



Policy, Research and Practice to Improve Student Outcomes: Some Philosophical Problems

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ABSTRACT

If policy, research and practice are to improve student outcomes, then the successful achievement of this will require prior attention to several fundamental philosophical problems. Failure to address these is likely to lead to a breakdown in the link between means and ends with the goals being sought coming to nothing. First, what, conceptually, is meant by 'student outcomes'? Second, since not all student outcomes are educationally worth cultivating, judgement is required to determine which outcomes to promote and which not. Third, how are we to ascertain whether there is an improvement in student outcomes? Finally, if policy, research and practice are to improve student outcomes, it is incumbent on those promoting such policy, research and practice to empirically demonstrate how these causally bring about such improvement rather than any improvement being attributed to some other causal mechanism. This paper will critically examine these philosophical difficulties.

A PRELIMINARY CONSIDERATION

Not all policy, research and practice is directed at improving student outcomes. Policy on the provision of school transport, historical research on some past event, and practice regarding school building maintenance, for example, are not designed to improve student outcomes, although they may, like the first and third, provide the conditions whereby other policies, research and practices directed at improved student outcomes can flourish. Here, for example, are to be found policy concerning the assessment of student learning, research on identifying the most effective pedagogy for students to learn to read, and practices geared to the efficient learning of scientific concepts.

Those who claim that their policies, research and practices do, as a matter of fact, improve student outcomes, need to make good on their claim. This will require some form of empirical evidence to justify the truth of such claims, but before we get to this point, a number of compelling philosophical problems must be confronted and adequately dealt with. Until they are, it remains an open question whether policy, research and practice can actually improve student outcomes in the way the claim suggests.

STUDENT OUTCOMES

If we are to have policy, research and practice which improve student outcomes, we need to be very clear, conceptually, about what student outcomes are. What are student outcomes? Both the noun ‘outcome’ and the adjectival ‘student’ stand in need of clarification for their respective individual and joint meanings are less than unambiguous.

Quite what the outcome is, in an educational sense, is not always made explicit, or if it is its meaning is not always that insightful. In other public spheres, such as research, outputs occupy a rather precise position in a sequential pattern. There are, first of all, *inputs*; these consist of, for example, financial assets, material resources, institutional facilities, human time and effort, and the like, required for the production of something, such as goods and services. Second, inputs are subject to some form of *processing* which involves their use and transformation. Researchers use funds to purchase equipment, support the doing of fieldwork and cover the cost of computer-based data analysis, as well as expending time and energy engaged in research activity. Third, there are the *outputs* generated by the research process itself – a conference paper, a journal article, a scholarly book. Finally, *outcomes* come to the fore – what use value do the research outputs have in the world at large?

It is within this conceptual framework that student outcomes are best understood. The inputs are those things which bear directly on students – the books they read, what they see on television, the things teachers say to them, and so on in an almost endless stream of experience. The processing of input information is a neural activity conducted by the brain in still largely unexplained ways, but waiting discovery through neurophilosophy. The outputs are the things produced: what is said in a discussion, what is written in an exercise book or examination script, what is crafted in some artefact such as a sculpture, or what is performed, including a gymnastics display or a musical composition. Outcomes, to complete the picture, pick out the ways in which the various outputs are employed, whether for some utilitarian goal such as acquiring a qualification for employment purposes or for some more noble intrinsic end captured by such expressions as ‘a love of poetry’ or ‘valuing history for its own sake’.

Student outcomes are to be distinguished from learning outcomes. The latter are far more limited insofar as they are pegged to particular parcels of learning. So, for example, a unit of work will have a pre-specified set of learning outcomes couched in terms such as:

At the end of the unit of work students will be able to:

- *explain ...*
- *draw conclusions ...*
- *understand the consequences of ...*

From these learning outcomes are the particular items of student assessment derived such that from the successful completion of the assessed items it can be inferred that the learning outcomes have been achieved.

What each unit of work with its own learning outcomes amounts to, in isolation, is probably not all that much. It is not even clear what a collection of units of work, extensive as it might be, would amount to, unless the parts and the whole are connected to something which guides the selection of the parts and gives coherence to the whole. This something is student outcomes.

Student outcomes, in the sense identified above, picks out those things which on the basis of learning, students become. How is what they have learned (as demonstrated through the assessment of learning outputs) put to use? What sorts of people do they become, are they capable of making reflective judgements, can they successfully solve problems which confront them, do they live (in an Aristotelian sense) good lives, and so on. In short, does what they learn at school lead to outcomes central to the living of the rest of their lives?

To illustrate. At the university a semester paper in philosophy of education might be administratively required to have specific learning outcomes which can be assessed by the end of the semester. Important as these might be for students acquiring a grade for the paper, the educational value lies less in the learning outcomes than in the importance of the long-term student outcomes which come to the fore long after the awarding of the grade – will what they learn shape their thinking far into the future, will they be better persons for it, are they capable of making informed decisions about educational policy and engaging in ethical educational practice? This far outweighs learning outcomes, for it carries with it a far higher normative content.

