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Measuring and Reporting School Performance

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ALL EDUCATION SECTORS, FROM PRE-SCHOOL to post-secondary, both public and private, face increasing demands to be accountable for their use of public money. The movement towards school accountability attracts broad political, community and media support. The public seemingly thirst for comparative information on schools. Parents use the information to help select a school for their children. Politicians believe publishing performance indicators helps to raise educational standards. The media purports to be acting in the public interest when publishing school performance information. However there is little doubt that the media also use the information to sell newspapers and advertising space. The Victorian government gave the *Herald Sun* the exclusive right to publish school performance information in 1996 and 1997. Had the *Herald Sun* acted altruistically rather than commercially, it would have shared the information with its competitors.

Communities have a right to know how their schools are performing. Schools have an obligation to be accountable to students, to parents and to taxpayers generally. This accountability should transcend across all aspects of a school's mission. Academic performance is one aspect that can be measured. However, no one measure or index of performance can possibly summarise the effectiveness or otherwise of schools and all such measurements involve error. Performance indicators do not describe the differences between schools but they do indicate that differences exist. Whilst school milieu, school facilities and the quality of teaching all contribute to a school's performance so too do student attitude, student willingness to work hard, parental encouragement and home background. Schools have no control over these latter factors; a point that must be remembered as we study the patterns over time of school performance.

Performance Indicators

Publishing school performance indicators in mass circulation newspapers and on the Internet are effective ways of ensuring that members of the public have access to the data. However, when publishing academic performance data the media has a responsibility to accurately and fully inform the public. Unfortunately, the qualifications that governments and education agencies place on the information and the measurement error associated with it, are often ignored or at best de-emphasised by the less responsible

sections of the media as they misrepresent and sensationalise the data. There is a tendency to pillory under-performing schools, to incite the opprobrium of the public towards the losers and eulogise the achievements of the winners. In 1996, the publication in NSW of tertiary entrance rank (TER) data led to a controversy over the media focus on the bottom school in the state, where the dux that year achieved a TER of 44. The NSW government has since moved to prevent the use of such data for comparative purposes. It is a fallacy to infer something about a school's performance from the examination results of its students without first taking account of the students' prior knowledge and without attempting to quantify exactly what skills and attitudes students bring with them to school. Simple performance indicators, based on scaled or unscaled examination results and entrance scores do not compare like with like. They also lend themselves to manipulation by schools that may skew their enrolment policy towards brighter, less troublesome students in an attempt to enhance their performance ranking. The limitations of simple performance indicators together with their potential misuse mean that governments must develop new measures that compare the results of students as they move from one stage of their education to another. This pre-test, post-test or value-added approach presupposes the existence of both a national curriculum and a nation-wide assessment regime.

In the United States, the right to publish school performance indicators is protected by public disclosure legislation. Individual states use standardised achievement tests, that are nationally normed, to report school performance to their communities. These tests take no account of pre-existing knowledge and student skills. Since 1994, the United Kingdom Department for Education and Training (DfEE) and *The Times* newspaper have published school performance tables. The 1997 secondary school and college performance tables, published by *The Times*, are available on the Internet.¹ They include a list of the most improved schools, the top state schools at A level, the top independent schools at A level, the top comprehensive schools at A level, the top comprehensive schools in the General Certificate of School Education (GCSE), the schools with the highest failure rates at GCSE, and the schools at the bottom of the GCSE league. The DfEE performance tables, also available on the Internet, cover the years from 1994 to 1997.² The schools and colleges tables list information on the achievements of 16 - 18 year old students at secondary schools and further educa-

tion colleges. The secondary school tables give information on the achievements of students in public examinations and vocational qualifications, school absences and background information such as school type, admissions policy and gender of intake. The primary school tables provide information on the National Curriculum results of 11 year old students in state schools in England. On page 1 of the 1998 Secondary School and College Performance Tables Consultation Document, that is listed on the DfEE web-site, is the statement that the Secretary of State for Education and Employment intends gradually to introduce new measures of the progress pupils have made from one stage to another including, in the longer term, value-added measures.

