Let me begin this response to Jonathan Dolle’s excellent essay by expressing my appreciation for his having taken up the challenge of discussing what is arguably the most important issue in contemporary philosophy of education. It is also worth noting that although we may differ on numerous specific considerations, Denis Phillips, Dolle, and I agree on the criticality of this debate. I sincerely hope that it becomes an issue that more philosophers of education decide warrants their future engagement.

I wish to make it clear from the outset that I am not against science in the main, rather quite to the contrary. My overarching concern, one seemingly not shared by Dolle or Phillips, is the fundamental incommensurability between the methods of natural science and how these practices might inform our understanding and prediction of human behavior in education. In what follows, I raise concerns with the manner in which Dolle frames the problem at hand and then offer support to his critique of Phillips’s position that educational research can or should be value neutral.

The issue that troubles me most about Dolle’s discussion is the complete lack of distinction drawn between natural and social science research. For it is precisely the misguided assumption that natural science methods successfully transfer to social science, and by extension to educational research, that generates the contradictory outcomes Dolle identifies. Although he ostensibly dismisses the positivist position, albeit in a three-sentence paragraph, Dolle also admits he employs terms such as science, research, and scholarship "to refer to one and the same thing.” Of course, the view that research in education is coextensive with science implies that the latter, with its multitude of positivist assumptions, affords an appropriate mechanism to study and predict human behavior.

Dolle’s failure to elucidate the unique nature of so-called human, or soft, science is rooted in tacit behaviorist or reductionist assumptions about human behavior. Jerry Fodor outlines this fundamental materialist presupposition of social science research as follows:

[Psychological] reductionism entails token physicalism since, if bridge laws state nomologically contingent event identities, a reduction of psychology to neurology would require that any event which consists of the instantiation of a psychological property is identical with some event which consists of the instantiation of a neurological property.¹

The predictive explanations and solutions sought by researchers, then, presuppose that human behavior is reducible to identifiable physical laws emerging from neurological properties, a contestable presupposition noticeably absent in the contemporary discourse on educational research.

Brute data collected from the natural world, that is, data derived from natural facts whose validity cannot be questioned by alternative interpretations, is radically
distinct from the majority of data collected in educational research. There are important linguistic, ontological, and epistemological reasons to support this distinction. To claim that Jean Valjean stole a loaf of bread advances an empirical claim of sorts, but it is not a claim devoid of normative assumptions regarding what constitutes theft, complex issues of economic justice and social ethics, and so on. When it comes to empirical accounts of human action the descriptive concepts we employ often embody obvious normative judgments. Even within behaviorism, arguably the hardest of the soft sciences, the problem of conceptual clarity and normative description remains serious. Edward Thorndike’s Law of Effect states that positively reinforced behavior will be repeated with greater frequency, or if the behavior is negatively reinforced it will be eventually extinguished. However, an objective and scientific language requires clarification of what specific behavior is being referred to, what specific forces constitute reinforcement (both positive and negative), and the environmental constants in place during the experiment. For example, what is the appearance and structure of the maze through which the rats travel to trigger the reinforcement? When behaviorist assumptions suggest that reliable predictions are possible for rodents in a maze get extended into the context-specific, fluid, and dynamic classroom situations investigated by education researchers, the descriptive complexity increases exponentially because of the virtually infinite number of variables involved.2

The prevailing disagreements regarding charter school outcomes Dolle discusses at the beginning of his essay highlight quite nicely a major problem within educational research. In his recent critique of the American Educational Research Association’s Handbook of Research on Teaching, Robert McClintock explains why such disagreements will inevitably occur even when rigorous empirical methods and scientific practices are applied:

[The Handbook] assembles work, pointless in a deep existential sense, for the research goes off in every direction, leaving those in practice, policy, school administration, teaching, instruction, and parenting without a clue what to do. Because educational researchers have proven unable to exercise rigorous control and account for the relevant variables in carefully controlled inquiries, their studies have notoriously conflicting results. If researchers cannot master the variables in controlled settings, why expect practitioners, caught in the daily cross-currents and daily coping with complexity, to be able to rationalize school activities according to the prescripts of research findings.3

I suggest that educational research achieves one of two dubious outcomes: (1) it accumulates circumstantial or arbitrary evidence that will inevitably confront contradictory findings where its proposed postulates do not hold, or (2) it reports pseudo-empirical and analytic outcomes as exemplified by the study Dolle cites on the relationship between smaller classes and academic achievement. Do we really require an empirical study costing hundreds of thousands of dollars to determine that smaller classes enhance student learning?

While we differ substantially on the general value of educational research, then, whether done poorly or done well, I am in broad agreement with Dolle on his critique of Phillips’s value-neutrality thesis. My primary concern is the extent to which it glosses over the problem of contested normative concepts and their attending
implications for research outcomes. If we are supposedly measuring educational excellence or achievement, but are instead operationally defining these concepts, then both our normative conceptual assumptions and our methods of investigation cannot be neatly separated from questions of value. Rather, the research practices measuring these concepts embody and perpetuate specific normative perspectives about education, teaching, and learning. There is no clear fact/value divide in educational research.

When we label a student as gifted or intelligent or as a behavioral problem we are not advancing an empirical claim, but a contestable normative judgment about what it means to be gifted or intelligent, or to engage in certain modes of behavior. Phillips appeals to broad public agreement, advancing an argumentum ad populum, as a suitable means to resolve such fundamental conceptual disputes. But even if we accept this philosophically fallacious approach to settling conceptual and normative disputes in education, the valuative component in educational research remains intact since broad public agreement is clearly not equivalent with either scientific truth or objectivity.

Finally, Dolle suggests that openness to refutation might form an important component of an emerging epistemological discourse on educational research. I would extend openness to refutation as a desirable epistemic virtue to include considering the possibility that educational research is so thoroughly flawed that the entire enterprise should be abandoned and the resources allocated to this area be redirected toward schools and teachers. The meaningful solution to address the confusions of contemporary educational research is to examine, objectively, philosophically, and with openness to refutation, what educational research as a field of inquiry can possibly contribute to solving so-called educational problems. The answer, I fear, is precious little indeed.