Teaching responsively and Responsibly: so, what is your theory?

Abstract
Responsive teaching (what most of us would call teaching) is responsive to learner states and actions. Responsible teaching means being able to justify your choices of actions in planning and in the minute-by-minute flow of the classroom. In order to teach responsibly it is necessary to be articulate about what informs choices.

It is proposed that one of the weaknesses of mathematics education as a domain of study is that it has lost touch with its principal aim, which is to improve the lived experience of learners in mathematics classrooms and beyond. One contributing factor is the absence of any mathematics-like theory, in which there are necessary consequences when the initial conditions (axioms) are satisfied. Instead, theories in mathematics education are collections of distinctions, usually with no particular consequences. Indeed there is often an ambiguity as to whether a research report is offering instances of theoretical terms or constructs (distinctions) or whether they are demonstrating that specified distinctions can indeed be made. What is lacking is any domain-wide agreed process through which meaning of technical terms, constructs, and distinctions can be negotiated, and consequences that inevitably follow when specified conditions are present.