

The Organisation for Economic Cooperation and Development is best known for its economic surveys, but over the last decade its substantial education division has made its mark. In this OECD supplement two of its senior officials write about new comparative programmes. Andreas Schleicher, who heads the OECD's PISA programme, writes about PIAAC – the Programme

for the International Assessment of Adult Competencies. His colleague Lyndon Thompson outlines the new AHELO programme – the international Assessment of Higher Education Learning Outcomes.

John O'Leary looks at the annual *Education at a Glance*, while Frances Rafferty reviews the report on *Improving School Leadership*. Another perspective comes from those who use

OECD reports. John Bangs is the NUT's leading policy expert while Ron Glatter is a senior academic.

I have long been a big fan of the OECD and the quality of its research. I hope that what follows in these pages will explain why.

Demetri Coryton
Editor



PIAAC – Assessing adults



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Countries need to maintain competitiveness in a global knowledge economy; they need to increase the flexibility and responsiveness of labour markets, stimulate workforce participation and deal with issues of population ageing. Such challenges are driving a growing interest of governments and other stakeholders to gather comparative evidence on the skills of adult populations, the acquisition and depreciation of these skills, and their social and economic returns. In response to this, the countries of the OECD have embarked on developing and implementing a strategy for assessing adult competencies within an internationally comparative framework – referred to as the OECD Programme for the International Assessment of Adult Competencies (PIAAC), with the objective to help them to identify and measure differences between individuals and across countries in key competencies and assess the impact of competencies on individual outcomes such as integration into the labour market, employment status and earnings, participation in further learning and education throughout the life cycle but also aggregate outcomes such as fostering economic growth or creating social equity in labour market outcomes and social participation. The performance of education and training systems in generating the required competencies should be monitored to

clarify the policy levers that lead to enhancing competencies through the formal educational system, in the workplace and through incentives addressed at the general population.

At the core of PIAAC is an assessment of “literacy in the information age”, understood as the interest, attitude and ability of individuals to appropriately use socio-cultural tools, including digital technology and communication methods, to access, manage, integrate and evaluate information, construct new knowledge, and communicate with others. In addition, PIAAC collects information from respondents concerning their use of key work skills in their jobs – a first for an international study. The relevance of adult competencies and their assessment does not, of course, automatically suggest that such an assessment should be undertaken in an internationally comparative context. However, countries have identified a number of advantages of undertaking such an assessment internationally.

Assessing cross-country differences in the level and distribution of competencies – and relating these to economic, social, policy, and contextual conditions – will permit policy makers to judge the comparative strengths and weaknesses of their skill development policies. Revealing what is possible, in terms of the skill levels demonstrated in the countries that perform strongest

internationally, can help decision-makers in pushing forward necessary policy reforms aimed, for instance, at improving the level and distribution of competencies. PIAAC can also assist with gauging the pace of progress, through assessing to what extent skill gains observed nationally are in line with skill gains observed elsewhere.

International assessments can also be used to set policy targets measuring goals achieved by other countries, and help to identify policy levers and establish trajectories and delivery chains for reforms. Many countries adhere to national and multi-national statements of intent regarding the achievement of economic performance targets relative to international norms, such as the Lisbon Goals established by the European Council for the EU in 2000. Monitoring of progress in meeting such international targets necessarily requires international comparisons.

Because cross-country variation in policies and institutional settings is greater than intra-country variation, an international assessment provides more policy-relevant data and analysis than a compilation of national assessments.

Finally, synergies and economies of scale can be generated by international collaboration in the development and use of new assessment instruments. For instance, all countries can draw on institutional capacities and expertise in other participating countries.

This paper sets out the design of the

PIAAC strategy in more detail. The strategy is currently being implemented with a view to undertaking a first PIAAC assessment in 2011 and providing internationally comparative analyses in 2013.

PIAAC surveys representative samples of adults, including the non-employed, in a household context. As noted before, an assessment of “literacy” is at the heart of the PIAAC, which previous assessments have identified as an essential foundation for individual success and the development of other competencies, and which can be considered a sufficiently stable trait to remain policy relevant over time as PIAAC progresses and monitors change in the development, use and impact of competencies. Literacy, once seen from the perspective of minimum competence, is defined here as a continuum of knowledge, skills and strategies that individuals acquire over the course of their lives. It includes the requisite set of skills and knowledge across a variety of domains including reading literacy and numeracy. Literacy is also considered as an evolving concept that recognises that the literacy skills needed for individual growth, economic participation and citizenship a generation ago were different from what is expected today. Then, individuals with basic skills in reading, writing and math could be expected to function well in society. Now, increased demands resulting from technological growth and change and the growing acceptance of lifelong learning within that context have changed views of literacy. For this reason, PIAAC expands the notion of literacy to include the skillsets and knowledge enabling individuals to fully capitalise on an increasingly technological world, integrating the management of information technology with communication technologies (ICT).

Another component of PIAAC provides an assessment of outcomes in multiple life domains, including labour market status, earnings, health status, and behaviours related to citizenship and the broader area of “social capital”, based on individuals’ self-reports. This component is presented to respondents as part of a background questionnaire, but it is conceptually and methodologically specific in that it seeks cross-nationally comparable and scaled measures of outcome variables, rather than contextual information that will help to explain outcomes.

PIAAC also seeks to capture how skills are used in the workplace, through a job-requirement survey. Such

information, when compared with that obtained through the direct test, will help analyse the extent of skill mismatch, and how this varies across groups and across countries. The job-requirement survey will help understand developments in skill requirements, which is important for the design of education and training policies.

