

## **Parliamentary Enquiry Into Innovation and Creativity: Workforce for the New Economy**

### **Submission by Pearson Australia Friday 11 March, 2016**

#### **Summary**

Pearson is the world's largest education company, with 40,000 employees in over 70 countries, including 400 people in Australia. We work to help people of all ages make measurable progress in their lives through learning. Pearson provides learning materials, technologies, assessments and services to teachers and students in order to help people everywhere aim higher and fulfil their potential. We put the learner at the centre of everything we do.

Working with governments can be rewarding and sometimes challenging. We are closely working with educators and their authorities to prepare our learners for the new economy based on innovation, disruption, technology and service. As the leading education company in Australia we believe our expertise confirms our ability to comment on how we can work together to prepare people of all ages to participate in the workforce of the new economy. Our own products and services are rapidly evolving to meet these changing needs, yet we recommend more can be done in the areas of regulatory certainty, investment in education and the promotion of STEM subjects to support the workforce of the future.

#### **Recommendations**

We would like this Parliamentary Enquiry and all members of parliament to:

- Acknowledge the benefits of working with organisations such as Pearson to provide products and services that support educators to provide high quality teaching and assessment experience.
- Continue to support Pearson and other education companies to research and develop new and innovative products and services that help educators focus on their core business of inspiring in others a lifelong love of learning.

- Provide clarity to universities around *the Higher Education Administrative Information for Providers (AIP)* stipulating the costs of course materials that are populated by the student as part of compulsory assessments essential for completing the unit of study may be included in tuition fees rather than deemed as incidental fees.

**Terms of Reference:****1. The extent to which students are graduating with the skills needed for the jobs of today and of the future;**

Equipping people with the skills they need for employment is a significant challenge. It is vital for economic success, and it transforms the lives of families. Unemployment in Australia rose to its highest level for 13 years in January 2015, at 6 per cent according to the Australian Bureau of Statistics. Despite this, the ManpowerGroup 2015 Talent Shortage Survey found that 44 per cent of Australian employers state they are having difficulty filling available jobs. Out of the employers surveyed 35 per cent believe that a lack of technical competency is a reason for the difficulty in filling jobs, with 28 per cent believing this is due to a lack of workplace competencies, sometimes called soft skills.

Further recent research from PwC suggests that a nearly half of Australia's workforce (44 per cent) are at risk of being replaced by computerisation and technology as they fail to be equipped with the required skills for the future. Furthermore, a report by the Organisation for Economic Co-operation and Development shows that 8 per cent of Australian students are failing to finish Year 12, and 40 per cent of those have poor numeracy and literacy skills. Young Australians are also more likely to have poor skills in problem-solving, despite living in a technology-rich environment.

The potentially negative effects of this in terms of jobs and the economic impact could be lessened by helping young people build the skills they need through a life long love of learning with assessment early and often.

Employability is the ultimate purpose of what Pearson does. And we focus on this at an early age. The following are three examples of the work we do to help learners get the skills they need for the jobs of the future:

1. Pearson is investing heavily in research to help inform teaching and learning best practice. We have dedicated researchers and one of the areas they have been looking into is what whole child readiness for university looks like. By this we mean gaining a better understanding of the impact that inputs such as family, school, social, motivation, behaviour and achievement have on a student and their capacity and likelihood to progress to university. We are in the early stages of developing a product to support these elements of best practice and will be testing iterations of this soon.
2. Through the Pearson Test of English (PTE) and Pearson VUE services, we acknowledge the importance of computer based testing for many assessment situations, to help the learner prepare for the new, digital economy. It is crucial that more Australian learning and assessment content – not just at school but also in professional exams and certification – has an emphasis on 21st century skills such as digital literacy, problem solving and time management. The question those in our industry need to ask ourselves is whether the processes and test measurement expertise required are in place to keep abreast of rapid change, rather than just reproducing the same syllabuses with little significant adaptation.

