PHILOSOPHY OF EDUCATION *2011* | Robert Kunzman, editor

Interpreting Student Responses in High Stakes Standardized Quantitative Learning Assessment

Andrew J. Davis
Durham University, UK

I am broadly in sympathy with Matthew Hayden's conclusions and his philosophical approach to assessment issues. He has stimulated some further thinking on my part, so in this essay I develop this thinking a little and raise one or two critical questions.

He follows Gert Biesta in arguing that educational assessment of any real value necessarily involves some complex interpretation. I argue that this should incorporate, on the one hand, what the students have been learning and, on the other hand, the interpretations (Hans-Georg Gadamer would say "prejudices") brought to the situation by assessors. Hayden notes that statistical quantitative learning assessments (SQLA) are designed "without any prior-knowledge of those being assessed," and hence are inherently deficient as assessment devices. Yet if this objection is cogent, does it not relate to the majority of externally devised assessments per se and not merely to SQLA?

I say "the majority," since the point should not be overstated. Arguably, tests of specific kinds of factual knowledge and skills do not involve interpretive processes. Successful test creators do not need to know about knowledge already possessed by the examinees. Moreover, in such cases there is no scope for a "fusion of horizons" between the Gadamerian "prejudices" that assessors bring to their interpretation of candidates' answers or performances and what the candidates mean by their answers. The answers just mean what they mean. In this connection consider, for example, spelling tests, tests of which French verbs are irregular, tests about key dates in history and of whether the student can swim a given length in a given time. Educators may doubt whether the kind of knowledge that can successfully be assessed like this should form more than a modest proportion of worthwhile school learning, but that is a different point.

I want to link the use Hayden makes of Gadamer and Martin Heidegger with some familiar points from constructivist approaches to learning. Here I may well be making a journey on which Hayden would not wish to join me. He quotes Heidegger as observing: "interpretation begins with fore-conceptions that are replaced by more suitable ones." Jean Piaget's notions of assimilation and accommodation are illuminating in this connection.[1] Any new knowledge acquired with at least a measure of understanding intimately involves the learner's *existing* knowledge. Learners strive to fit the new knowledge to existing understanding — that is, to assimilate it. At the same time, their prior knowledge must change to allow the new knowledge to take root — that is, it must accommodate it.

My next point certainly goes beyond Hayden, at least as I have understood him. The "learner" now becomes the educational assessor herself, seeking further

understanding of her students' knowledge in order that her teaching decisions are appropriately informed. She is in the business of interpretation. Her verdicts about what her students know involve her pre-existing understanding of their attainments, her "prejudices," through which she interprets their current responses to questions and tasks in classroom contexts and reaches fresh judgments. Or, to express matters in Piagetian terms, her pre-existing knowledge of her students' attainments must assimilate new knowledge about their achievements today, and also must accommodate this new knowledge, if she is to advance her grasp of her students' understanding. Hayden tells us, in effect, that the designers of SQLA cannot assimilate or accommodate knowledge of candidates' learning; "SQLA are based on … what knowledge the SQLA designer desires the students to know, and not what the designer *knows* the students know." SQLA, by its very nature, rules out any possibility of the assessor assimilating and accommodating new knowledge about student attainment as evidenced by test performance. Those composing and those marking the tests have no prior grasp of the candidates' knowledge.

Hayden contends that SQLA is unsuitable for use in high stakes assessment, almost as if other kinds of assessment might be *more* suitable, though I would be surprised if he thought so. The suitability of any form of assessment for accountability is contestable. Assessment for accountability makes a significant impact on both teachers' and students' conceptions of learning. Teachers, aware of the powerful audit culture in which they are embedded, devise strategies to maximize test performance, and these strategies may well *not* coincide with those required for the development of "rich" knowledge. Hayden uses the phrase "rich knowledge" and refers to various passages in my writings. So let us say that rich knowledge involves a measure of understanding. This in turn means that knowledge elements are appropriately connected in the knower's mind, rather than being possessed as standalone epistemic constituents. Hence, "rich knowledge" can be used and applied in a variety of contexts.