PIAAC also collects basic data on the demographic and educational background of individuals, as well as retrospective information on employment, career interruptions, job changes, status vis-à-vis welfare programmes, and participation in both formal and informal training – which allow an assessment of the mechanisms through which skills are acquired and lost. Furthermore, policy and institutional information of participating countries will help to establish how the level and distribution of competencies, as well as school-to-work transitions, the situation of at-risk adults vis-à-vis welfare benefits and patterns of adult learning relate to differences in policy and institutional settings across countries.

Ultimately, it may be possible to integrate a survey of employers into the PIAAC design. Such a survey could throw new light on linkages between competencies, productivity and technological change, as well as on policy settings that affect enterprise-level investment in human capital. Inclusion in PIAAC of an employers’ survey could significantly enrich analyses of policy issues relevant to skills shortages and mismatches. Such a survey could also be used to obtain additional indicators of skills demand.

Analytic potential of PIAAC
PIAAC will offer participating countries a powerful tool for the measurement and analysis of competencies among their adult populations. For example, data and analysis from the survey will:

- *Extend the direct measurement of skills held by the working age population.* PIAAC will offer a far more complete and nuanced picture of the stock of human capital than has yet been available to policy makers in most OECD countries. Building on previous surveys of adult literacy, it will help explain more about the characteristics of adults with both low and high level of skills. For high performers, it will show to what extent they are able to apply their cognitive skills to solve challenging problems requiring mastery of technology. For those with low literacy, it will show to what extent

their problem is with performing basic reading functions or with understanding and application.

- *Show factors that are associated with adult competencies.* PIAAC will allow investigation of the links between key skills and a range of variables. These include demographic characteristics, educational background, success at work and use of skills in the workplace and beyond. In particular, PIAAC will improve understanding of the labour market returns to education, by measuring more directly the role played by skills and their usage. It will show to what extent skills held by individuals are actually used at work. It will also identify the role cognitive skills play in improving the labour market prospects of at-risk populations.
- *Provide a better understanding of the relative effectiveness of education and training systems.* PIAAC will show to what extent individuals who have obtained qualifications from education and training systems hold relevant skills and are able to deploy them in society and the world of work. For younger groups, PIAAC will show the extent to which performance in PISA aged 15 years is reflected in performance at older ages. For older adults, the survey in conjunction with earlier adult surveys will provide evidence on whether skills are lost or maintained and whether they are being enhanced by adult education and skill formation systems.
- *Allow comparisons across countries and over time.* The PIAAC survey is designed to maximise its cross-cultural, cross-national and cross-language validity. This will provide a firm basis for comparative analysis of skill formation systems and their outcomes and for international benchmarking of adult skills. The international report will give a picture of the distribution of the proficiency of the adult population, alongside levels of formal education and training achieved. For those countries that participated in the earlier International Adult Literacy Survey and/or the Adult Literacy and Lifeskills survey it will be possible in 2013 to see how human capital has evolved over time. For all countries, further cycles of PIAAC will make this monitoring possible over the longer term.

The analytic potential of the PIAAC strategy for public policy



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1. When establishing the PIAAC strategy, countries sought to be able to inform policies relevant to five overarching themes:
 - adult competencies and their individual as well as aggregate economic and social outcomes;
 - the design and quality of education systems and levels and distributions of adult competencies;
 - enhancing the prospects of adults at risk;
 - improving school-to-work transitions and reducing youth unemployment;
 - population ageing and lifelong learning;

Adult competencies and their individual as well as aggregate economic and social outcomes

2. Data and analyses will become available on the ways in which a comprehensive set of literacy competencies in adults affect individual and aggregate economic, labour market and social success. By being implemented over more than one cycle PIAAC can also examine how relationships between competencies and key outcomes are changing over time.¹
3. Among the many aggregate-level issues that could be addressed, PIAAC will permit the development of *a more precise quantitative analysis of the role of education in generating economy-wide increases in productivity*. Measurement of how skills affect labour productivity is hindered by insufficient variance in key parameters (Heckman and Vytlačil, 2000). This problem could be addressed through an assessment that covers a sufficiently large number of individuals. Furthermore, and critically, PIAAC will permit more accurate measurement of the stocks of human capital than is possible using the standard indicators of educational attainment, years of work experience and occupational classification.

4. Over a number of assessment cycles, evidence could be constructed relevant to how growth is affected by countries' investments in different stages of education (from pre-school to advanced tertiary education and work-related training), as well as *the growth returns to expanding higher education access*.
5. The background questionnaire collects information on individuals' labour market status, health status, and behaviours relevant to citizenship and social capital. These data will allow evaluation of the relationships between assessed competencies and these critical outcomes.

The design and quality of education systems and levels and distributions of adult competencies

6. PIAAC gathers evidence on how key features of education systems relate to the level and distribution of literacy competencies throughout the adult population and its sub-groups (e.g. by level of income, occupation, gender, immigrant or non-immigrant status, minority or non-minority grouping). Findings indicating that certain combinations of the features of education systems were consistently associated with superior levels - or preferred distributions - of adult competencies would, at the least, provide a robust agenda for policy-oriented research aimed at elucidating causal links that PIAAC could not explain.
7. Among many analytical possibilities of relevance to policy, data will become available for examining the relative importance of initial education quality in the development of key competencies. In a related manner, by using a background questionnaire to collect information on participation in continuing education and training, it will be possible to examine the relative contribution to adult competencies of initial education, on the one hand, and adult education and training on the other. Furthermore, over a number of assessment cycles, evidence could begin to be gathered on the duration over which the quality of initial

education exerts a significant influence on adult competencies, competency outcomes, and other variables such as learning behaviour.

