Independent Education Union
Queensland and Northern Territory Branch

Submission Re: National Education Evidence Base Inquiry

Relationship between Submissions: IEUA and IEUA-QNT Branch

IEUA-QNT welcomes the opportunity to provide feedback regarding the Productivity Commission's National Education Evidence Base Inquiry.

IEUA-QNT represents ~18,000 teachers, support staff and ancillary staff in non-government education institutions in Queensland and the Northern Territory and consistently engages in education debate at both state and national levels through its Education Committee (a group of registered and practising teachers) and through its national counterpart, the Independent Education Union Education Committee, which receives input from teachers in all States and Territories.

While this submission is made on behalf of the IEUA-QNT Branch, it should be read in conjunction with the submission by our federal body, the Independent Education Union of Australia.

The federal submission emphasises the fact that we have known, for some time, how to support teachers to make use of evidence to support teaching and learning, but successive governments have failed to adequately fund or resource initiatives that would support their efforts (e.g. provision of adequate release time to allow collation and analysis of data).

Against that backdrop, the content of this submission from the IEUA-QNT Branch emphasises the quality of data that is collected and its limited utility in instructional diagnosis.

As such, the two submissions are complementary and should be read in succession.

Introduction

We note that the scope of the inquiry indicates that the Productivity Commission is seeking information that can be used to develop recommendations regarding:

1. Information required to provide an evidence base to inform policy development
2. Additional information that could be considered.
3. Existing or potential barriers to the sharing of education data.
4. Factors that inhibit access to, and consistency of, education-relevant data to support analysis and evidence-based policy development.
5. The role of technology and mobile devices.
6. Costs and benefits of options for improvements to the national education evidence base.
7. How Australian and overseas governments have approached the use of evidence and sharing data to improve outcomes.

We also note, with interest, that the Issues Paper [1] asks 72 targeted questions regarding technical aspects of collecting, analysing and disseminating findings from educational data.

Rather than respond to these in detail, IEUA-QNT would draw the Commission's attention to the three concluding questions on p. 33:

- What reforms are likely to be the most beneficial?
- How should reform options be prioritised?
- How long would these reforms take to implement?

In seeking answers to the 72 technical questions, the inquiry would appear to be based on an assumption that the answers to these questions can, and will, be found through broad scale collection and analysis of large, national and/or international datasets of student results.

IEUA-QNT is of the opinion that this reflects a gross misunderstanding of the work performed by teachers that, left unchecked, will result in nothing less than a dangerous, dysfunctional and potentially irreparable de-professionalization of the teaching workforce.

While experts in educational theory have a role to play in the education landscape, the current approach to reform has subjugated the knowledge, skills and experience of practising teachers to higher education academics with little to no current teaching experience.

For those who work with students in early childhood education and schools, the net effect is an ever-expanding list of tasks that are peripheral to the core business of teaching and learning and an expectation that these can be performed in the absence of any meaningful industrial provisions such as release time, access to professional development or even relevant and adequate resources. Further, despite the fact that research shows optimal translation of reform into practice typically requires 5-10 years [2-4], government plans rarely allow this much time before instigating new reform.

IEUA-QNT is of the opinion that any attempt to determine what reforms are likely to be the most beneficial, how these should be prioritised and the manner in which they should be implemented must restore classroom teachers' control over the work that they perform.

This requires those in positions of influence to recognise that the emergent dominance of non-practitioners is based on three myths.

Myth 1: Teaching is not currently evidence-based

As the extent to which social and economic development of individuals, communities and nations depends on education, using sources such as national test data to articulate and enact policies and practices that facilitate quality education has some utility [5-13]. If broad scale testing regimes are to contribute to design and implementation of genuinely transformative educational programmes however, data must be analysed and interpreted with diligence and discretion.

Despite significant correlations between performance on national and classroom tests [14-16], a majority of teachers believe that classroom assessment provides superior insights into student learning [15-17]. Leighton et al. (2010) have interpreted this as an indication that teachers do not understand the full nature and purpose of assessment, but this is simply not consistent with evidence that those who achieve greater learning gains for students are more likely to deploy regular in-class testing [18].

