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Australian
Learning
Lecture

www.all-learning.org.au

Commissioners Jonathan Coppel and Julie Abramson
National Education Evidence Base
Productivity Commission
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Dear Commissioners

Australian Learning Lecture Submission to the Productivity Commission Inquiry into the National Education Evidence Base

Thank you for giving the Australian Learning Lecture the opportunity to make a submission to the Inquiry in the National Education Evidence Base.

About the Australian Learning Lecture

The Australian Learning Lecture (ALL) is a prestigious biennial lecture series. It was launched in May 2015. Its aim is to bring big ideas in education to national attention in order to strengthen the importance of learning in Australia for all Australians (www.all-learning.org.au).

Its objectives are:

1. To create a discussion about learning in Australia that will ignite the interest of the wider community
2. To situate learning as a central part of our national dialogue, engaging stakeholders in education, business, government and community
3. To recognise the importance of libraries and their role as learning institutions
4. To highlight case studies of best practice that can drive improved outcomes for all students

ALL is a joint initiative of the Koshland Innovation Fund and State Library Victoria.

Ellen Koshland established the Education Foundation in 1989 to encourage community involvement in state schools that would contribute to a quality public education system and improve learning and life outcomes for young people. The Foundation, under Ellen's leadership, has raised more than $10 million to fund over 500 programs changing the lives of many thousands of state school students and teachers. It now operates on a national scale in all states of Australia and, in 2008, became a permanent division of The Foundation for Young Australians.

ALL's vision

ALL envisages a future in which all children become confident, equipped and engaged learners. By 2025, ALL wants to see young people leave school with the skills and attributes that will prepare them for 21st Century learning and a passion for learning. We want people to know

that learning, unlearning and relearning, at whatever age and stage of life, is at the core of 21st Century life and work.

Our interest in this Inquiry

One of the Australian Learning Lecture's core commitments is to drive an expansive view of education, where all young people are given the opportunity to become creative, resilient, and capable learners.

Currently the Australian education system is not achieving this for all young people, and hence we are falling behind internationally. This impacts our social and economic progress. The system has to change in order to ensure our young people have 21st Century skills to meet the challenges of the future. The Foundation for Young Australians reports that over the past three years, employers are seeking more enterprise skills when they recruit staff. For example, the proportion of jobs that demand critical thinking has increased by 158%, creativity by 65%, presentation skills by 25% and team work by 19% (FYA, *The New Basics*, 2016).

ALL's interest in data

ALL believes that the most important data for learners is diagnostic data. This facilitates and enables improved learning. The most effective data for improved learning is formative data, allowing analysis and constant feedback.

Sir Michael Barber, the renowned UK educationalist, presented ALL's first lecture Joy and Data in 2015.

In it, he posed the question: how do we enable students to acquire the literacies, competencies and character to thrive in the 21st century?

His argument was that data was essential and that "we need to reclaim data as an ally in improving the human condition, … as one ingredient alongside others such as analysis, informed ethical judgment and, … teaching and learning, data can and does bring joy."

Sir Michael says "data raise questions and provide an evidence base, but to make sense of them requires interpretation and for that conversation is the key. [The teacher's] deep knowledge … along with the dialogue between [the teacher and learner] about the data, bring the learning; the learning and the application of learning, bring the joy. The data far from being in opposition to the joy is, therefore, an important ingredient of it."

His views, that are shared by ALL, include:

MISCONCEPTION ONE: The growing ubiquity of data in our lives undermines our creativity and inspiration

The better the data, the greater the efficiency. In other words, improved data will reduce the grind and maximize the inspiration and therefore the potential for joy.

MISCONCEPTION TWO: The data tells you what to do

- Data informs, humans have to exercise judgment.
- Only the data combined with judgment and analysis will get you to a decision.
- There is a further, even more important, aspect of deciding what to do; not what is possible but what is right. Here data can again inform but otherwise offers no guide at all.

MISCONCEPTION THREE: Data replaces professional judgment

- Informed professionalism, aided by modern technology and informed by excellent data, has huge potential to unleash a transformation of teaching and learning, which in turn could drive greatly enhanced performance.
- *DATA x ANALYSIS x ETHICS x JUDGMENT = GOOD DECISIONS*

In other words: *The informed use of data brings joy to learning and teaching, an ingredient to improving the human condition.*

http://www.all-learning.org.au/sites/default/files/joydata_sir_michael_barber.pdf

Our interest in evidence-based learning

ALL is committed to showcase some of the central ways (both big and small) in which joy and data are a part of education. These are intended to illustrate, in a clear and appealing manner, the ways in which data can support joyful learning.