Enhancing the prospects of adults at risk

8. Policies that cater to the needs of at-risk adults are important for at least three reasons. Firstly, addressing the needs of the most vulnerable is an obvious social equity objective. Second, if market failures hinder the acquisition of competencies, these failures are most likely to represent binding constraints for at-risk adults. Third, research suggests that the impacts on macro-economic growth from improving competencies among those with low levels of skill might be high. For instance, using IALS data, Coulombe *et al* (2004) found that even small increases in the middle of the literacy skills distribution, where most workers are, will yield sizeable growth effects. Still more significant economic gains could be had from raising literacy among those with the lowest literacy skills.
9. "At risk" adults are understood here as persons having a high propensity to experience unemployment, poverty, ill-health, being a victim of crime, social isolation and related desiderata. As described previously, the PIAAC assessment will use a locator test to identify respondents with the lowest levels of literacy skills. Such individuals are likely to belong to the population sub-group facing greatest socio-economic risk (i.e. as individuals with the lowest levels of autonomy in exploiting available economic, social and educational opportunities). These respondents will then take a test of document literacy and literacy component skills.
10. PIAAC can also compare how, across countries and over time, the competencies of at-risk adults, and the changes in their competencies, are related to different policy and institutional settings. In this way, combinations of policies could be identified that appear most effective in mitigating known risk factors –

e.g. social class, parents' education, and educational attainment (particularly the non-achievement of upper-secondary education).

11. In assessing literacy components skills – such as vocabulary and word recognition – among individuals with the lowest levels of literacy skills it will be possible in many countries to reframe policy thinking about reading. Policymakers will obtain a sense of the extent to which key literacy components skills are being taught by their respective school systems. Policymakers could also gain insight on how they might adjust their adult literacy instruction to better address the needs of struggling adult readers. Furthermore, the possibility exists that different population subgroups exhibit different component profiles, knowledge of which could facilitate the targeting of programmes of remediation. Assessment of component skills could also facilitate policy-relevant estimations of the resources required to effect a fundamental improvement in individuals' literacy performance. Indeed, as noted earlier in this paper, just creating well-normed vocabulary and word recognition tests will represent a pedagogical advance in a number of countries.
12. An analysis of the characteristics of individuals with the lowest levels of competencies during the first assessment could then also lead to their utilisation for the purpose of oversampling in subsequent assessments. In this way, the picture of adults at risk could become increasingly solid and detailed as PIAAC progresses.

Improving school-to-work transitions and reducing youth unemployment

13. The assessment will provide data on how a comprehensive set of literacy competencies relate to patterns of youth transition. For instance, such fundamental questions could be examined as:
 - What role do literacy competencies play in facilitating or hindering youth transitions?
 - To what extent do literacy competencies reduce the probability of access to work, or determine school-to-school transitions?
 - What effect do literacy competencies have on wage differentials?

14. More generally, and across a number of assessment cycles, PIAAC could examine how and why patterns of youth transition have changed over time. PIAAC will also improve understanding of the impact on school-to-work transitions of a range of factors outside the individual's control (such as a person's parents and their home background). Moreover, longstanding limitations in the international comparative analysis of transition processes could be addressed.
15. PIAAC could also shed light on how, across countries and over time, transition probabilities, transition duration and transition outcomes (in terms of a range of employment conditions) - for young people of different ages, genders and levels of educational attainment - are related to the following policy and institutional settings:
 - The presence of institutionalised pathways connecting initial education with work and further study.
 - The existence of national institutional arrangements governing employer participation in school-organised workplace experience programmes.
 - The level of development of the vocational education sector.
 - The variety of general, technical and vocational education options available.
 - Curriculum content (e.g. mandatory inclusion of career education).
 - The existence, scope and *modus operandi* of information career guidance services, including whether services are designed for individual needs.
 - The existence of opportunities to combine education with workplace experience (encompassing apprenticeships and work-oriented learning in schools).
 - The extent of employer involvement in the design of occupational qualifications.
 - The existence – and management modes - of organised safety nets for early school leavers.
16. Contrasting such policy-settings with measures of competencies and transition outcomes across countries will provide clues for policy-makers about *which policies – or combination of policies – best facilitate effective transitions.* Furthermore, PIAAC could provide

evidence on the extent to which different policy settings contribute to successful school-to-work transitions *via improvement in competencies.*

Population ageing and lifelong learning

17. In relation to population ageing and lifelong learning, across a number of assessment cycles, PIAAC could examine such key questions as:
 - What is the role of a comprehensive set of literacy competencies in driving skills accumulation over the life-cycle?
 - Responding to fears of growing mismatches between the skills of older workers and the demand for skills - how is the level of literacy competencies distributed across younger and older age cohorts?
 - In what ways do literacy competencies matter for the employability and social integration of older adults?
 - How do different policy settings relate to equity in the distribution of adult learning, including equity between genders?
 - How do the qualifications of labour force entrants relate to learning opportunities and skills formation later in life?
 - How does learning behaviour over the life-cycle relate to attitudes, beliefs and values about learning (possibly complementing efforts to develop diagnostic and instructional methods for children and young adults)?
18. From an analytical perspective, the examination of lifelong learning will ideally be addressed through a longitudinal survey design. However, for reasons of cost and capacity constraints a longitudinal design is not for PIAAC.

Footnotes

- ¹ For example, Murnane *et al* (1995) show that in the United States, basic cognitive skills had a larger impact on wages for 24-year-old men and women in 1986 than in 1978.

