



Has Teacher Quality Declined and is “Merit Pay” the Answer?

**Australian Education Union Federal Office
120 Clarendon Street Southbank
3006**

**John McCollow
Federal Research Officer**

October2006

Has Teacher Quality Declined and is “Merit Pay” the Answer?

Research funded by the Federal Government by two ANU economists (Leigh and Ryan, 2006) has recently received press coverage for purportedly showing that the quality of the teaching profession has declined and that merit-based pay is the answer to addressing this problem. The bases of both of these assertions merit more critical analysis than either the Government or media has given them.

The Quality of the Teaching Profession has Declined

The basis for the assertion that the quality of the teaching profession has declined is a fall in the average score of high school students who later became teachers on literacy and numeracy tests. The research covers teachers who entered the profession between 1983 and 2003.

A decline in test scores of entrants to the teaching profession over time is a matter of valid concern. However, the nature of the ANU study is such that its findings should be treated very cautiously.

Some points:

The authors unproblematically characterise a literacy and numeracy test score as “academic ability”. The latter term is used extensively.

“Academic ability” is treated as a constant, innate characteristic of people. No consideration is given to the question of how appropriate it is to judge an adult’s capacities on the basis of a test taken when they were in Year 9 in high school. Everything that happened in that person’s life subsequently – their further schooling, their teacher education, their life experiences, their work as a teacher is apparently irrelevant – they will never be “academically able”.

The authors acknowledge that “academic ability” is at best a proxy measure for “teacher quality”. They cite American studies that show a “strong positive correlation between teachers’ classroom performance and their own standardised test scores”. I suspect that these studies do nothing of the sort. Rather than examining “teachers’ classroom performance”, I suspect that they examine and find a correlation between the *standardised test scores of the teachers’ students* and the test scores of the teacher – this is a different thing. However, even if the studies do what the authors claim they do, none of them used the tests employed by the ANU researchers so they hardly prove the validity of their assumption about a correlation.

Common sense would suggest that all other things being equal, more academically able teachers should perform better than less academically able teachers. The problem is that very seldom are all other things equal. There are a variety of factors (concern for children, a sense of social justice, enthusiasm, hard work, etc.) that are important and can mean that a more academically able person is actually a worse teacher than his or her less academically able colleague.

There are good reasons to be sceptical of the assertion that the quality of those entering the teaching profession has declined based on the evidence marshalled in the ANU study. It is also worth noting the age mix of the profession. The average age of currently practising school teachers is in the mid-to-upper 40s – it is not a profession dominated by young entrants.

Looking at the data as it is presented by the authors it shows a decline in test scores. The authors assert that the decline is “significant”. Well, it is *statistically* significant, but that does not necessarily mean it is significant in a social or educational policy sense.

Consider the following:

The authors divide the each cohort of teachers into five “ability” groups. (The figures referred to in brackets are the figures in the ANU article from which the data are drawn.)

The proportion of the “top” ability group entering teaching as a profession was only about 11 per cent for females in 1983 and about 4 per cent for males (Figure 5) – so teaching wasn’t ever a real magnet as a career for the high academic ability group. Sure by 2003, the percentage of women in the top group entering teaching had shrunk to about 6 per cent and for males to 3 per cent (Figure 5), but can this be fairly characterised as a dramatic change in the attractiveness of teaching for the high ability group? I submit that a fairer assessment would be: While the decline in the attractiveness of teaching to people in the top ability group is worth noting and addressing, in percentage terms (at least since 1983) teaching has never attracted very many candidates from this group.

It should be noted that the decline in the proportion of the top group entering teaching is overwhelmingly related to the female population. The significant increase in the range of career opportunities for women during the period in question would seem to be a factor worth considering, but the authors pay it scant regard.

The proportion of the “bottom” ability group entering teaching (the lowest 20 per cent – so it includes a pretty broad section of the population) entering teaching as a profession in 1983 (Figures 1 & 2) was very low (about 3 per cent for females and 1 per cent for males). In 2003 the percentage of males and females entering the profession from this group had actually declined slightly (Figures 1 & 2). Again I submit that the fairest assessment of this data is: proportionally not many people from the lowest ability grouping enter teaching – in the past or now.