Rather, it suggests that teachers are not unwilling or unable to engage with national test data, they simply perceive it as having limited or inferior utility.

The perceived disparity between national and in-class testing has its genesis in teachers' professional understanding of assessment as a three-step process requiring: 1) identification of the skills and knowledge to be assessed; 2) articulation of outputs (behaviours and products) that demonstrate the required skills and understanding and; 3) mapping of individual outputs to levels of achievement [19-32].

The tendency for standardised, large-scale tests to be presented as more objective, and therefore more meaningful, than classroom-based assessment [5, 8, 9, 26, 33-38] contradicts teachers' understanding of quality assessment as requiring these processes to be undertaken in a manner that ensures both validity and reliability of results.

Conceptually, validity is achieved when the variable(s) measured map directly onto the skills and/or knowledge elements being assessed, while reliability relates to the extent to which assigned values

of the variable(s) represent(s) a true and accurate measure of the examinees' understanding and proficiency [26, 39, 40].

Scepticism about the utility of national test results is also directly connected to: 1) the fact that test scores often map more accurately to sociocultural and socioeconomic status than to student ability [37, 38, 41, 42]; 2) the impact of instructional methods that develop test-taking strategies rather than genuine understanding of core content [17, 43], and; 3) the fact that the effects of implementing a curriculum determined by reference to previous tests remains unquantified ([44]).

The issue is not that skilled and experienced teachers are unaware that using test results to determine what students do and do not know and reconfiguring instruction to enhance learning is an essential element of teaching practice. It is that a lack of involvement of teachers in the examination process constrains connectivity with interpersonal knowledge of the individuals within the classroom [44]. For educators working with children and adolescents, meaningful interpersonal relationships are in fact a requirement for quality education [13, 45].

Attempts to link test data and teaching practice indicate that translating data from standardised tests to targeted variations in teaching practice does generate learning gains and we acknowledge that an empirical study of 13 poorly performing schools in New Zealand [46] for example, showed that academics are able to work with teachers to draw out implications of test results and map these directly onto teaching practice, with substantial, positive effects on student outcomes. A troubling recommendation of the study [46] however, was a call for greater, and more widespread, collaboration between researchers and practitioners. To imply that teachers cannot, or should not, attempt to work without academic support is however, both impractical and naive. Not only is it unlikely that academic collaboration will affect teaching practices in regions and/or communities where it is most required, it is an extension of a false, and counterproductive, rhetoric of teacher-deficiency.

The perception that teachers are disinterested in, or incapable of, engaging with professional development and further learning is simply inaccurate. In reality, 35% of teachers possess higher qualifications (above Bachelor level) and, in any given year, up to 59% undertake further study or training beyond their initial teaching qualification [47]. Further, up to 58% of primary teachers, and 61% of secondary teachers, elect to undertake professional development programs focussed on evaluating and improving their own teaching [47]. Reports from members also indicate that the vast majority of further study and training, and particularly that which has the greatest impact on practice, is undertaken in unpaid time and is rarely recognised or supported by employers.

Myth 2: External assessment is superior to in-school assessment

Standardised external and/or national testing is a mandated element of education systems in an increasing number of countries. Assessment plays an integral role in effective education programmes because it allows educators to diagnose learning needs and deploy tailored instructional methods and materials, but excessive emphasis on gatekeeping and accountability has limited the pedagogical utility of national test results.

Critiques of national testing programmes suggest that contemporary approaches are increasingly establishing 'merit-demerit' cultures that reinforce disengagement of students who most need support and encourage teachers to abandon creative, reflexive practices that foster higher-order thinking and adopt narrow, prescriptive methods designed to elevate test scores [14, 17, 36, 44, 48-51].

Linkage of test performance to school funding and changes in systems of teacher training and registration is also recognised as an issue with pedagogical, political and economic ramifications [15, 17, 31, 35, 44, 45, 49, 52-55].

Nagy (2000) places attitudes to national testing in context by recognising three functions of assessment: a) gatekeeping - determining who is granted privileges such as admission or graduation; b) ensuring accountability - using assessment results to evaluate the professional

competence of schools and teachers, and; c) instructional diagnosis – using results to determine what students do and do not know and reconfiguring instruction methods to address imbalances and shortcomings.