References and further reading

Atrostic, B.K. and Nguyen, S.V. (2001), *Computer Networks and US. Manufacturing Plant Productivity: New Evidence from the CNUS Data*, paper prepared for the 9th Conference on National Accounting, ACN/INSEE/Eurostat, Paris, France,

- November 21st and 22nd, 2001.
- Baldwin, J.R. Dunne, T. and Haltiwanger, J. (1995), 'Plant Turnover in Canada and the United States', in Baldwin, J.R., *The Dynamics of Industrial Competition*. Cambridge University Press, 1995.
- Bartelsman, E., Bassanini, A., Haltiwanger, J., Jarmin, R., Scarpetta, A. And Schank, T. (2004), 'The Spread of ICT and Productivity Growth: Is Europe Really Lagging Behind in the New Economy?', in Cohen, D., Garibaldi, P. and Scarpetta, S. (eds), *The ICT Revolution: Productivity Differences and the Digital Divide*. Oxford University Press, Oxford.
- Belli, R.F. (1998), 'The Structure of Autobiographical Memory and the Event History Calendar: Potential Improvements in the Quality of Retrospective Reports in Surveys'. In *Memory*, vol. 6., no. 4, pp.382-406.
- Belli, R.F. (2004), *The Integration of a Computer Assisted Interviewing Event History Calendar in the Panel Study of Income Dynamics*. Mimeo, University of Nebraska-Lincoln.
- Belli, R.F, Shay, W.L., Stafford, F.P. (2001), 'Event History Calendars and Question List Surveys: A Direct Comparison of Interviewing Methods'. In: *Public Opinion Quarterly*, vol 65, pp. 45-74.
- Caspi, A. Moffitt, T.E., Thornton, A., Freedman, D., Amell, J.W., Harrington, H., Smeijers, J., and Silva, P.A. (1996), 'The life history calendar: A research and clinical assessment method for collecting retrospective event-history data', in *International Journal of Methods in Psychiatric Research*, 6, 101-114.
- Chall, J. S. (1994), 'Patterns of adult reading', in *Learning Disabilities*, 5(1), 29-33.
- Coulombe, S., Tremblay, J-F., and Marchand, S. (2004), *Literacy Scores, Human Capital and Growth Across Fourteen OECD Countries, Statistics Canada and Human Resources and Skills Development Canada*. Ottawa.
- De Grip, Andries (2004). *Evaluating Human Capital Obsolescence* Paper prepared for the joint EC-OECD Seminar on Human Capital and Labour Market Performance.
- DfES (2003) *The Skills for Life survey. A national needs and impact survey of literacy, numeracy and ICT skills*. DfES Research Brief RB490.
- Dolton, P.J. and Makepeace, G.H. (2004), *Use IT or lost IT? The impact of computers on earnings*, University of Cardiff, mimeo.
- Economist Intelligence Unit (2004), *Reaping the benefits of ICT: Europe's productivity challenge*, London.
- Entorf, F. and Kramarz, F. (1998), The Impact of New Technologies on Wages: Lessons from Matching Panels on Employees and their Firms, *Economic Innovation and New Technology*, Vol. 5.
- European Commission (2002), *eEurope 2005: An information society for all: An action plan to be presented in view of the Sevilla European Council*, 263 final, 21-22 June 2002.
- Felstead, A., Gallie, D. and Green, F. (2002), *Work Skills in Britain 1986-2001*.
- Freedman, D., Thornton, A., Camburn, D. Alwin, D. Young-DeMarco, L. (1988), 'The Life History Calendar: A Technique for Collecting Retrospective Data', in: *Sociological Methodology*, vol. 18, pp. 37-68.
- Green, F. (2004a), *First thoughts on methodological issues in an international assessment of adult skills*, Paris, OECD (COM/DELSA/EDU(2004)6).
- Green, F., (2004b), *Programme for the International Assessment of Adult Competencies. Piloting the Job Requirements Approach in Three Countries*, Draft Questionnaire, November 2004.
- Green, F. (2005a), *A Proposal for Assessing the Validity of International Comparisons of Skills Measures obtained using the Job-Reporting Method*. Mimeo.
- Heckman, J. and Vytlačil, E. (2000), *Identifying the role of cognitive ability in explaining the level of change in the return to schooling*. NBER Working Paper series 7820. Cambridge, MA: The National Bureau of Economic Research.
- Krueger, A.B. (1993), 'How Computers Have Changed the Wage Structure: Evidence from Microdata, 1984-1989', in *The Quarterly Journal of Economics*, February.
- Lennon, M., Kirsch, I., Von Davier, M., Wagner, M and Yamamoto, K. (2003), *Feasibility Study for the PISA ICT Literacy Assessment*, Australian Council for Educational Research (ACER), National Institute for Educational Policy Research (NIER), Educational Testing Service (ETS). See. http://www.pisa.oecd.org/Docs/Download/ICT_Feasibility_Report.pdf
- Medmarket Diligence (2003), *Telemedicine Market in State of Flux*, http://www.theinfoshop.com/press/me d16756_en.shtml, December
- OECD (2005), *The Commercialisation of Space and the Development of Space Infrastructure: The Role of Public and Private Actors*, Report on Phase III Space Applications, OECD Futures Project, OECD, Paris.
- OECD (2005a), *E-learning in Tertiary Education: Where Do We Stand?*, OECD, Paris.
- OECD (2005b), *Promoting Adult Learning*, OECD, Paris.
- OECD (2005), *The relevance of PIAAC to education and labour market policies*, COM/DELSA/EDU(2005)1.
- OECD (2004), *Employment Outlook*, Paris.
- OECD (2004), *Understanding Economic Growth*, OECD, Paris.
- OECD (2004a), *2004 Information Technology Outlook*, OECD, Paris.
- OECD (2003), *Employment Outlook*, Paris
- OECD (2003), *The Sources of Economic Growth in OECD Countries*, Paris.
- OECD (2002), *ICT Skills and Employment*, STI Working Papers, Paris.
- OECD (2002a), *The Role of Policy and Institutions for Productivity and Firm Dynamics: Evidence from Micro and Industry Data*, ECO/CPE/WP1(2002)3, Paris.
- OECD (2000), *From initial education to working life: Making transitions work*, OECD, Paris.
- OECD (2000a), *Information and Communications Technologies and Their Implications for the Development of Rural Areas*, DT/TDPC/RUR (2000)1.
- Phillips, B.D. (2002), 'Home-Based Firms, E-Commerce, and High-Technology Small Firms: Are They Related?', *Economic Development Quarterly*, 16 (1), Feb 2002, pp. 39-48.
- The Economist (2004), 'The health of nations: A survey of health-care finance', *The Economist*, July 17th 2004.
- Sabatini, J.P. (2005), *Reading Components Assessment: Content Selection Workshop*, Literacy Assessment and Monitoring Programme, Education Testing Service, Princeton, New Jersey, USA.
- Sabatini, J.P. (2002), 'Efficiency in word reading of adults: ability group comparisons', in *Scientific Studies of Reading* 6 (3).
- Snow, C. and Strucker, J. (2000), 'Lessons from Preventing reading difficulties in young children for adult learning and literacy', in Comings, Garner, and Smith (Eds.), *Annual review of adult learning and literacy 1*, San Francisco: Jossey Bass.
- Statistics Canada (2002), *Adult Literacy and Life Skills Survey: International Planning Report -Second Round*. Statistics Canada/OECD (2005), *Learning a Living: First Results of the Adult Literacy and Life Skills Survey*, OECD, Paris.
- Strucker, J., Yamamoto, K. and Kirsch, I. (forthcoming), *Component Skills of Reading: Tipping Points and Five Classes of Adult Literacy Learners*, Educational Testing Service and Harvard Graduate School of Education, NCSALL.
- UNESCO Institute for Statistics (2004), *International Planning Report for the Literacy Assessment Monitoring Programme*, Montreal, Canada.