He rehearses the widespread concern that education is becoming dominated by market-related discourse involving "customers," "consumers," and "delivery of goods". But we need to explain properly why education should not be construed in this way. Hayden simply assumes this in his essay without defending his position. A defense preferably should be devised in terms that would persuade our opponents. I have argued elsewhere that a high stakes assessment regime undermines the very types of learning needed by education as servant of a competitive industrial economy.[2] Hayden talks of an "instrumental accountability" that aims at instrumental education rather than rich knowledge. This may be a correct empirical observation about what is actually happening, but I would contend that an *effective* instrumental education *also* needs rich knowledge, that is, knowledge that can be used and applied.

A related issue emerges later where SQLA is criticized as being uninformed by any deep philosophical understanding of learning. Now, any account of the latter would need to accommodate the point that learning comes in various guises. For

10.47925/2011.186

instance, we have, among other things, "rich" learning, rote learning, and learning of skills. Learning is a typical family resemblance concept. It does not possess an essential nature, and what it *should* be is contested. Protagonists of the relevant debates draw on fundamental assumptions about appropriate aims for education, the character of a good society, and of human flourishing. Since learning lacks an essential nature, this complicates any attempt to distil the inadequacies of SQLA from Hayden's "accurate understanding of what learning is."

Hayden claims that SQLA in high stakes testing cannot provide evidence to inform teaching "because the evidence is used summatively rather than formatively." This assumes that the two assessment purposes cannot be combined. Certainly the UK National Curriculum assessment framework did, according to many commentators, attempt to square the circle — namely to devise assessments that were both assessments for learning and in possession of a summative function for accountability purposes. But this incompatibility needs to be argued for, if Hayden believes it holds across the board in educational assessment. The reason that SQLA cannot be used formatively is *the kind of data it provides* rather than its summative function. Assessment *for learning* might include assessment with a summative purpose; summative purposes are not necessarily linked to accountability purposes.

Hayden tells us that education is "not a cause and effect process," but is instead "a process of *symbolic* or *symbolically mediated* interaction." Yet it is not obvious that "symbolically mediated interaction" cannot incorporate causal influences on student learning by teachers. Is Hayden assuming that transactions between people involving meaning, interpretation, and reasoning *cannot* be causal? While Ludwig Wittgenstein might have argued this, many have effectively opposed such a view, including Donald Davidson and John McDowell.[3]

Finally, Hayden notes that standardized tests are probing relative achievement, and hence need a good spread of scores "to be reliable and valid." He claims that high SES students with *higher innate academic potential* (my emphasis) will do better on the tests so that the schools' efforts are not being properly assessed. Hayden owes us a defensible account of "academic potential." After all, the latter *could* be construed as the kind of generic cognitive ability implicated in psychometric approaches to intelligence that have been subjected to devastating criticism in recent decades. Moreover, what about the notion of innateness itself? If, for the sake of argument, we go along with the notion of potential, we are not forced to understand it as a genetically determined, fixed personal characteristic. Instead, we could be talking here about aspects of students' early environments experienced in high SES households (social and cultural capital) that develop features in virtue of which students are apt for academic learning. Such an approach to "potential" would leave room for at least some kind of assessment of school influences. There could be school effects that are only in operation when student features "resulting" from high SES are *also* present. Hayden can still argue, of course, that SQLA are an inappropriate means of detecting such effects.

10.47925/2011.186

1. Jean Piaget, *Origins of Intelligence in the Child* (London: Routledge and Kegan Paul, 1936).

2. Andrew Davis, *The Limits of Educational Assessment* (Oxford: Blackwell, 1998).

3. Donald Davidson, "Actions, Reasons and Causes," in *Essays on Actions and Events* (Oxford: Clarendon Press, 1980); and John McDowell, *Mind and World* (Cambridge, Mass.: Harvard University Press, 1994), 75n6.

10.47925/2011.186