UNESCO GMR on Skills Development

Pearson submission - by Tom Eats & Ross Hall, February 25th 2011

Over the last few years, Pearson has been undertaking research to understand the apparent disparity between abilities that employers were looking for and those with which they were provided by the education system. Our research has been conducted in over 25 countries with conversations with all relevant groups, including government, employers, training providers, universities, learners, teachers, entrepreneurs and educators. This is our Effective Education for Employment research, referred to throughout, and a summary version of the findings is attached to this submission.

Do initial education and training systems equip students with the skills demanded by labour markets?

Of course there are some systems, institutions and programmes that are excellent at preparing people for work - thinking of medical and legal professions in many countries in particular. But our Effective Education for Employment research findings suggest that most systems, institutions and programmes do not effectively prepare people for the workplace. And this is a problem that is thought to be essential to resolve in order to address the challenges of economic growth, unemployment, social exclusion and sustainable development.

In our Effective Education for Employment research findings, there is a clear sense from employers that in recruiting new employees and in valuing existing staff, they prioritise behavioural qualities first, then look for specific skills and only finally seek sets of knowledge.

And yet it is perceived that the focus of most governments is on school systems which prioritise knowledge before skills and skills before behavioural qualities.

Our research suggests that the base (21st century) qualities that that employers want are very much universal (these are in alphabetical order):

1. Application of ICT
2. Application of numbers
3. Application of science
4. Managing business
5. Managing money
6. Managing people
7. Managing processes
8. Understanding work
9. Collaboration
10. Communication
11. Conflict management
12. Critical thinking
13. Health and wellbeing
14. Leadership
15. Negotiating
16. Planning and organising
17. Problem solving
18. Researching
19. Selling
20. Service
21. Appreciation
22. Caring
23. Commitment
24. Confidence
25. Creativity
26. Curiosity
27. Drive
28. Empathy
29. Enthusiasm
30. Global sensitivity
31. Humour
32. Integrity
33. Resourcefulness
34. Respectfulness
35. Self direction
36. Thoroughness

Knowledge bias
Skill bias
Attitude bias

Critically, the nature of work in general is changing so it’s essential to develop qualities, skills and knowledge that are not fixed - or rather to develop the ability and desire to learn (Curiosity, above), because with this mindset people can most easily adapt to changing jobs and work environments.
Why does this problem exist?

In summary, and putting historical reasons to one side, our research suggests that the systemic causes of this problem are:

- Lack of connectedness between employers, educators and policy makers
- Therefore a lack of understanding of what employers need (by educators and students)
- Therefore many curricula don’t contain complete and relevant learning outcomes or appropriate assessments
- Systems are slow to change, and there is a tendency to stick to the academic model because it’s widely perceived to be both robust and relatively straightforward to administer

As a consequence:

- Delivery methods are often irrelevant
- Assessments are not best suited to measuring talent in ways which are relevant to the learning outcomes
- Teachers are ill-equipped because they being measured on results which can encourage teaching to the test
- Students can become apathetic about learning because it’s not matching their abilities

There are also a number of related problems, in that:

- Quality assurance systems are misdirected - programs limited by an institutions ability to teach
- Technologies are underused - which will be another barrier to progress if unaddressed
- Insufficient benchmarking of qualifications is prevalent.

What should be done to fix the problem?

Our research suggests that there is no single fix and that an holistic approach needs to be taken to reforming or transforming education systems, institutions and programmes.

The common themes we found almost everywhere indicate we need to:

1. Understand (and continuously stay abreast of) the skills needs of employers - not just large scale employers but also small scale employers and of self-employment
2. Share this information openly with educators, policy makers, students and other relevant stakeholders (e.g. families, unions)
3. Build complete and relevant curricula that include explicit learning objectives that match the needs of employment. Do this is in a timely manner - curricula that take years to develop may well be out of date at the time of publication
4. Recruit, train and support teachers to deliver these curricula effectively
5. Make learning objectives clear to students before they start and throughout their programme
6. Ensure that delivery methods are relevant to both learning objectives and to the different learning styles of students - recognising that certain delivery methods are more relevant to the development of knowledge than to skills or behavioural qualities. And also taking into account the power of experiential learning in developing skills and behavioural qualities as well as knowledge (which makes apprenticeships so effective)
7. Put in place assessments that are relevant to learning objectives, recognising the differences between formative and summative assessments, and acknowledging that assessment regimes tend to steer the direction of teaching.
8. Manage the transition from the place of learning into the place of work - again, apprenticeships or internships can be very effective here (reference the medical profession)

9. Apply technologies across the system to help the development of learning objectives by supporting student access, teaching and delivery, assessment and transition to work. Lack of interaction with technology represents an additional barrier in some countries.

10. Quality Assure the entire system holistically with the development of learning objectives as being the principle measures of performance - including the development of teachers and teacher training.

Are there sufficient provisions for continuing education and training? Who should provide these programmes, and who should pay for them?

- Quality should be the primary focus for provision
- Access to the quality programmes should be the next step
- Engaging with stakeholders enables the greatest chance of defining appropriate responsibility for delivering education

While the question may be about sufficient programs - we would argue that it’s about the quality of these programs as much as their availability and that it is quality that should be primary judge of provision

There is no use in having quality programs however, if people can’t access them. There are a number of potential barriers, including disability, culture, language, educational resource issues such as insufficient numbers of trained teachers, or adequate school buildings.