Lessons from Finland



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One of the most important papers published by OECD recently, *England's Educational Achievement* came not from the Directorate of Education, but from Anne-Marie Brooks in its economic department. She analyses the UK's ability to raise educational achievement in the context of the Programme for International Student Assessment (PISA), and within it, Finland's achievements. She finds that, whereas the UK has 20 per cent of students performing at the lowest level of competence, there are only five per cent in Finland at this level. She also finds that in the UK intergenerational social mobility is lower than in many other countries.

In examining Finland's ability to narrow the gap, she concludes that while societal values are likely to prevent a wholesale transfer of an education system from one country to another, some lessons may be learned.

How different that this conclusion is to some of the conversations that I have been having recently.

Completely irrelevant

Many in the Westminster government and in its agencies will go out of their way to say that no lessons can be drawn from Finland; it is completely irrelevant. England is a far more complex society and far less homogenous than Finland. It is a small country, far away. Its population is not as big as London's. The language is much easier. And, of course, its values are very different. These are the usual comments.

This refusal to learn any lessons from one of the world's most successful educational systems seem to be as myopic as the Finnish right-wing television interviewer I met three or four years back, who said that the reason for Finland's success was because it had abolished the working class ten years ago!

Like many others since the first PISA report was published, I have visited Finland. Helsinki University and the Finnish National Board of Education held a conference this September on the factors behind Finland's success.

It left me with two broad reactions. The first was that, yes, England, in particular, is an enormously complex society and there is much to be proud of in how the UK's education systems are dealing with that complexity. But, yes, as the OECD's own paper says, there are some broad lessons that can be learnt.

Finnish society values education. Those values are understood and permeate its society. They focus on teachers' high quality and high status, on the recognition that they are valued experts and they emphasise the importance of an inclusive, coherent, comprehensive 6-16 system where everyone involved is absolutely determined never to give up on any pupil.

Empowerment

All those involved in education also understand that municipal autonomy and empowerment of schools is vital to the success of the system. The national core curriculum has written within it, in explicit terms, that schools are expected to adapt the curriculum to the needs of their students.

Special educational needs provision is an automatic and integral right for any student who falls behind. Decisions on which type of SEN provision each student needs are thoroughly pragmatic and focus only on the severity and nature of needs.

As the OECD recognises, there is no emphasis on individual testing or measurement-driven accountability. Self-evaluation is pervasive. There is no competitive choice between schools or the positioning of schools in public performance rankings. The expectation is that all schools will be good. If schools suffer from failure, municipal authorities concentrate not on removing staff, exerting control or imposing interventions, but on analysing what has gone wrong and how those schools can be helped.

I visited two schools. There were no bravura displays of pedagogy. Pedagogy is low key, often with conventional lines of desks. The relationship between teachers and their pupils is both informal and respectful. Indeed, respect between the teacher and

pupil is one of the key commonly understood national values. Meaningful conversations between teachers and pupils provide the basis of teaching and learning; 'dialogic learning', as they say in the trade.

While there is no great thrust towards intensive continuing professional development as UK teachers might understand it, staff are expected to constantly evaluate, on a regular basis, whether each school's curriculum is right and relevant for their young people.

Masters

And, of course, there is one factor that reflects Finnish society's high value it places on education. All teachers are expected to have Masters degrees, which are divided into two: a core module in relation to advanced pedagogy; and a core module focusing on subject knowledge. Training lasts between five to six years. Teaching is the first choice for those graduates who want to choose between business, industry, public services and education. In short, Finnish society's investment focuses absolutely on the quality of its teachers.

This is something which, of course, the recent McKinsey Report on the world's best performing school systems recently highlighted and which led to the adoption of the Masters in Teaching and Learning in England. Yet, while I hope the MTL works and teachers in England see it as an entitlement rather than an imposition, the Masters is just but one facet of the value that Finnish society places on its education system.

Surely, valuing education, trusting the profession and investing in teachers' education are goals that we would want for our society in the UK. Top-down externally driven initiatives; an obsession with structural diversity and an absence of trust in teachers are features of our system that the Finnish system has held up a mirror to. Rather than being in denial about Finland, it is surely time for all parties to critically engage with the very real lessons we can learn. Of course cherry picking of other countries' systems should not happen but neither should we ignore the elephant in the room!