Arguing that current frameworks for national testing focus primarily on gatekeeping and ensuring accountability, Nagy (2000) also suggests that centralised administration and reporting is undermining the capacity of education professionals to use national assessment to achieve instructional diagnosis. The issue of how practitioners can be better supported to link assessment results to teaching practice is therefore, one that demands greater attention from educators, academics and policy makers.

IEUA-QNT is of the view that a key determinant of quality assessment is the support and engagement of teachers. The involvement of classroom teachers in design and implementation of assessment tasks ensures quality teaching and learning and any removal of the opportunity to develop a range of targeted, locally responsive assessment tasks and techniques equates to a removal of the capacity for differentiation. The salience of this point extends beyond national and international tests (e.g. NAPLAN and PISA). It is relevant in the context of subject-specific assessment at all levels of schooling.

A survey of IEUA-QNT members (conducted for the Queensland Government's 2013 Inquiry into Assessment Methods for Senior Mathematics, Chemistry and Physics, but including teachers from all subject areas) indicates that what frustrates teachers in relation to assessment is lack of consistency in understanding and application of processes and a sense that they were not being provided with realistic time allocations for the nature and extent of work demanded.

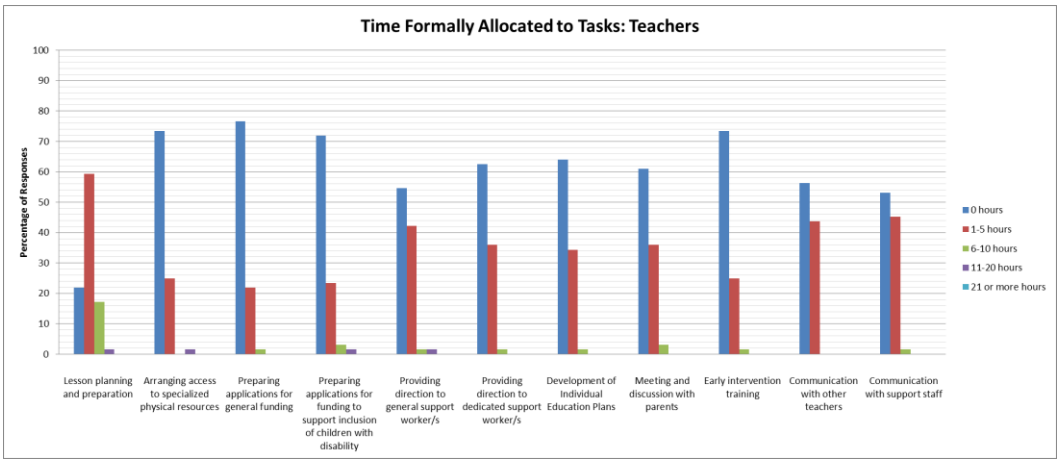
As evidence to support this point, we include below data from a recent survey of Queensland Kindergarten Teachers and Support Staff. The survey itself was designed to identify issues relating to implementation of the National Disability Insurance Scheme (NDIS), but clearly indicates that time formally allocated to various tasks falls, in most cases, far short of the amount of time required to complete them (Fig. 1).

IEUA-QNT is also concerned that excessive emphasis on external assessments provides an opportunity for universities to gain control over the school curriculum. This is undesirable, for multiple reasons.