PTE Academic is a computer based test of English which utilises innovative test design and delivery standards to provide a robust and objective assessment of English. Computer based test delivery allows PTE to assess English in more ways than traditional pen and paper test delivery. Candidates must demonstrate their ability to effectively communicate in English, not memorise rote learnt responses, and thus Pearson is able identify whether students and workers are likely to possess the communication skills required to cope in an academic or workplace context. We welcome the recent inclusion of the Pearson Test of English to the range of English literacy tests mandated by the Federal Department of Immigration and Border Protection for visa applicants. This move demonstrates the government understands the need for timely, accurate and unbiased assessment of the english literacy of new workers to Australia.

- The above services and many other products and services Pearson provides are meaningless without delivering the right outcomes. While progression outcomes such as matriculation, employment and career readiness are an ultimate focus, we think learner outcomes are the most important measure of the success of our products and services.

We divide these outcomes into four categories. Each outcome category has the ability to impact whether learning is effective and is thus critical when assessing long-term progression outcomes such as employability or matriculation. These categories

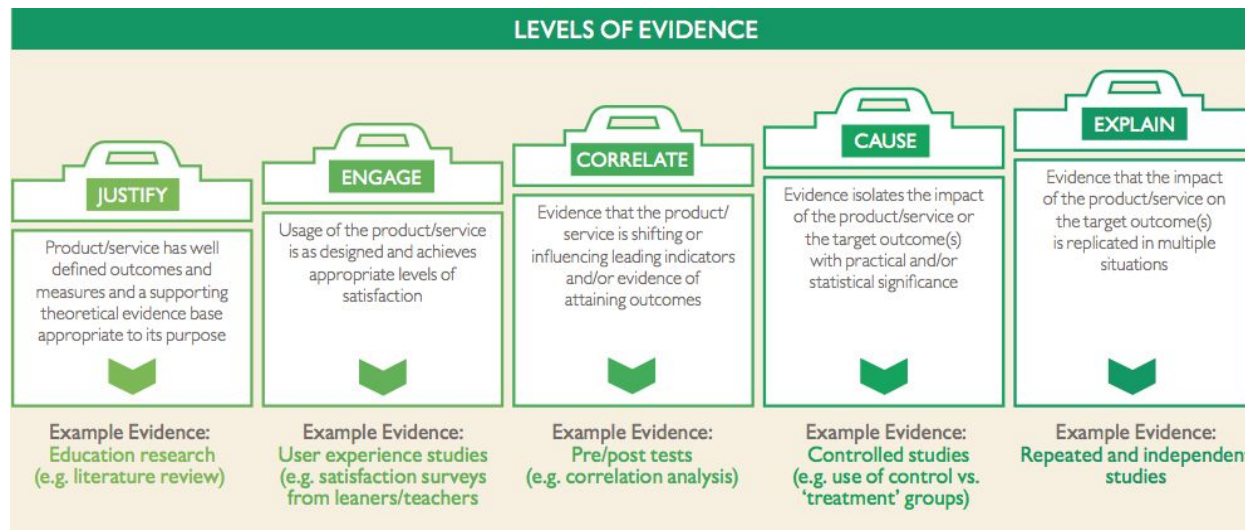
EFFICACY: TYPES OF OUTCOMES			
Category	Level of aspiration and value	Definition	Example learner outcomes
<p><b>Access</b></p> <p>The learner access and experience</p>	Utility	<p>The degree to which learners can access a product (e.g. in terms of technology and socio-economic access)</p> <p>The level of learner satisfaction</p> <p>The level of motivation and confidence that the learner gains</p>	<p>All learners can access digital learning materials from a personal computer, tablet or smart phone anytime</p> <p>Learners enjoy using the product and have a positive learning experience</p>
<p><b>Completion</b></p> <p>The timeliness of completion</p>	Usage rhythm as designed	<p>The progress that the learner makes through the course</p> <p>The time taken to achieve the standard or competence</p>	Learners complete course of work within one semester
<p><b>Achievement</b></p> <p>The standard of achievement or level of competence</p>	Competencies and skills achieved	<p>Qualification gained</p> <p>The level of performance on a standardised test</p> <p>Course-specific competencies demonstrated</p> <p>The acquisition of specific skills</p>	<p>Learner earns a bachelor's degree</p> <p>Learner will be able to demonstrate mastery of the English course material</p>
<p><b>Progression</b></p> <p>Learner progression</p>	'Door unlocked'	Ability of learner to progress to next course of study, training, or employment	Learner gets gainful employment in field of study