Improving leadership



Frances Rafferty

Shifts in society, greater migration, changes to family structures and global competition have placed a heavy burden on England's schools and particularly those who lead them.

And it is a similar picture across Europe and the developed world, the OECD has found in a number of reports focusing on school leadership. By 2015, about 40 per cent of headteachers here will have retired and the UK is not alone in having such an age profile in the profession. But, the report authors of *Improving School Leadership* found: "Potential candidates often hesitate to apply, because of overburdened roles, insufficient preparation and training, limited career prospects and inadequate support and rewards."

They note a trend among the diverse school systems in the developed world towards decentralisation, with school leaders having a greater responsibility for decision making, coupled with more accountability for pupil results. The UK has been in the vanguard of this movement. For many years European heads have been envious of the devolved budgets and other freedoms enjoyed by UK schools. But the downside, the authors have found, is that it can lead to high workloads and as a result teachers are reluctant to take on the role of school leader.

"Research has shown that school leaders can make a difference in school and student performance if they are granted autonomy to make important decisions. However autonomy alone does not automatically lead to improvements unless it is well supported," the report notes.

This increased autonomy should be accompanied by the means to distribute leadership, within and across schools. This is achieved by developing a school's middle management, creating more responsibilities and a proper career structure. "This can be done," the authors said, "in formal ways through team structures or more informally by developing ad hoc groups based on expertise and current needs."

To improve recruitment, adequate training must be provided. A survey of new principals in Europe (Bolan et al, 2000) found that 65 per cent had not

had formal training for the job. The report on the English system said that the National College for School Leadership had "contributed to a more professional culture of school leadership". The authors believe that a flexible, collaborative relationship between schools is also necessary to improve recruitment and increase the economies of scale for training. There needs to be a "critical mass to make system leadership a movement, not just a practice of a small number of elite leaders".

School systems that allow for system-wide school improvement, not ones which promote competition between schools, can be more innovative. It should be easier for staff and school leaders to move between schools and there should be a more flexible system which "reduces the weight accorded to seniority and attracts younger dynamic candidates with different backgrounds".

The authors believe that salaries for school leaders should be competitive with similar grades in the public and private sectors. Headteachers in the UK are among the highest paid in the world, but the OECD reported that many frequently mentioned the physical, emotional, and mental isolation of the job. This again pointed to the need of a school management structure to share the burden.

State of the art in Australia

Of the school systems studied by the OECD it was that of the state of Victoria, Australia, which the authors found the most "cutting edge". It is the country's smallest, but most populous, state with five million people, a quarter of the total population. It is highly urban and a quarter speak a language other than English at home. In 2003, the State published a blueprint on school improvement. Described by the OECD authors as a "clear and persuasive, research-based school improvement programme...articulated through a common language", it has given school leaders a "clarity of focus".

Its success has been put down to a realistic view of implementing reform, by not pretending it to be a quick fix, by a high level of consultation and, most

importantly according to the authors, by the fact that the driving strategy is not accountability, or implementation of political policy or specific models, but investment in human capital. "The Department has created professional learning opportunities for leaders at all levels in the system to seize, and the increasing numbers that have done so inject further knowledge and vitality into the system...which is driven with a particular leadership structure and style, and supported by thorough consultative procedures, frequent communications and comprehensive networking," they said.

The Finnish system is also held up as an example of good practice: "School leaders exercise a wide-ranging, independent decision-making power on issues concerning school development. Their leaders are highly educated and in their work they follow quite modern leadership models...they also participate very widely in professional development." The system is decentralised, but long-term education policy and decisions have been made in a transparent and unanimous way, resulting in commitment to the reforms.

Another interesting case study is in Flemish Belgium. The Flemish Ministry of Education interferes only minimally in the organisation of schools. It is a very competitive system with schools vying for pupils and teachers' salaries are often dependent upon the size of school. The 2003 PISA results show that there are very large differences between the strongest and the weakest students in Flanders.

Recently the ministry provided incentives for "communities of school" where school collaborated to increase economies of scale to cut costs, but also to provide more opportunities for training and to aid system-wide school improvement.

Improving School Leadership, Vol 1: Policy and Practice by Beatriz Pont, Deborah Nusche, Hunter Moorman and Improving School Leadership, Vol 2; Case Studies on System Leadership by Beatriz Pont, Deborah Nusche, David Hopkins.

www.oecd.org/edu/schoolleadership



Keeping the faith



John O'Leary, Editor of *The Times Good University Guide*

The public has lost faith in national statistics on education – just as it has as in other official performance measures. Rightly or wrongly, most people do not believe that there are genuine improvements each year at GCSE, A level or in the proportion of students meriting first-class degrees.

People do not necessarily feel they are being lied to, but they find the concept of constant improvement intrinsically unlikely – particularly when for much of the year they are bombarded by claims that standards are declining. The natural reaction is to assume there is no way to tell whether things are getting better or worse.

International comparisons appear to be the exception to the rule, even though they are, by definition, made up of collections of national statistics. There may have been widespread surprise that English 14-year-olds recently came second in Europe at maths, for example, but the finding was treated more seriously than any report from the ill-fated key stage 3 tests in the subject.

“Rightly or wrongly, most people do not believe that there are genuine improvements each year at GCSE, A level or in the proportion of students meriting first-class degrees.”

Nothing in this field has wider currency than *Education at a Glance*, the OECD's annual comparisons of everything from teachers' pay to primary school hours, university tuition fees and work-based education and training. The topics change from year to year, but there is a core of regular data that makes for easy comparisons.

The latest compendium focuses even more than normally on higher education and the end of secondary schooling. Many of the messages are familiar from previous editions – high rates of return for graduates, strong correlation between social class and educational achievement, comparatively low investment in

schools and higher education as a proportion of gross domestic product.