Australian Measures

In Australia, different states have taken different approaches to school accountability. After the TER controversy, NSW has moved away from direct comparisons of schools using data such as the TER and the NSW Basic Skills Tests. Whilst this has ended the controversy caused by not comparing like with like, it has left the NSW government open to the charge of concealing information from the community. In WA, final year students, hoping to enter university, elect to sit for the Tertiary Entrance Examinations (TEE). They have, until this year, also had to complete a three-hour examination called the Australian Scaling Test (AST). By subtracting the percentage of a school's students in the top half of the AST from the percentage of its students in the top half of the TEE, each school in WA has been ranked and the ranks have been published in *The West Australian*. This method of ranking schools, whilst crude and having no accompanying measure of uncertainty, represents an attempt to measure the learning value added by schools. This year a new method of scaling, called the Average Marks Scaling method, will be used to adjust the marks of Tertiary Entrance Score subjects onto a common scale. WA students will no longer sit for the AST examination. How and if WA schools will now be ranked remains to be seen. But there can be little doubt that the WA public will continue to demand the publication of school performance information.

School performance data in the Victorian Certificate of Education (VCE) have been published in the *Herald Sun* since 1996. Schools are listed alphabetically along with various measures of school performance. The percentage of study scores of 40 or higher achieved by a school's VCE students is a simple performance indicator that only includes the achievement of the top students. The Achievement Index is a fairer but still imperfect indicator of school performance. It is a measure of how well a school's students performed in the VCE after taking account of how well they performed in the General Achievement Test (GAT). The GAT is used as a measure of the quality of intake into the VCE. Students sit for the GAT in the middle of their final year of secondary schooling. It is an aptitude type test pitched at a Year 10 standard. If the students in a school have an Achievement Index of 100 then they have performed as expected on the basis of their GAT scores.

The Achievement Index is actually a range, or interval, within which we can be 95 per cent confident that a school's true achievement lies. No one point within a school's range is more or less significant than any other. If a school's range lies completely above the population mean of 100 then we can say, with confidence, that the school has

added value to the learning of its students. If the ranges of two schools do not overlap, then we can be very confident that the schools have performed differently.

The Achievement Index attempts to allow for the prior knowledge of students. It is an inclusive index in that it values the learning of all students as opposed to concentrating only on the achievements of the top students. The quality of a school's student intake is not important; it is the learning the school adds to its student intake that matters. The index therefore treats all schools, public and private, advantaged and disadvantaged, equally. Its weakness lies in the closeness of the GAT to the VCE examinations. If a school affects student performance in the VCE then why does it not also affect student performance in the GAT? The continued use of the GAT to check the reasonableness of school assessments further complicates the issue. If a school can minimise its students' GAT results then it will maximise its Achievement Index. However, in so doing it will increase the likelihood of its school assessment marks being questioned and reviewed. This in turn has an affect upon the school's VCE results. It cannot be assumed that student performance in the GAT is independent from the school's influence. The validity of Achievement Index would be strengthened by moving the administration of the GAT to the end of Year 10.

Value-Added Measures

Work being done in the United Kingdom together with developments in WA and Victoria suggests that value-added measures are likely to figure prominently in the performance indicators of the future. Australia has a newly agreed national literacy standard for all students in Year 3 and Year 5. Year 3 students in all states and territories are now assessed against this national literacy standard. In the year 2000, the 1998 Year 3 cohort will be tested, as Year 5 students, and assessed against the Year 5 national literacy standard. Will this lead to the emergence of a primary school literacy performance index? If the national literacy standard is extended to Years 7 and 9 and if a national numeracy standard is also developed, then we may face the possibility of national performance indicators in literacy and numeracy at the end of each two year stage of schooling. Such indicators would level the educational playing field. How far schools take their students; from wherever they were; will become more important than absolute achievement. Such a paradigm shift in school learning culture will further blur the boundaries between public and private schools. It will not be that one sector will ape the other, but rather that both will coalesce around a new industry standard based on performance and accountability.

About the Author

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