are:

Measuring outcomes requires a robust evidence base and the levels of evidence required across various outcomes differs in both complexity and methodology. To assess the impact of our products on learner outcomes, Pearson is building capacity in data and research.

We are starting to gather efficacy evidence in partnership with our customers around the world. This evidence can be as simple as user surveys and as complex as randomised-controlled trials or longitudinal research. Research plans are created for each product and are mapped to a target standard of evidence, based on the Standards of Evidence produced by NESTA, a UK-based research organisation, and guidance and standards provided by the US Department of Education and the National Science Foundation.

Below are the Levels of Evidence that Pearson works to attain for identified outcomes:



To support these activities, Pearson has embedded its global product organization with teams of dedicated educational researchers, efficacy reviewers, efficacy improvement managers, data analysts and impact evaluation researchers. These teams

are supported by local efficacy experts who work both internally and with customers to identify and measure learner outcomes. Pearson is applying this process to all priority products and services in preparation to reporting externally on our efficacy progress from 2018 onwards.

**2. Matters relating to laws and regulations that may act as a barrier to education providers being able to offer qualifications that meet the needs of the new economy and fastest growing sectors;**

In the area of assessment, there is a need for greater integration of these 21<sup>st</sup> century workplace skills into both learning and assessment from schools through to adult professional testing. This means designing exams to measure real-world skills more than they do at present, adopting the right question formats to help meet measurement goals and understanding how media can be used to better assess competencies.

Governments are beginning to open up the market to more modern and efficient forms of testing. The Federal Department of Immigration has recently opened up their testing program to include the Pearson Test of English (PTE) which is a positive step.

The PTE:

- delivers results in five business days
- runs test sessions up to 7 days per week at over 200 locations worldwide
- is approved by the Australian Government for all visa applications and accepted by thousands of institutions in the UK, Australia, USA, Canada, New Zealand, and Ireland, including Harvard, Yale and INSEAD.
- is marked entirely by computer providing highly accurate and consistent scores, free of any potential bias such as a test taker's accent or appearance.

Professional high-stakes test owners are already leading the way. Finance giant Certified Practising Accountants Australia has already made the move to a computer-based testing (CBT) model offering greater flexibility and access to assessment across a network of test centres more relevant to a tech-savvy generation. The Australian Medical Council has not just moved to CBT but also made use of computer adaptive testing, a cutting edge method of assessment where the difficulty of the questions change depending on the aptitude of the exam candidate.

While Pearson welcomes the Prime Minister's Innovation Agenda, particularly in the areas of education and employment, we believe more can be done to emphasise the importance of Australians to prepare themselves for the workforce of the future.

More clarity and consistency could be applied to the roles and responsibilities of the many departmental and other agencies set up to advocate the importance of science, technology, engineering and mathematics (STEM) subjects and skills.

Beyond the role of the Chief Scientist, CSIRO and the Department of Industry and Innovation, Australia is home to STEM Australia, STEM Queensland and every other state, plus non-government organisations such as Engineers without Borders. It is a fractured field and difficult to gauge where organisations such as ours should contribute to make the most valuable impact.

Pearson has in other jurisdictions engaged directly with private companies such as Cisco to provide STEM education resources as part of their corporate social responsibility programs. Government led STEM education initiatives or partnerships for education companies would be of value.

