

Clarifying Functional Contextualism: A Reply to Commentaries

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Several prominent researchers and theorists in the field of instructional design and technology provided commentary on my article, “Constructing a Pragmatic Science of Learning and Instruction with Functional Contextualism” (Fox, 2005). Some of the important issues raised by those commentaries are addressed briefly in this reply. In particular, further clarification is provided regarding the distinction between theory and philosophy, the relation between functional contextualism and objectivism, the empirical basis and applications of relational frame theory (RFT), and the analytic goals of functional contextualism and instructional design.

□ I am honored that my article, “Constructing a Pragmatic Science of Learning and Instruction with Functional Contextualism,” has received commentary from several distinguished scholars in the field of instructional design and technology (IDT). While the commentators seem divided over the utility and value of functional contextualism for IDT, several important issues were presented in their discussions. I am grateful for the opportunity to respond briefly to some of these issues and to provide further clarification about functional contextualism.

FUNCTIONAL CONTEXTUALISM IS A PHILOSOPHY OF SCIENCE,
NOT A THEORY

Jonassen (2005) contends that functional contextualism is “just a theory” (p. 45), and merely one of more than 100 theories that attempt to describe learn-

ing. As is stated in the article, however, functional contextualism is a philosophy of science—not a theory. Philosophy consists of the preanalytic assumptions and rules of evidence (or criteria for truth) that are used to create, assess, and evaluate knowledge claims and theories. The nature of truth is fundamental to any philosophy, and it is no coincidence that the number of relatively adequate world views described by Pepper corresponds to the number of different truth criteria traditionally identified by philosophers (Hayes, 1988). The categories and concepts derived from a word view's root metaphor serve as the basis for constructing theories or statements about the world.

My article outlines the truth criterion and root metaphor of a contextual philosophy focused on the prediction and influence of events (functional contextualism), a science that applies that philosophy to psychological phenomena (behavior analysis), and some theories based on this philosophy and science (e.g., relational frame theory—RFT). Functional contextualism consists of a set of philosophical assumptions and rules used to construct and evaluate theories. It is these theories that can be empirically tested, not the underlying philosophy, but it is only when one is clear about philosophical assumptions that true comparisons among theories are possible. Clarifying such assumptions was a major purpose of my article.

FUNCTIONAL CONTEXTUALISM AND OBJECTIVISM

Hannafin (2005) claims that “the foundations and assumptions underlying the framework [of functional contextualism] are more akin to objectivism than constructivism” (p. 40). Functional contextualism is, indeed, not the same as all forms of constructivism, as I argued, but Hannafin seems to be redefining objectivism to match whatever opposition arises to his particular brand of constructivism rather than addressing the differences within a constructivist approach. He does not adequately explain, for example, how the act-in-context as a root metaphor and a pragmatic truth criterion resemble objectivism. Behavior analysts have long rejected an objectivist approach to truth and knowledge in favor of a pragmatic one: “[Scientific knowledge] is a corpus of rules for effective action, and there is a special sense in which it could be ‘true’ if it yields the most effective action possible” (Skinner, 1974, p. 235).

RFT

In his commentary, Winn (2005) questions the empirical grounding and applied implications of RFT. He suggests that even those who developed RFT acknowledge these shortcomings, and cites a page in the RFT book to support

this claim. On that page the authors are acknowledging that much remains to be done in specifying experimentally the histories that give rise to the processes identified by RFT, but it seems unfair to turn the healthy scientific conservatism of RFT researchers against them in this fashion.

The overall empirical support for RFT is, in fact, considerable and growing, and a great deal has already been done to analyze these histories. There are currently more than 70 published studies formally examining RFT concepts, claims, and predictions, and in every case the resulting data are supportive. It is impossible to cite this entire literature here, but a summary listing of many of these articles can be found on the RFT Website (<http://www.relationalframetheory.com/about/empirical.html>).

Winn also comments that there is “little guidance about how to design interventions that embody [RFT’s] principles” (p. 57). This statement also seems unfair. There are nearly 100 pages of text devoted to some of the applications and implications of RFT in the book Winn cites, many of which have already been tested. For example, acceptance and commitment therapy (ACT; Hayes, Strosahl, & Wilson, 1999) is a form of psychotherapy that is explicitly based on both functional contextualism and RFT, and it already has nearly 50 published supportive empirical studies (see Hayes, Masuda, Bissett, Luoma, & Guerrero, 2004, for a partial summary). A variety of RFT-based interventions for education have already been offered, and supportive empirical evidence on these interventions continues to emerge (e.g., Ninness et al., 2005).

ANALYTIC GOALS

Reigeluth and An (2005) object to the inclusion of prediction in the analytic goal of functional contextualism. Prediction is included because predictive relations can provide clues about which variables could be modified to influence events. As Biglan and Hayes (1996) wrote, “‘prediction’ is used in a restricted sense that is tied to control” and “the approach seeks to identify predictor variables that could ultimately lead to *both* prediction and influence” (p. 51). Once an analyst is able to reliably influence an event, prediction (in at least some contexts) easily follows.

Hannafin (2005) argues that the prediction and influence of psychological events are not generally applicable to IDT because some in the field are working instead to “develop tools for independent inquiry, or seek to guide student-centered inquiry in open learning environments” (p. 38). But these are simply examples of attempts to predict and influence *particular types* of complex psychological events (e.g., independent inquiry).

It is true that IDT is something of a “metafield” with contributions from diverse disciplines, but it also has a broad, common purpose. At the very least, IDT involves the creation of instructional materials or events. And instructional materials and/or events, by definition, are produced to influence the learning of those who use or participate in them. In this sense, anyone involved in the instructional design or development process *is* focused on the prediction and influence of psychological events. I offer functional contextualism as a coherent philosophical framework for pursuing this goal in a scientific manner. □

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