The authors also divide the cohorts in two ability groups: the top and bottom fifty per cent (Figure 6). Only about 3 per cent of females and 1 per cent of males from the bottom 50 per cent entered teaching in 1983. For 2003 it was 5 per cent for females and less than 1 per cent for males. Again, this does not seem to me to be a very large difference considered in terms of its potential implications for the “quality” of the teaching force.

I would suggest that most people would be reassured that the teaching profession does not draw proportionally large numbers of candidates from “low” ability groups, agree that more might be done to attract academic “high flyers” into teaching, but accept the proposition that one does not need to be in the top twenty per cent in terms of academic ability in order to be a very effective teacher.

“Merit-Based” Pay is the Answer

The authors assert that greater financial rewards might be a way of making teaching more attractive. On one level this is, of course, unarguable – and far be it from an education union to challenge it as a basic proposition.

It is worth noting, however, as a number of people have, that most of those who become teachers don't do so because they are seeking a highly remunerative career – their key motivation is a sense of public service or a commitment to children, or a love of knowledge. And, of course, there are many other non-salary factors that can make a career more or less attractive.

There are, of course, a number of ways of increasing the financial attractiveness of teaching as a career. One is a general increase in average teacher salaries. The authors briefly mention this but are more interested in addressing the relatively “flat” salary structure which is seen as a disincentive to people entering the profession. This is not a new observation; it was made in the report 1998 Senate inquiry into the status of teaching *A Class Act*. If greater differentiation in teacher salaries is a significant issue, then the least it deserves is a serious consideration of the many different ways of achieving this.

Instead, we are presented with “merit pay” as the only option. The case the authors make for merit pay is based on an economic analysis that purports to show greater returns for “aptitude” in other, alternative occupations. Voila! Having constructed a problem (“a substantial decline in the academic aptitude of the typical teacher”, p. 30), the authors construct a solution: tying remuneration to aptitude. In the words of Wendy Currie (2006, p. 7), the authors propose a solution “for a phenomenon they have not managed to prove is actually occurring”.

It is not the intention here to go through the all the arguments in relation to merit pay. I simply make the point that the ANU article hardly clinches the case for it. To be fair to the authors they do not claim that it does. However, already we have seen it being depicted as such by the media and the current Federal Minister for Education.

Problems include:

Much of the devil in merit pay proposals is in the details. The authors provide no guidance on how “merit” would be defined or how such a scheme would work, simply referring the reader to a proposal from another group of academics as an example. Some versions of merit-based pay for teachers are, of course, highly controversial and have a long track record of failure. There is an extensive literature detailing the problematic nature of the concept and its troubled history (e.g. Martin, 1987; Marginson, 1990; ECS, 2001; Kohn, 2003; OECD, 2005).

As noted above, the authors’ definition of teacher quality is based on the performances of future teachers on a standardised test when they were 14 years old. Presumably, the authors are not suggesting that these test scores should be the mechanism that determines who gets merit pay. The authors themselves admit that a “metric, which captured the ability of teachers to raise student performance on tests, as well as on material regarded as important but difficult to test, such as social skills ... is not available” (p. 5). So how is merit identified?

Without any specifics as to what it means and how it would work (addressing the concerns that have been raised about such schemes), the case for merit pay has not been made.

The research cites and is in the tradition of the work of American education economists such as Hanushek and Hoxby in that it relies on economic analysis of disembodied data unsullied by any actual direct contact with real teachers or real classrooms:

- How do we recognise a good teacher or successful student? We look at test score data.
- How do we determine what will make teaching more attractive? We do an econometric analysis.

I venture to suggest that it might be useful to talk to teachers about what made them choose to be a teacher and about what would make teaching more attractive as a career. Merit pay *might* be mentioned, but it is likely that there are a lot of other things that would be rated higher – smaller class sizes perhaps, or more support for students with disabilities, or improvements in the physical plant in schools, or reduced paperwork and administrivia. The *Class Act* report includes an entire chapter of factors affecting teacher morale. Dare I suggest that a bit more respect from the current Federal Government, media and from academics deploring a putative decline in teacher quality might also go down pretty well.

John McCollow
AEU Federal Research Officer

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