could not address all aspects of learning outcomes, it should aim to take into account the historical, linguistic, and cultural contexts, and the differences that exist between countries in curricula, duration of study and enrolment rates.

- Underlined the need to develop and implement the work in open and transparent ways, to involve higher education institutions and relevant agencies in the process, and to document the conceptual
underpinning of the proposed feasibility study, the criteria for success and the process to assess the validity of the measures.

– Sought greater detail on the scope of the feasibility study, in terms of the number of institutions and countries to be involved, the subject areas that might be assessed and the costs.

– Underlined the need to consider the full range of existing approaches to evaluation and assessment for the establishment of the instruments of the feasibility study.

– Noted that countries would base decisions on further steps on the outcomes of the feasibility study.

I would like to thank former Minister of Education, Akito Arima; the President of Tokyo University, Hiroshi Komiyama, and the Director of the William and Flora Hewlett Foundation, Marshall Smith, for their valuable contributions to our discussion. And I am grateful to fellow Ministers for their openness and generosity in contributing to our exchanges which I know will be of great relevance to reform in my own country and will I hope be of equal value to them.