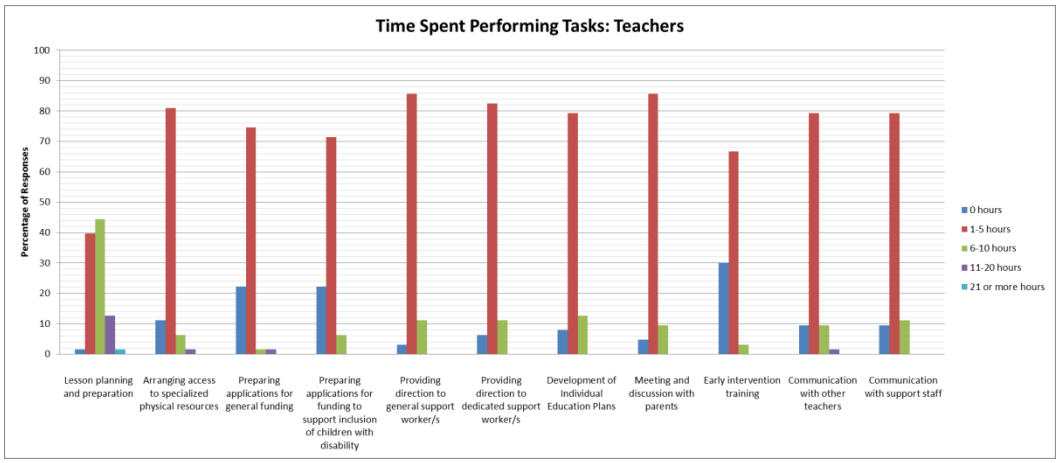
Firstly, the academic and political focus on publication of such data in league table formats, and collated for each school, places unnecessary pressure on students, parents, teachers and school leaders.

Secondly, it fails to recognize that only 41% of Queensland graduates proceed directly to university study [56]. In the 21st century, senior secondary schooling is, quite simply, about more than university preparation. This does not, as often reported, mean that standards in academic subjects are declining. Rather, it reflects the increasing diversity of students within the senior secondary cohort and consequent diversification of post-secondary study/work pathways [57].

This is not a negative phenomenon: There are substantial economic and social benefits to be gained from recognising and supporting industrial diversity [58-60] and IEUA-QNT strongly supports a fluid, dynamic system of education that allows individuals to transition between vocational and academic pathways.



a)



b)

Figure 1: Comparison of Time Allocated and Time Spent Taken to Complete Specific Tasks

A survey of ~100 kindergarten teachers and IEUA-QNT members undertaken in April 2016 shows significant mismatch between amount of time formally allocated to specific tasks and the time taken to complete them. Although the survey was focused on issues associated with implementation of the National Disability Insurance Scheme, reports from our members suggest that the same mismatch occurs in primary, secondary and post-secondary education: Tasks with no formal allocation of time do, in fact, take up several hours per week and, even where there is time formally allocated to tasks, this greatly underestimates the amount of time required.

In this context, although successive waves of reform have typically been framed in terms of a renewed emphasis on preparing young Australians for employment [61] [62-64], this has, over time, been decoupled from any meaningful analysis of the needs and requirements of the full cohort of students.

ABS data indicate that 27.1% of Australian 15-19 year olds, and 16.4% of Australian 20-24 year olds participated in VET studies in 2013 [65] and that VET programmes have particular importance for disadvantaged groups, with 25.4% of Indigenous Queenslanders aged 18-24 [65] and 9.1% of students from remote regions [65] enrolled in VET training in 2012.

A recent Productivity Commission inquiry [62], and related media coverage [63, 64], highlights the fact that inadequate government support for, and regulation of, the VET sector, and consequent proliferation of unscrupulous operators, has a disproportionate impact on students from vulnerable backgrounds because these are the cohorts that are most dependent on vocational education.

Myth 3: The current teaching population lacks theoretical understanding and practical skills

Scepticism about the utility of external and/or national testing regimes arises from evidence that test scores often map more accurately to sociocultural and socioeconomic status than to student ability [37, 38, 41, 42]. Despite significant correlations between performance on national and classroom tests, a majority of teachers believe that classroom assessment provides superior insights into student learning [14, 15]. Kyriakides [44] has argued that one of the key reasons for this is that distancing classroom teachers from assessment processes constrains connectivity with interpersonal knowledge of the individuals within the classroom.

That general academic ability is a powerful predictor of grades is entirely consistent with expectations. Basic aptitude for learning is heritable [66] and individuals who do well in Mathematics would therefore be expected to perform well in subjects such as English and Science. It is also widely known that increases in core language, literacy and numeracy skills correlate with increased performance across all academic fields [5, 8, 33, 35, 38, 67].

The latter point has been used to justify standardization or nationalization of assessment in many countries, but critiques of national testing regimes suggest that one of their more insidious effects is establishment of merit-demerit cultures that reinforce disengagement of students who most need support, and encourage teachers to abandon creative, reflexive practices that foster higher-order thinking in favour of narrow, prescriptive methods designed solely to elevate test scores [14, 17, 36, 44, 48-51].