ARE ALL STUDENT OUTCOMES WORTH CULTIVATING

Student outcomes come in all manner of forms and are far from predictable. Past and present learning provides a very meagre basis for conjecturing how students will, in the future, use their learning to not only acquire further learning but employ it over the course of their natural lives. All children ought to go on as adults to live a good life. Not all lives are good lives, as the lives of tyrants and despots attest, and are not to be idealised as lives worth living. But we can't conclude either, that there is but one form of life worth living, one's own! Ethically good lives come in many forms, some better than others; rather than retreat to the intellectual emptiness of relativism we ought to embrace the Socratic dictum that the unexamined life is not worth living.

How student learning contributes to living the good life, given that the good life comes in a plurality of forms, has no easy answer. If we cannot specify in advance how student learning now will shape, if at all, future student outcomes, then it is far from self-evident what sorts of learning experiences children ought to be exposed to at school. We might excel at stating the learning outcomes but fail miserably at achieving desirable student outcomes. Fagin is a case in point. Dicken's character in *Oliver Twist* has very clear and specific learning outcomes, easily assessed – the urchins have pick-pocketing down to a fine art: learning outcomes achieved! But, given the way of the world, with youthful offenders of today having a tendency to become adult criminals of tomorrow, such 'curricular' activity falls well outside the educational norm of student outcomes. And so it is, too, with the new curriculum: it is not enough to spell out learning and learning outcomes – over-riding importance must be given to making judgements about the sorts of student outcomes we ought to

aspire to and how the learning children acquire contributes to this social ideal. It is here that public and intellectual debate ought to prevail, but is strangely silent.

ASCERTAINING IMPROVEMENT: STUDENT OUTCOMES

How we ascertain whether there is any improvement in student outcomes is not simply an empirical matter of gathering some relevant data. There are some underlying conceptual matters which require some working through prior to collecting information. In the most fundamental sense, how are we to determine whether what students learn now leads to a later improvement in the things held to be most valuable? How do we assess whether students in the future, as adults, will be better at delivering a society, and living within it, than their parents currently do? The new curriculum is replete with such words as 'community' and 'participation', but how are we to judge that the future, in these respects, will be an improvement on the present? Is a young generation of today, obsessed with all the technological trappings possessed by them, leading a better life, and living in a better society, than that of their parents and grandparents? If not, can they improve on their forebears? It remains to be seen, but ascertaining improvement will be a difficult task indeed.

But if we put this to one side, relegating it to the 'too-hard basket', what about its proxy – improved learning outcomes. We may demand higher 'standards' of achievement (both ideal and actual) in learning outcomes, but for what purpose? Are the quality of our lives and the nature of our society changed for the better just because more students are awarded NCEA passes or graduate with university qualifications?

If anything, we should be extremely concerned about claims regarding achievement of learning outcomes. Our very best students hold their own, internationally, in comparative studies such as PISA and PIRLS. But the gap between our highest and lowest achievers is far wider than that possessed by most of those countries with who we are compared. Clearly, on this count New Zealand is failing in the achievement of learning outcomes (assuming that these measures are appropriate gauges of learning outcomes and proxies for student outcomes).

CAUSAL ATTRIBUTION OF IMPROVED STUDENT OUTCOMES

If policy, research and practice are to improve student outcomes, then it is incumbent on those promoting particular policy, research and practice to empirically demonstrate how what they are promoting causally brings about such improvement rather than any improvement being attributed to some other causal mechanism. This is a particularly acute problem, for simply asserting that a particular policy or practice does so is not enough to show that it is so. In this respect, researchers are well placed to investigate the truth of the claims made. But story-telling will not do; what is required are well-designed studies which not only identify the relevant factors but also allow the identification of those causal mechanisms which suitably explain the link between policy and practice on the one hand and improved student outcomes on the other (or, learning outcomes if needs be!).

This is no mean feat, and easily undone by ideological distortion, which is well illustrated by the Te Kotahitanga project. In brief, Te Kotahitanga sets out to explain differential attainment and provide a solution. Māori children in particular do not achieve well at school, as measured by international testing, NCEA examinations and informal classroom assessment. Why is this so, and what can be done about it? According to Te Kotahitanga:

... it is teachers positioning themselves in non-agentic positions through their deficit theorising that is a major influence on Māori children's academic and other achievement. This positioning creates feelings of helplessness among teachers, feelings of inability to bring about effective change, and results in low expectations of Māori students' achievement. Low expectations of Māori students' achievement in turns creates a self-fulfilling prophecy of failure and low achievement levels.

Bishop, et al. (2003, p. 81)

So, teacher deficit theories are the cause, changing teacher expectations is the solution; all will be well if we implement the Te Kotahitanga professional development programme in secondary schools. Thirty secondary schools have introduced it and the recently elected National Government's (2008) policy supports teacher excellence by 'expanding the Te Kotahitanga professional development programme to more secondary schools'. The new Minister of Education ought to tread warily on doing so.