They are designed to:

- Illustrate examples of current teaching practice that focuses on personalised learning; case studies are chosen for their relevance and wide appeal.
- Promote and support the adoption of similar practice in other institutions
- Set a high standard in national and international research, displaying rigour and authority.

To date, the case studies include:

Maths success and joy
Bacchus Marsh College, VIC
The Maths Pathway program uses online assessment to diagnose student learning and to provide tailored learning programs for each student. This program focusses on growth, effort and accuracy as its core metrics.

Collaborative Problem Solving
Eltham High School, VIC
Profiles an online assessment tool developed by The University of Melbourne, which is used to assess students' collaborative problem solving skills. Teachers use the data from the tool to identify skills which need development.

Positive Education
Mount Barker High School, NSW
Data from two student wellbeing assessment tools is used to inform a Positive Education program.

Specific to the Inquiry

The importance of data and a national evidence-base

ALL recognises that good data and diagnostic tools are essential to the learning and teaching cycle. Data is a powerful tool to help students and teachers identify a student's point of need and, if used well and alongside other data, enables teachers to deliver personalised learning in the classroom.

But we caution against relying on achievement tests as the sole indicator of an effective educational system, which currently appears to be the status quo.

We also note that the national evidence base as described in the Issues Paper is a network of datasets. While over time they can measure changes, provide insight into drivers and inform policy decision-making, service delivery and evaluation, these datasets have no power to improve education outcomes.

Data too limited
Currently, our view is that education policy and national data collections concentrate on a narrow set of cognitive indicators (i.e. literacy and numeracy) rather than embrace the skills and attributes the young people need to succeed in the world outside school.

Our view is in line with the OECD, which states:
"ICt tests and achievement tests do not adequately capture non-cognitive skills, personality traits, goals, character, motivations and preferences that are valued in the labour market, in school, and in many other domains. For many outcomes, their predictive power rivals or exceeds that of cognitive skills" (Kautz et al., 2014)

Data to reflect new measures

The World Economic Forum in its *New Vision for Education: unlocking the potential of technology* notes the importance of new skills being mixed in with traditional skills. (http://widgets.weforum.org/nve-2015/

"To thrive in a rapidly evolving, technology-mediated world, students must not only possess strong skills in areas such as language arts, mathematics and science, but they must also be adept at skills such as critical thinking, problem-solving, persistence, collaboration and curiosity."

These skills are what ALL calls 'the new success', and will be the subject of our 2017 lecture, to be delivered by Charles Fadel, the US futurist.

We note that the Mitchell Institute recommends that Australia monitor international developments closely and commence work on developing and prototyping approaches that will be fit for purpose in an Australian context. ALL believes this is a sound strategy.

Further we note that the Mitchell Institute and the Victorian Curriculum and Assessment Authority (VCAA) are partners in a project that is developing teaching and assessment strategies around the four key capabilities in the Victorian curriculum: personal and social development, intercultural and ethical capability, and critical and creative thinking. We encourage the Productivity Commission's inquiry team to investigate this approach further.

Do you agree that the objective of a national education evidence base should be to improve education outcomes?

ALL recommends that the government makes its objectives more explicit, visionary, and achievable and these have a dual focus of addressing the benefits for individual children and the nation as a whole.

The national education objectives are not explicitly stated in the Issues Paper although there are references to:

The Melbourne Declaration on Educational Goals for Young Australians: providing context and hints at the higher-level policy objectives of Australia's education system;
The National Education Agreement: "that all Australian school students acquire the knowledge and skills to participate effectively in society and employment in a globalised economy".

ALL recommends the Commission employ a broad definition of outcomes. These could include health and social and emotional development and early childhood development. These will require linkage with datasets outside of the education sector.

Charles Fadel, who is presenting our next lecture in 2017, says that the purposes of educational assessment are for:

1. *Individual/Group Diagnosis* – to track individual and group learning achievements and progress
2. *Performance/Practice Improvement* – to improve learning and instructional effectiveness by providing useful feedback to students, employees and teachers/trainers
3. *Accountability* – to support system accountability evaluations through feedback on performance of schools, districts, workplaces, etc., in order to guide policy decisions
4. *Program Evaluation* – to provide data on program effectiveness to drive selection and improvement of education and training programs

What data should be collected nationally?

The current reliance on AEDC and NAPLAN data is limited. The AEDC is a cross-sectional population level tool, and does not allow for individualisation. Moreover if children are absent on the testing day their results are not included. Depending on the child, on the day their performance may not represent their actual literacy and numeracy levels.

ALL recommends the Inquiry considers the suggestion in the recently released Grattan Institute paper that an improved method for reporting on NAPLAN results could concentrate on 'years of progress' rather than raw test scores (Goss et al., 2016, Goss, 2016).