But the 2008 edition also serves as a reminder that even international reports are vulnerable to one-off swings that are not representative of longer-term trends. In this case, for England at least, one came in the shape of top-up fees for undergraduates. *Education at a Glance* records a “sharp rise” in tertiary enrolments, placing the UK above the OECD average for the first time in six years.

However, the explanation lies not in sudden success for the Government's efforts to widen participation in higher education, but in the rush for places at £1,000-a-year tuition fees, ahead of the £3,000-a-year version. Stand by for seriously bad news in the 2009 edition, which will catch up with the inevitable slump in the year that top-up fees were introduced, to be followed by another leap in participation in the 2010 edition.

Comparative problems

There lies another problem with international comparisons: domestic statistics have a long enough lead-time, but even something as regular as *Education at a Glance* contains data that are even older – and often not relating to the same year across all countries. Wherever possible, the trends they contain should be tested against a run of reports. (If English 14-year-olds are still second in maths when the next TIMMS Report is published, rather than eleventh, as they were in 1999, that really will be cause for celebration.)

Some of the trends in *Education at a Glance* have been established for several years. Once famous for its high graduation rate, for example, the UK has been overhauled by more and more countries. The 2008 edition identifies 11 countries (Australia, Denmark, Finland, Iceland, Ireland, Italy, the Netherlands, New Zealand, Norway, Poland and Sweden) where the proportion of people graduating at the normal age for each country exceeds the UK's 39 per cent. That is two more than last year and the report adds that current enrolment rates suggest that more countries will overtake the UK in the foreseeable future.

There is better news, however, on

two of the measures that often cause concern in the UK and elsewhere. One is the recruitment of students to science courses – the subject of expensive campaigns recently by the higher education funding councils, as well as regular entreaties by ministers. Even by 2006, according to the report, only six OECD countries had a higher proportion of science graduates among 25-34-year-olds. Similarly, the 29 per cent of students entering higher vocational programmes is above that for all but five of the 32 OECD members (as it has been for at least six years).

“The 29 per cent of students entering higher vocational programmes [in the UK] is above that for all but five of the 32 OECD members ”

Nor do the well-established advantages enjoyed by UK graduates in the labour market appear to be weakening as their numbers grow. Indeed, the report finds that the number of vacancies for skilled workers in the UK economy suggests there is scope for further expansion at tertiary level.

Partly because the staying-on rate in education beyond 16 is still well below the OECD average, a degree offers an unusually strong premium in terms of employment prospects and salary. Private rates of return are even higher for those completing secondary education up to the age of 18, compared with those who do not.

As usual, there is implied criticism in the analysis of equity in the UK education system. With 54 per cent of students in the UK having fathers who are graduates, compared with only 27 per cent in the population as a whole, the social divide is so strong that, of ten countries with comparable data, only Austria, Germany and Portugal had more socio-economically uneven participation in higher education.

Despite substantial increases between 1995 and 2005, Government spending on education remains below the OECD average and capital spending on tertiary institutions is almost half the average.

Where size does matter



Professor Ron Glatter
Open University

Why, in England, have we taken such an eccentric path concerning the structure of secondary education? The diversity policy has landed us with an extraordinary patchwork of provision, based on a huge range of school types – academies, foundation schools, trusts, faith schools, community schools, specialist schools of many different stripes, grammar schools, secondary moderns and the list can go on. Yet there is no substantial evidence that this approach leads to greater effectiveness. Even more puzzling, I'm not aware of any public or parental demand for it.

I'd like to suggest a possible explanation. Buried deep in the OECD's massive 525-page statistical tome entitled (presumably ironically) *Education at a Glance: 2008 Indicators* are some thought-provoking figures, shown in the box below.

What is striking here is not the difference with other countries in terms of average class sizes in state schools – we are closely in line with the international average (though we fall short in the primary sector – 25.8 against the average of 21.5) – but the huge difference between our state and private school averages. Class sizes in our private schools are on average little more than half the size of those in state schools. By contrast with our situation, there is only a small difference overall in class sizes between state and private schools across OECD countries, and at least some of this difference must be accounted for by the large UK discrepancy.

There are disputes about the role of class size in school effectiveness (though small classes are undoubtedly part of the appeal of private schools to

many parents who send their children to them). However in this context these disputes are irrelevant. Differences in class size stand here as a proxy for differential resourcing on a very significant scale.

School structure

The private sector appears to me to be a major – if not *the* major – influence, and a largely unspoken one, on the whole debate about school structure in England. It is the elephant in the room. The gap in resources appears unbridgeable on any realistic scenario, although when he was Chancellor Gordon Brown set bridging it as an aspiration. This is a real dilemma for policy-makers in England and so it's perhaps not surprising that the emphasis is often put on issues of branding rather than resources – on 'independence', uniforms and house systems for example, perhaps as a way of giving the impression that a private school education can be provided for free by the state.

Some of the brands, notably 'academy', 'foundation' and 'trust' evoke a sense of traditionalism, solidity and individuality and imply, like private schools, control by the owners and the market rather than by the public and their elected representatives. The specialist school brand is a bit of an oddity since private schools normally promote themselves as generalists but the implication is one of superiority on the analogy with, for example, specialist hospitals.

Although this emphasis on school branding and differentiation may be understandable its consequences are likely to be damaging. As this journal has frequently pointed out, international research such as the OECD's successive studies in their Pisa programme (Programme for

International Student Assessment), the countries which do best in terms both of overall performance and relative equity have comprehensive, integrated systems of schooling. Those countries which have selective systems or which like England place emphasis on choice and diversity do markedly less well on both these crucial dimensions. This has been known for years. The first Pisa results came out in 2001 and were widely publicised: the later studies have provided confirmation. Their influence on policy in England has however been hard to discern.

I've sometimes heard structural reforms like academies justified on the weak basis that "We must do something. The status quo isn't acceptable". But what if the evidence suggests that the direction being taken is more likely to compound than ameliorate the problems?