- 3. Factors that discourage closer partnerships between industry; in particular small and medium enterprises, the research sector and education providers; including but not limited to: intellectual property; technology transfer; and rapid commercialisation.**

Pearson and other education companies produce content and assessment tools that are prepared with the rigour of sound learning design and vetted by a global community of students and educators. Many Australian universities risk denying themselves access to these tools on the basis of their interpretation of the Higher Education Support Act (HESA).

As HESA states that all students must be provided equal access to any materials deemed necessary for course completion, Australian universities often opt out of requiring these tools out of concern for those students unwilling or unable to purchase them. Ironically, the same concern for placing financially challenged students at a competitive disadvantage vis-a-vis their peers results in the unintended consequence of risking that all students suffer relative to their peers around the world who have access to these tools.

To support the effort to ensure that Australian universities and students are globally competitive, we ask the members of parliament to underscore the provisions in the Higher Education Administrative Information for Providers, which is to be read in conjunction with HESA. Specifically, we ask this Parliamentary Enquiry to clarify for universities that the incremental costs of educational tools may be included as part of tuition fees - thereby providing all students with equitable access. We wish to empower universities to interpret the provisions of the AIP in the spirit that professionally produced learning tools can play an integrated - not ancillary - part of an educational experience. Accordingly, universities should be enabled to utilise these tools and build the associated costs into the fees that they charge

The need for more high quality partnerships, technology and commercialisation is most prevalent in higher education. There is so much potential for online and blended learning to fundamentally change the way learning is accessed and delivered, and should be a more central part of a university's strategy. Governments and universities need to radically change the way they think about students, in every way. By appreciating that higher education is a high consideration, high investment decision, the engagement



and interactions with students throughout their learning journey- from enquiry to graduation and alumni need to be strategic and effective.

To meet this demand, Pearson has undergone significant change in recent years and is now a large and active player across a much broader range of education services and products. In Australia we have been building a specialised services business to assist universities in understanding the change and challenges in transitioning to online learning- both operationally and pedagogically. By partnering in the development, go0to-market and delivery of online programs, we have achieved greater access, scale and speed to market than would have been possible for the university to generate independently.

We are proud to be partnering now with Monash and Griffith Universities, helping them develop and grow new online learning operations, initially at postgraduate level. Both of these institutions chose Pearson because they acknowledged that a different learning experience and approach to student management and support was needed if better student retention and graduation rates were to be achieved.

It is through these partnerships we are able to attract high volumes of students from within and outside the traditional university catchment area. While the institution still remains firmly in charge of the application and decision making process and teaching, Pearson works behind the scenes to assist the students with their applications, the enrolment process, onboarding and welcome activities. But the fundamental value of these partnerships is that we're not just about commencing student enrolments. Both Pearson and our partner institutions understand that it is the learner's success that will deliver true results. Our business model only works if we succeed in retaining a majority of students and helping them through to completion.

#### **4. Relationships between tertiary education entrepreneurship programs and private incubator and accelerators.**

There is abundant opportunity for Australian tertiary education institutions to partner with organisations such as Pearson to incubate and scale industry and sector ideas. Pearson does partner with startups in other jurisdictions through our Pearson Catalyst program.

This program identifies the most promising education startup companies and match them with Pearson brands to deliver pilot programs. Over the course of three months, startups have access Pearson resources – such as product experts, innovators and industry veterans – and the opportunity to work closely with a Pearson brand.

We also run a learning fund which launched in 2012 and has had some significant results.

The Pearson Affordable Learning Fund (PALF) started with US \$15 million of initial Pearson capital and a further US \$50 million in 2015 to be invested up to 2018. The fund is committed to partnering with not for profit organisations, start ups and government programs to help educate children in the developing world.

The PALF vision is to help millions of children in the world access a quality education in a cost effective, profitable and scalable manner. In addition we want to demonstrate to governments and donors that private education can help to educate their youngest citizens in an efficient way.

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