

**Response to the Productivity Commission’s Draft Report on the Education Evidence Base, V C Blackburn, Director, Essential Education Economics (E3), and School Efficiency Metrics Australasia.**

**DATA OVERLOAD.** Until recently uses of the School Education Evidence Base in Australia have historically focused on either “Test Centric” measures of student achievement, teacher workforce characteristics, or school finance aggregates, often in isolated discrete domains for analysis of the outcomes of the diverse Australian ‘school enterprise’. There has been a lack of interest for example in analysing how data drawn from all domains could be used to assess the efficiency with which school funding levels impact on school educational outcomes over time. Indeed we are literally ‘drowning’ in such ‘silo’ centric data sets partial modelling, using outdated bifurcated analytical perspectives. These studies fail to adequately integrate all three data domains mentioned above in robust school performance measurement and efficiency studies comparable to the large extant body of health efficiency and productivity studies. Similar studies in the school education finance policy space await the integration of the non-financial variables focused on student characteristics and their test score or exam results, teacher characteristics and school financial variables. An integrated research and policy focus needs to be reoriented to assess how school funding levels are used in improving student outcomes across all Australian States and all school sectors.

**POLITICAL AWARENESS.** A belated onset of awareness is evident in recent statements by the current Commonwealth Education Minister, the Honourable Simon Birmingham, when he recently said that “at a time of enormous Budget deficits we need to get more bang for our buck”, ABC Insiders Program, reported in the Australian, 25/9/2016. This sentiment was mentioned somewhat earlier by the Prime Minister the Honourable Malcolm Turnbull, in the context of School Funding about the need to ensure “that money goes to where it is most needed and where it is going to have the most effect, and how to get the best educational outcome bang for the taxpayer buck”, interview with Leon Compton ABC Northern Tasmania 30/10/2015. The modelling dimensions surrounding these issues, including future multi-level student/school hierarchical perspectives, were discussed at length in E3 and SEMETRICA’s submission 17 to this current Productivity Commission Inquiry.

**RESEARCH METHODOLOGIES.** This short follow up to the Draft Productivity Commission’s report of 6 September 2016 will briefly focus on how two ways that currently quickly exist to measure this greater “bang for the school education buck”. The first has been successfully implemented across all Primary and Secondary schools in the UK as outlined in their “School Efficiency Metric”, February 2016, (1). Their definition of school efficiency is the relationship between how much progress pupils make at the school, (the ‘output’) and how much income the school receives (the ‘input’), where value added is chosen as the numerator output and income per pupil as the denominator input. Value added was chosen as the most appropriate measure of school education ‘output’. The UK Education Department introduced this metric tool, informed by E3, in February 2016 to help schools understand whether they could improve their efficiency relative to other statistically similar schools. Their metric essentially provides schools with an indication of their efficiency, based on student attainment and the funding used to achieve it, relative to statistically similar schools.

**REPORTING TEMPLATE.** A second more discriminating methodology based on better granular school data for Australian schools has recently been published using a Two Stage Network Data Envelopment Analytical (DEA) model framework to assess the simultaneous Cost and Learning Efficiency Drivers in primary and secondary schools (2). More details on both methods are contained in the E3 and SEMETRICA submission to this Productivity Commission Inquiry. Future studies are underway by E3 and SEMETRICA that will set up the implementation of both methods in an “Australian School Efficiency Reporting Template (ASERT)”, across all School sectors for 2009-15. (1) UK Department for Education, “School Efficiency Metric”, February 2016, REF: DFE-00004. (2) Professor P Wanke, V Blackburn, and C Barros, “A Two Stage Cost and Learning Efficiency Driver Network DEA Model of Australian Schools”, Applied Economics, February 2016.

Vincent Blackburn

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