At the same time, we need to consider environmental factors such as poverty, inadequate healthcare, transport and infrastructure which are pressing concerns in many developing countries. For those without these problems, access to education can still be an issue while working or with family responsibilities. Making sure programs are themselves inclusive is essential, and this is in line with a focus on quality - the programs also need to be appropriate for the audience. Connecting this back to the beginning, one implication is that programmes should actively deal with the issues that are a barrier to education - for example, what are the skills for health, which when implemented into better healthcare could increase enrolment in education?

Internationally there are many vocational programs but in general they are perceived as low quality, intended for those who drop out of school, or lack the resources or equivalence infrastructure. Part of this has been caused by a relatively limited understanding of the value of experiential learning and partly by a general lack of engagement between people who are involved in providing education and those who deal with the outcomes.

Our view is that, if you start at the beginning to understand the abilities required, that you can see that a number of those abilities are generally not enhanced through the typical academic education route. While the research to find out what’s important is an imperative, consideration needs to be given to the way vocational education is understood regardless.

Critically, by bringing together government, industry and society to participate in defining programs alongside educators, it’s possible to see both the diversity of talent needed and the complex problems felt by governments in benchmarking it.

As an international benchmarking authority, it’s clear to us that it’s important to see academic and vocational routes as of having equal weight. Once governments provide funding in accordance with their need and this underpinning equivalence, then people will feel confident in whichever suit gives them the opportunity to flourish.
In terms of provision and payment, our thought is that independent education bodies are best placed to work with the group of stakeholders to deliver and assess programs, while our inclination is to organise public payment around the abilities that will bring the most benefit, and giving academic and vocational equal weight.

At the same time, there is some evidence that students who pay are more incentivised to learn and complete programmes but this is a complex subject as other factors may contribute here (for example a desire to learn might presage a willingness to pay)

**How can non-formal learning programmes be used to supplement formal ones, and how should the skills that are acquired be assessed and certified?**

- The value of learning in all its forms should be recognised
- National and international benchmarking systems need to find a common base
- Assessment of prior learning based on universal benchmarks an aim in the future

It’s our thought that non formal education should be recognised too - and that, therefore, it need not be informal. That doesn’t necessarily mean the nature of the education has to change, more that perhaps the nature of the assessment for learning has to evolve.

This is both true of the need to have educational content which is up to date, but also to ensure recognition of knowledge and skills which are currently only vaguely understood. Developing nations may have not been able to reach everyone with formal education, but there still remains a vast reservoir of talent - that talent may or may not be recognised, internally, externally and internationally, but it should be.

We think that it’s imperative to engage in research that affords people the recognition their abilities and achievements warrant, and by developing an appropriate model of assessing prior learning that allows outcomes to be benchmarked is one suggested step in this direction.

It is our view that with the interconnectedness afforded by globalisation, that international recognition is the desired future scenario for all forms of learning. Recognition that facilitates, mobility, opportunity and investment is the ideal.

**What wider policies are necessary to ensure that skills training programmes help to overcome high levels of unemployment?**

- Advocate research into a universal framework to define abilities
- Importance of working together to define these and appropriate ways of understanding and assessing abilities
- Research into making development aid more effective through the application of education, and the role of education in relation to policy delivery valuable
- Importance of bringing together all scales - local to global

Primarily, we think it is imperative to have both a universally understood framework for education, and secondly a universal engagement on that framework to ensure that education is meeting the desired outcomes.

The engagement that’s critical is that between those who define what is learned, how it’s assessed and benchmarked, those who deliver the education, those whom the education is for, and those who have a stake in seeing an outcome of that education. In other words, that means respectively governments, qualification organisations, teachers, students, - and in the last group parents, NGOs, civil society organisations, government again, employers, unions, universities, professional bodies and industry organisations.

We also believe that many policies and payment structures are currently a point of engagement for national governments of developing countries with a range of development organisations,
including the UN, World Bank and regional development banks, bilateral agencies and corporate CSR initiatives. Our thought is that if the projects which are undertaken in a development context had an educational component every time, then whatever the nature of the project - be it bridge building or irrigation, turbine construction or disaster prevention - there is an opportunity for people to learn how to do it. Such a change would enable the legacy of that investment to be truly sustainable. This also relates to the need for funding mechanisms to support students who can’t afford access to programmes.

In an increasingly interconnected and internationally mobile world, it’s also imperative to understand the international nature of education - so that people’s abilities are recognised and benchmarked appropriately whichever path they choose to follow. International migration and regional integration policies need to reflect this reality and work with educators to define common touchstones.

It’s also important that Quality Assurance and Management Information systems are in place, driving continuous improvement across the system - there needs to be a process of continuous evolution in order to align education with current and future needs.

**Continuing research**

We feel it’s important to engage in understanding of skills development in the context of national economic and social advancement, and to this end we think there should be research around:

- What are the key abilities for development?
- How programs are benchmarked and variations between nations
- Whether ensuring skills development is a formal part of development assistance would increase aid effectiveness?
- Creation of a universal learning framework to define the abilities and organise them into a hierarchy
- Understanding the role of education in relation to economic, social and environmental welfare, policy and practice

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**About Pearson**

A website outlining the Effective Education for Employment research is also available at www.eee-edexcel.com

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