Although criticism that national testing undermines the abilities of education professionals to diagnose the unique and situated instructional requirements of individual students has focused primarily on language, literacy and numeracy testing in lower grade levels [26, 44], it is relevant in all educational contexts. Moon et al. [68] have shown that classroom environments focused on external testing generate boredom and resentment in high ability primary students and emphasizing external measures of competitive attainment frustrates both performance and engagement even in high-achieving tertiary cohorts [69].

The reality of teaching and learning practice is that reforms emphasising external tests of ability and aptitude reduce, rather than enhance, differentiated practice [68, 70]. Tailoring tasks to meet the needs of different individuals and cohorts requires adequate time for preparation, planning and reflection. This is acknowledged in some systems, where teachers are given a maximum of three classes [71], but it is also important to note that this is often due to expectations that primary and secondary teachers should be active in educational research and publication. This is not always realistic because it underestimates the value of time spent preparing individual learning plans for multiple classes, each of which may contain between twenty and thirty students. The tertiary sector is recognizing that there are reasons to separate the functions of teaching and research [72-77], and the primary and secondary sectors must also acknowledge that imposition of research loads will constrain teaching.

IEUA-QNT continues to ask why successive state and federal governments have failed to understand that berating teachers does nothing to improve either the morale of practising teachers, or public perceptions of the profession?

Any government truly committed to the restoration of teaching as a prestigious profession that attracts the best and brightest students cannot realistically expect to achieve this through a program of action that degrades both public perceptions of teachers and the morale of practitioners.

Recent studies of teachers who leave the profession indicate that negative perceptions are reinforced by a lack of legitimate career pathways, linked to employers' tendency to employ educators on casual and short-term contracts [78, 79] .

Low-value perceptions of the profession have also been linked to the fact that it is female-dominated, comes with excessive workloads and relatively low remuneration compared to other professions [78, 79].

Further, while it is desirable that students entering education courses have a record of high academic achievement, high academic achievement itself does not guarantee the student will be a good teacher. Emphasis on tertiary entrance ranks and scores is therefore misguided because these are largely reflective of demand for a course: The low entry scores for education courses indicate low demand or interest in the career choice.

Similarly, statements that graduates of 'fast track' training programmes are superior to graduates of standard training programs insult not only graduates of standard programs, but also the many highly qualified, highly competent practising teachers currently working in schools.

Concluding Statement

Assessment as a form of evidence collection plays an integral role in effective education programmes because it allows educators to diagnose learning needs and prescribe tailored instructional methods and materials, but excessive emphasis on gatekeeping, accountability and the research interests of higher education academics limits the pedagogical utility of standardised external and/or national tests.

It is not our intention to argue that teachers should not engage with evidence-based practice, or that all assessment should be school-based, but to point out that lack of interest in, or failure to engage with, data generated through national and/or external testing regimes is not an indication of professional incompetence. The problem is, rather, one of insufficient return for the substantial investment of time required to download, collate and interpret test statistics with limited interpersonal relevance, particularly when the working reality for most teachers is one where time formally allocated to even fundamental tasks such as lesson planning is woefully inadequate.

The importance of interpersonal knowledge in developing and implementing effective learning programmes is a recurrent theme in education. As we enter what is being described as a fourth age of educational reform [45], personalisation is becoming the fundamental organising principle of lesson design and implementation [49]. To expect that any individual teacher (regardless of their own academic qualifications and capabilities) could, or should, engage in many hours of statistical analysis or academic research is however absurd because this detracts from the purpose of maximising learning gains for individuals within a particular class or cohort.

Rather than encouraging teachers to view their students as data points within a national or global cohort, good educational policy should focus on providing teachers with the time and resources required to deploy their considerable knowledge, skills and understanding consistently and effectively to support learning gains for individual students in their classes.

We thank the Productivity Commission for the opportunity for input into this inquiry and would welcome the chance to engage in further discussion.

Terry Burke
Branch Secretary
Independent Education Union of Australia
Queensland and Northern Territory Branch
24th May 2016

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