Policy implications

Given that there have recently been signs of a more judicious and inclusive approach, what are the key policy implications? First, while the subtle influence of the elite private school sector on the structure of English state schooling should be more fully recognised, there is no case for viewing private schools as a model for publicly-funded schools. Their context is entirely different to an extent that is almost unique internationally, particularly in relation to their levels of resourcing and the self-selected nature of their intakes. As individual private and competing organisations their model of governance is unsuited to a publicly-funded, democratically-based system. Robert Hill, the former No. 10 adviser, expressed this well in *Education Journal* Issue 109 when he wrote: "For too long education policy has been about trying to create successful institutions rather than an effective school system".

Second, while the sharply different resourcing between the two sectors can't be ignored, it seems a particularly intractable issue. The charity status of private schools is obviously a relevant factor and requires robust review. Beyond that, substantial extra funding might be focused on disadvantaged pupils (as has been widely proposed) as a way of narrowing the gap with private schools for at least those pupils and for the schools in which they are taught.

Average Class Size: lower secondary education

State schools

U.K. 23.7

OECD average 23.8

Private schools

U.K. 12.0

OECD average 22.6

(Adapted from *Education at a Glance 2008: OECD Indicators*. Paris: OECD, 2008, table D2.1)



Please don't cling to the ivy



Lyndon Thompson, OECD Education Directorate

With some seventeen thousand universities worldwide, it is little wonder that students and parents cling to university league tables when choosing an education. But education professionals have started lobbing brickbats at the tables, claiming that their authors are biased and the range of criteria used is too narrow. At a two-day conference of education experts held in December at the Organisation for Economic Cooperation and Development (OECD) in Paris, one participant called league tables, or rankings, "blunt instruments." Crude they may be, but do we have anything better?

The December conference was the first meeting of national experts charged with the creation of what may be the largest and most comprehensive assessment of higher education ever conceived. The international Assessment of Higher Education Learning Outcomes (AHELO) aims to measure a fundamental aspect of higher education's output, which is almost entirely overlooked by traditional league tables: the hypothesis behind AHELO is that all universities, regardless of geopolitical, cultural or linguistic factors, can be compared in terms of learning outcomes. A feasibility study of AHELO is underway to determine how far this is the case and whether this ambitious project can be implemented.

The idea arose out of discussions by education ministers at the 2006 OECD Ministerial Conference in Athens. With more people in higher education than ever before in history and greater student mobility (in some Australian universities, for example, 19 per cent to 50 per cent of the student body is international), Ministers at the Athens Conference were quick to acknowledge the inadequacy of current ranking systems.

Glaring omissions

League tables are heavily weighted toward research, the number of faculty publications and the august reputations of older, pre-1920s universities. But there rest two glaring omissions: teaching and learning. This is not necessarily the fault of universities. In

the fiercely competitive world of higher education, university chancellors may cut programmes and redefine their university's mission with a recklessness that comes from being under fire for too long. As a result, universities tend to ape one another, sacrificing their character, autonomy, perhaps even their strongest assets to stay in the ranks of the top 10, 50 or 100 universities.

But even if more data becomes available, can any fair comparison between universities be made? In theory, yes. Analytical ability is as essential to the engineer calculating stresses in the design of a suspension bridge as it is to the lawyer grappling with a slippery bit of legal rhetoric. Penning a lucid phrase is no mean feat, either for the poet or the politician; whether it is written in English or a language spoken by fewer than 100,000 people is beside the point. AHELO defines these skills as *generic*, one of the strands used in its assessments. The *discipline* strand measures a student's competence in a particular field (economics and engineering have been chosen for the feasibility study). The *contextual* strand puts performance into a specific institutional context and will hence help identify successful teaching and learning strategies. Finally, the *value-added* strand gauges the feasibility of measuring a student's progress throughout his or her degree programme. Indeed, league tables focus on results, ignoring how much a student has learned while at university as well as how much he or she acquired beforehand. The Oxbridges and Ivy Leaguers draw A+ students, so it comes as no surprise when they turn out A+ graduates. But what of a modestly endowed state university that accepts B students and produces A- graduates? Wouldn't the "added value" of that university be superior? Recognition of this fact permits universities with missions to provide education to as many people as possible to distinguish themselves from highly selective institutions. There is no need to cling to the ivy.

The complexity of AHELO should not be underestimated. Questions of cost, methodology and practicality remain. At present, there are few tested

methodologies for certain strands, two exceptions being the College Learning Assessment programme (CLA), used in the United States, which focuses on generic skills and an approach used by the Centre for Higher Education (CHE) in Germany, which effectively allows students to compare higher education institutions according to their own needs. And where no methodology exists, it will be necessary to invent one. Moreover, socio-economic conditions may hamper some universities from taking part. Online testing and surveys, for example, are harder to implement in universities where computer terminals are lacking. Nor are students likely to complete surveys if they are too long or administered months after graduation. For AHELO to work, it must be unobtrusive.

Scepticism

Sceptics argue that AHELO will merely lead to the creation of another league table, albeit a more complex one. No doubt some fear that a new assessment might cast an unflattering light on their own institution. The aim, however, is not to create another ranking, but to identify as many perspectives as possible from which higher education can be evaluated. Such information can be critical to assist institution leaders in their improvement efforts, by providing benchmarking and diagnosis tools. Nothing should be overlooked.

The feasibility study is being managed at the OECD by the Programme on Institutional Management in Higher Education (IMHE). IMHE is a membership forum serving policy-makers in national and regional authorities, managers of higher education institutions, and researchers. This study will conclude in 2011. If the results are promising, the next step will be to launch a full scale international assessment. AHELO has embarked on its maiden voyage. The rich cargo it bears home may change our ideas about higher education, opening new routes to educational success.