Te Kotahitanga has terms of agreement that teachers sign up to and its first point is that teachers will agree: 'To remain focused on the goal of raising Māori students' achievement within a community that rejects deficit theorising of Māori students and actively seeks to maintain agency' (Bishop, et al., 2003). This vaguely Orwellian approach – acting as though all the other influences in a child's life do not exist – means Te Kotahitanga is not without its critics (Black, 2008, p. 26). Indeed, Te Kotahitanga has its critics (Clark, 2006, 2007, 2008; Gutschlag, 2007; Nash, 2005, 2006; Openshaw, 2007) and for very good reasons, two of which will be addressed here.

First, as has been pointed out on many occasions, to reject deficit theories and locate the cause in teacher expectations alone is to deliberately select as the cause only one component of a larger causal set and to quarantine all other causal factors from the causal explanation. But to do so is to wilfully deny oneself the full use of our epistemic resources to explain complex social phenomena. Given that the differential in students' learning achievement has its origins in learning prior to their attending school, then the cause is not of the school's making and in large part not in the school's power to eliminate. To be sure, changing teacher expectations might assist to some limited extent in improving student outcomes, but unless the rest of the cause is tackled (which is external to the school and may account for around 2/3 of the variance) (Clark, 2008), then any school-based gain in student learning achievement might at best begin to close the gap but not significantly eliminate it: those at the bottom will remain at the bottom with all the consequences this entails for children's future lives.

There is also something deeply disturbing about requiring participating teachers to sign up to a declaration which explicitly rejects all causal explanations but one, as if this would somehow eliminate the material forces at play which structurally hold the differential attainment in place. This is the very worst of academic indoctrination imposed by researchers committed to an academic ideology, where contrary views are simply not entertained, being rejected outright with no rational justification.

Second, enthusiastic as the supporters of Te Kotahitanga might be for its success in raising school achievement (Ritchie, 2007, p. 7), this needs to be tempered by the realisation that other causal explanations, besides Te Kotahitanga, are possible.

One might well ask which of these schools were involved in other major projects such as the Literacy Project and which were not? This latter question becomes particularly important where the Te Kotahitanga designers used data across whole student populations rather than just, for argument's sake, mathematics teachers or teachers engaged in teaching literacy skills in Te Kotahitanga. Which project can, therefore, legitimately claim the most credit for gains? Furthermore, if in both years the non-Māori students also made considerable gains, to what extent might any of this outcome be directly attributable to Te Kotahitanga? These doubts are heightened by the claims ... that all students on average performed significantly better ..., raising further questions about how much of the increase in performance can be directly attributed to the project.

Openshaw (2007, p. 14)

On very meagre conceptual and empirical foundations is a large and expensive professional development programme being constructed and politically presented. The designers are enthusiastic:

We are convinced that if we change the environment, discourses, attitudes, positionings, and relationships within our schools, we will create the conditions under which all groups of students ... will achieve outcomes that are similar in range and scope to their peers.

Shields, Bishop and Mazawi (2005, p. 142,
quoted in Openshaw, 2007, p. 16)

Such optimism may well turn out to be seriously misplaced, and seen to be so, if Te Kotahitanga had been less wedded to a distorted ideology and more committed to a system casual analysis of student learning.

CONCLUSION

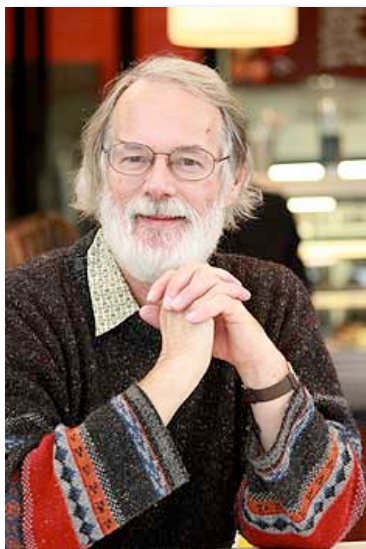
Policy-makers are prone to claiming that certain of their policies will improve student outcomes, if introduced; researchers may insist that their research findings will improve student outcomes, if adopted; and practitioners may contend that their practices will improve student outcomes, if implemented. These are bold claims, often without foundation. The linking of policy, research and practice to student outcomes is no straightforward matter of 'if this then that'; between the two is a complex causal chain characterised by conceptual confusion and empirical inadequacy. In seeking to establish causal explanations and attribute causal efficacy we need to tread warily in order to carefully identify the causal mechanisms at work in order to handle them in ways which bring about consequential improved student outcomes. This calls for systematic, controlled studies which can reveal antecedent determinants and consequential results bound together by intermediary explanatory mechanisms. Then and only then, will policy-makers, researchers and practitioners be in a powerful position to substantiate their claims that their policy, research and practice does actually improve student outcomes. Until then, Wittgenstein's (1973) aphorism is apposite: of that which we cannot speak we should remain silent, for more harm is done extolling a false claim than withholding assent through uncertainty to a true one.

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