



## **Assessing higher education learning outcomes: “PISA” for Higher Education?**

### **Introduction**

1. Following the meeting of education ministers in Athens in 2006, the Organization for Economic Cooperation and Development (OECD) launched an investigation into the feasibility of developing a tool to assess how effectively higher education institutions are educating their students. The tool is to be modelled on the OECD’s Program for International Student Assessment (PISA), a standardized test given to 15 year-olds in OECD countries in order judge the effectiveness of the school system by assessing the learning outcomes of students. Applied to higher education, a similar measurement of learning outcomes of higher education students across the globe, an OECD discussion paper says, “could provide member governments with a powerful instrument to judge the effectiveness and international competitiveness of their higher education institutions, systems and policies in the light of other countries’ performance, in ways that better reflect the multiple aims and contributions of tertiary education to society.”
2. The OECD has assembled a panel of experts to advise on the development and design of a PISA for higher education. The composition of the panel includes many advocates for standardized testing. The expert panel has met three times and, while noting some serious methodological and practical challenges, are nevertheless pushing forward with the project. A feasibility study will be presented to an informal meeting of ministers in January in Japan.

### **Key Issues and Challenges**

3. PISA for schools has been extremely controversial in its own right. Applying a standardized test to higher education raises even more serious concerns. At a practical level, it would be extremely difficult to design one assessment tool that would produce any meaningful and comparable measure across the different cultures, languages, disciplines and institutions within OECD countries. How would such an assessment tool deal with the incredible variation in institution types, student bodies, and other factors affecting learning outcomes across OECD countries? In short, it is difficult to imagine that a standardized assessment tool could realistically provide any meaningful comparisons of educational quality across diverse systems, let alone between institutions as is being considered.

4. More fundamentally, even if these methodological hurdles could be overcome, questions remain whether a standardized test is in fact an appropriate way to assess learning. A good deal of research indicates there are serious limitations with all standardized measures of learning. Standardized tests almost invariably result in oversimplified measurements of the “quality” of education.
5. Summaries provided of the expert meetings indicate that the panel has discussed some of these challenges faced in developing a PISA for higher education. It is noted, for instance, that the variety and diversity of countries and higher education systems to be included in the assessment make it exceedingly difficult to determine ‘what’ and ‘who’ to assess, as well as ‘what to compare’.
6. However, the concerns with a PISA for higher education are not just methodological in nature. The problems identified by the OECD are in fact compounded by a number of *political* considerations. For instance, internationally, and even within countries, there is a notable lack of consensus on what should be the appropriate practices and outcomes of higher education. Simply put, there is no widely accepted set of skills, competencies and attributes that are expected – or in fact arguably should be expected – of higher education students. Given this lack of consensus, a standardized international test of higher education outcomes makes little sense.
7. As with all standardized tests based on an assessment of outcomes, a PISA for higher education will only give at best an incomplete picture of the effectiveness of systems and institutions. Research shows that standardized test results alone are not particularly useful unless information is also provided on the educational context (type of community, socioeconomic status of students, institutional mandate, admissions policy, respect of academic freedom and collegial governance), resources (expenditure per student, student support services, teaching staff, building quality, library resources, support for research), and programs and pedagogical processes (class size, curriculum, instructional methods). The danger is that a PISA for higher education will lead to very simplistic conclusions about the quality of complex and highly differentiated systems, processes and institutions.
8. As has routinely been the case with PISA for schools, one of the most common problems with the use of standardized tests is the misuse and misinterpretation of results. These problems arise because of the belief that numbers are precise measurements of a student’s ability and, by extension, the effectiveness and quality of an education system or institution. However, no standardized test can or should claim to provide a complete picture of student abilities or institutional quality. The quality of higher education is neither a measurable product nor an

outcome subject to any simple assessment. Quality has to do with a range of factors, including the conditions and activities of teaching and free enquiry.

9. External standardized assessments raise important issues around professional autonomy for academic staff. Traditionally, the quality of higher education institutions has been assessed through rigorous and regular peer reviews. What constitutes quality teaching and research should be debated, established, and reassessed at the institutional level through effective academic senates or councils that have meaningful representation from staff and students.
10. Developing a standardized test for higher education is particularly difficult given it is at this level where a greater degree of *specialization* takes place both between and within institutions. Whereas all secondary students across all countries are exposed to a set of common subjects assessed in the PISA (i.e. mathematics, literacy and science), this is not the case in higher education. There is considerable variation between and within higher education institutions with respect to what specialized programs students pursue and even what is taught within specific subject areas.
11. As indicated in the notes from the meetings of experts, a further difficulty with a PISA for higher education is related to a fundamental difference between secondary and higher education. Unlike secondary education, attendance at a college or university is not universal but is based on selective standards that vary markedly between countries and even between institutions within countries. Consequently, nations and institutions that have highly competitive and selective admission requirements will likely perform better on a PISA-like test than countries and institutions that are more accessible to the broader population. For instance, a standardized test may show that public colleges in the United States produce poorer outcomes than elite, private universities. However, this would reflect the fact that elite universities are comparatively far less accessible, serve students that on the whole come from a more privileged socio-economic background, and have highly restrictive admission requirements. Test results would therefore not necessarily reflect the "quality" of education students receive at community colleges or elite institutions, but would rather be more indicative of differences in admission standards and the socio-economic status of students. Similarly, countries with more selective systems would likely perform far better than countries where participation rates are higher and near universal access is promoted.
12. One of the stated objectives of the proposed PISA for higher education is to provide OECD member countries with more information about the effectiveness, quality and international competitiveness of their higher education systems and institutions so that they, as needed, may look at

ways of improving quality. Evidence from the standardized test-driven school improvement efforts pursued by many OECD governments over the past two decades, however, demonstrates conclusively that this type of testing does not, in fact, lead to improvements in education. This is often because the test results do not adequately measure deficiencies in educational inputs or processes. In many cases, teachers have simply been encouraged to “teach to the test”, a practice which can have a detrimental impact on student learning and educational quality.

13. It is very unlikely that a meaningful assessment of higher education students can be performed in any standardized fashion. Currently, higher education teaching personnel use a variety of methods to assess and measure a student’s progress over time. In addition to performance assessments and examinations, these methods include: observing, documenting, analyzing, and commenting on student work; assessing projects and assignments conducted in and out of the classroom; and evaluating research abilities, initiative and originality. Standardized testing can and should never replace the central role that higher education teaching personnel play in assessing students.
14. A further concern is that a PISA for higher education could easily be transformed into a simplistic ranking or league table of institutions. Such rankings are already common and have encouraged many institutions to engage in a senseless competition to improve their standings. In many cases, this has led higher education institutions to inflate their reported statistics in order to move up the rank.

### *Conclusion*

15. The proposed PISA for higher education faces a number of methodological hurdles. More importantly, however, there are important political considerations underlying the project. Standardized assessments of students, either internationally or within nations, cannot be seen on their own as a measure of the effectiveness and quality of higher education. The quality of the educational experience students receive simply cannot be quantified in a performance-based test. Quality is a function of the “lived experience” of higher education including the conditions and activities of teaching and free enquiry.
16. A more adequate assessment of the quality and effectiveness of higher education would demand that governments and institutions understand teaching as a work of continuous transformation – the life-long education of critical thinkers, the preparation of able and self-sustaining professionals, and the creation of citizens who actively participate in civic institutions and processes. These practices depend on guarantees of academic freedom, collegial governance, the integration of teaching and research, and fair and equitable working conditions and terms of employment for staff.

